

CHALLENGES OF ECONOMIC SCIENCES IN THE 21ST CENTURY

EDITORS

Dr Jean-Paul Guichard
Dr Valter Cantino
Dr Giuseppe Dutto
Dr Mirjana Radović-Marković
Dr Srdjan Redžepagić
Dr Hasan Hanić



Belgrade, 2008.



CHALLENGES OF ECONOMIC SCIENCES IN THE 21ST CENTURY

Editors

Dr Jean-Paul Guichard
Dr Valter Cantino
Dr Giuseppe Dutto
Dr Mirjana Radović-Marković
Dr Srđan Redžepagić
Dr Hasan Hanić

Belgrade, 2008.

Publishers

Ministry of Sciences of the Republic of Serbia, Serbia
Institute of Economic Sciences, Serbia
University of Torino, Scuola di Amministrazione Aziendale, Italy
University of Nice - Sophia Antipolis, France
Faculty of Economics of Technical University in Košice, Slovakia
Universidade de Coimbra, Portugal
Institute of Agricultural Economics, Serbia
Belgrade Banking Academy - Faculty for Banking, Insurance and Finance, Serbia

For publishers

Mr Božidar Đelić
Prof. dr Dejan Erić
Prof. dr Valter Cantino
Prof. dr Albert Marouani

Prof. dr Vincent Šoltes
Prof. dr Fernando Jorge Rama Seabra Santos
Prof. dr Drago Cvijanović
Prof. dr Hasan Hanić

Reviewers

Prof. dr Lawanna Blount
Prof. dr Imani Silver
Prof. dr Naren Kumar Bishnoi
Prof. dr Dragos Simandan

Prof. dr Isiaka Esema
Prof. dr Muhammed Omolaja
Prof. dr Esey Marcel
Dr Kemal Yildirim

Programme Board

Prof. dr Dejan Erić, IES, Belgrade, President
Prof. dr Hasan Hanić, BBA – Faculty for banking, insurance and finance, Belgrade
Dr Jelica Minić, IES, Belgrade
Prof. dr Mirjana Radović, IES, Belgrade
Dr Božo Drašković, IES, Belgrade
Dr Srdjan Redžepagić, IES, Belgrade
Dr John Board, Reading University, ICMA Centre, Great Britain
Prof. dr Valter Cantino, University of Torino, Scuola di Amministrazione Aziendale, Italia
Dr Giuseppe Dutto, University of Torino, Scuola di Amministrazione Aziendale, Italia
Prof. dr Claude Berthomieu, University of Nice – Sophia Antipolis, France
Prof. dr Jean-Paul Guichard, University of Nice – Sophia Antipolis, France

Prof. dr Stephane Ngomai, University of Nice – Sophia Antipolis, France
Prof. dr Andre Boyer, University of Nice – Sophia Antipolis, France
Prof. dr Joao Sousa Andrade, University of Coimbra, Portugal
Prof. dr Xavier Richet, University Paris 3 – Sorbonne la Nouvelle, France
Prof. dr Maks Tajnikar, Faculty of Economics University of Ljubljana
Prof. dr Besim Čulahović, Faculty of Economics University of Sarajevo, Bosnia and Herzegovina
Prof. dr Saša Popović, Faculty of Economics, Montenegro
Prof. dr Drago Cvijanović, Institute of Agricultural Economics

Computer layout

Zorica Božić

Published by «Čigoja štampa», Belgrade

Published in 200 copies

ISBN 978-86-80315-79-9

Collection of papers is integral part of the macro project »*The Integration of Serbian Economy into the European Union: Planning and Financing of Regional and Rural Development and Enterprise Development Policy*«, no. 159004, financed by the Ministry of Science and Technological Development of the Republic of Serbia.

Copyright© 2008 by Institute of Economic Sciences Belgrade, All rights reserved. Publisher has the copyright to all published articles



The publishing of the Collection of papers is assisted by the Ministry of Science and Technological Development of the Republic of Serbia. Former and actual generations of IES's would like to express their gratitude towards the Ministry for its kind assistance.

Contents

Preface.....	xi
SECTION I	
MODEL OF MARKET ECONOMY FOR COUNTRIES IN TRANSITION.....	1
Influence of Distribution Channel on Development of Agricultural Sector Case: Agricultural Sector of Herzegovina	3
Sanja Bijakšić, Sandra Jelčić	
Determinants of Bosnia and Herzegovina's Country-image.....	10
Nenad Brkić, Denis Berberović, Melnisa Šabović	
Istrian Sustainable Tourism Destinations.....	19
Jasmina Gržinić	
Sustainable Development in Term of Spa and Rural Tourism in Serbia.....	28
Vladana Hamović, Drago Cvijanović, Željko Arsenijević	
Process of Fiscal Decentralisation in the Slovak Republic in Comparison with Chosen Countries	33
Lenka Horváthová, Marianna Neupauerová	
Possibilities of Implementing "Flexicurity" Concept in Western Balkans Countries.....	41
Maja Jandrić	
Gravity Model and International Trade: the Case of OECD Countries	49
Mislav Jošić	
Fair Industry and Participant Satisfaction	56
Miodrag Koprivica	
Infrastructure and Service Providing Companies Business Activities	62
Dušan Kostić, Božo Drašković, Zoran Rajković	
The Use of Factor and Cluster Analysis to Support Regional Development Policy and Adoption of Nuts Classification in Bosnia and Herzegovina.....	70
Jasmina Osmanković, Rabija Somun, Emina Resić, Muamer Halilbašić	
Farm Level Income Impact of Using GM Technology	77
Tatjana Papić	
The Causes of Limited Success and Mutual Differences in Post-communist Transition Among the Countries of South-Eastern Europe	84
Milenko Petrović	
Transitional Pains of the Serbian Industry	95
Ljubodrag Savić	
Accountancy as a Means of Strengthening Farmers' Competitiveness	103
Duško Šnjegota	
Economic Crisis and Crisis of Economics Thought (What about if Friedman was wrong?).....	115
Dragoljub Stojanov, Vinko Kandžija	
Privatization and Restructuring of Serbian Economy Real and Banking Sector.....	125
Ivan Stošić, Saša Stefanović, Gordana Vukotić-Cotić	
Development of Dental Tourism in the Sarajevo Region	132
Boris Tihi, Almir Peštek, Sanid Vlajčić	
Minimum Wage and Average Wage in Slovakia	139
Renáta Vokorokosová	

The Image of Leasing Services as a Factor in Increasing Investment Activity in Countries in Transition.....	145
Slobodan Vujić, Saša Vujić	
The Free Movement of Capital Under the Stabilisation and Association Agreement	154
Jovan Zafiroski	
Models of Public Administration Reform: Which to Choose for Serbia?.....	162
Jelena Žarković-Rakić, Milena Lazarević	
Economic and Political Cooperation in the Region of Southeastern Europe Within the Framework of the CEFTA Agreement	170
Mina Zirojević, Sanja Jelisavac	
Organic Food Market Development – The Case of Serbia	179
Jovan Zubović, Ivana Domazet	
 SECTION II	
ENTREPRENEURSHIP AND SME ACTIVITIES.....	191
Entrepreneurship Dynamics Conceptualized Through Regional Economic Systems	193
Marika Basheska-Gjorgjieska, Aleksandar Gjuroski	
Women Entrepreneurship in Science and Technology: Impetus for Female Participation in National Development in Nigeria	201
J.B. Bilesanmi-Awoderu, O.O. Kalesanwo	
The Necessity of a New Legal Framework for the Reorganisation of the Cooperatives	207
Sonja Bunčić	
Accountant Analysis Tools in Function of Qualitative Company Management.....	213
Rifet Đogić	
Service Economy and Tourism with Special View on Rural Tourism in Bosnia and Herzegovina ...	221
Aleksandar Djurić, Tatjana Vujić, Ferhat Čejvanović	
Female Entrepreneurship in Serbia	227
Radmila Grozdanić, Mirjana Radović-Marković, Milanka Vučić	
The Different Form of Financing Small and Medium-Sized Enterprises in Bosnia and Herzegovina.....	238
Zijad Džafić, Adnan Rovčanin, Nermin Klopčić	
The Role of Small and Medium Enterprises for Economy Development.....	245
Miroslav Gveroski, Aneta Risteska	
Using Free Software Solutions to Improve Micro – and Small Business Bottom-line	251
Aida Habul, Zoltan Milić	
Business Dressing and Culture.....	257
Ana Langović-Milićević, Tatjana Cvetkovski, Zlatko Langović, Violeta Cvetkovska-Ocokoljić	
Marketing Mix Application in Degree-granting Educational Institutions.....	261
Biljana Lazić	
Entrepreneurship - Development Factor in Transitional Economies	268
Svetislav Paunović	
Microcredit as a Cure for Poverty: The Case of Serbia.....	274
Bojana Radovanović	
Development and Features of Female Self-employment in Bosnia-Herzegovina.....	279
Mirjana Radović-Marković, Snežana Lekić	
Women and Informal Activities in Transitional Countries and Serbia: Old and New Views.....	284
Mirjana Radović-Marković	

Women Activism in Nepal Micro Credit Movement Towards Selfreliants Economy and Happiness	291
Raghu Bir Bista	
In Tune With Business Entrepreneurial Opinion on “In Tune With Business” Programme.....	301
Peter Szirmai, Katalin Mihalkov Szakács	
Doing Business – The Challenges of Establishing Small and Medium Enterprises in Bosnia-Herzegovina	310
Mira Šunjić-Beus, Danijela Martinović, Ljiljan Veselinović	
Development of Entrepreneurship and the SME Sectors in South-Eastern Europe	318
Antal Szabó	
The Influence of Marketing Activities of Small Enterprises on Economic Growth and Development.....	327
Igor Trandafilović, Srdjan Žikić, Marija Vidanović, Suzana Živković	
Entrepreneurship Environment in Bosnia and Herzegovina in International Perspective	331
Bahrija Umihanić, Rasim Tulumović	
Female Entrepreneurship and Local Economic Growth: A Case of Countries in Transition.....	339
Mirjana Radović-Marković, Imani Silver Kyaruzi	
 SECTION III	
ECONOMICS OF KNOWLEDGE AND THE INFORMATION SOCIETY	341
Global Standard 1 (GS1): Key E-Business Performance in the Supply Chain Management.....	343
Slobodan Acimović, Ivana Stojanović	
Regional Differences in Human Capital: The Case of Croatia	351
Ana Aleksić, Fran Galetić, Ivana Načinović	
The Okun Law and its Application to the Portuguese Economy	360
João Sousa Andrade	
Strategic Management Planning as a Tool in Advanced Local Governments	372
Zvonko Brnjac, Dejan Erić, Ivan Stošić	
Accounting Case as an Application of the Graph Theory	379
Jozef Bucko, Vladimir Gazda, Radoslav Tušan	
A Comparative Analysis of Internet Banking in Bosnia and Hercegovina and Serbia	388
Marija Čutura, Igor Živko	
Taxpayer Services as a Part of E-Government.....	394
Mališa Đukić	
Factors Determining Modes of Entry of MVNO on Southeast Europe Mobile Communications Market	402
Anto Domazet, Nadžida Sarić	
Human Resource Management – Developing Force of Tourist Industry.....	409
Marija Džopalić, Jovan Zubović, Ivana Domazet	
The E-Logistics System.....	417
Dragan Ilić	
Challenges of Strategic Marketing in XXI Century	424
Karolina Ilieska	
Human Resources Management.....	428
Dejan Ječmenica	
New Ways of Increasing Nation Wealth in the Creative Age.....	433
Biserka Komnenić, Hristina Mikić	

Human Capital Management in Fair Events Organization.....	441
Vasilj Koprivica	
Consulting Services as a Factor of Economy Knowledge Development	446
Branko Mihailović, Zoran Simonović, Vesna Paraušić	
Human Capital Management.....	453
Dragan Mihajlović, Biljana Ilić	
Individual Versus Composite Indexes for Digital Divide Measuring	457
Đorđe Mitrović	
Creative Industries, Creative Economy and Knowledge Economy: The Holly Trinity of a New Economic Growth Paradigm.....	463
Saša Popović	
Challenging Human Capital Measurement – Learning Process.....	471
Živka Pržulj, Gordana Vukelić, Marija Vuksan Delić	
Appliance of the Concept of Learning Organization in Developing Tourism of Bosnia and Herzegovina	476
Zijada Rahimić, Amra Kožo	
E-Presentation of Accounting Information	486
Andijana Rogošić, Branka Ramljak, Ivana Bilić	
Is It Possible to Teach Leadership?.....	493
Laurent Lapierre, Pierre-Péladeau, Dragan Milinkovic Fimon	
 SECTION IV	
FINANCIAL SYSTEMS INTEGRATION OF BALKAN COUNTRIES	
IN THE EUROPEAN FINANCIAL SYSTEM 499	
Financial Sector Restructuring and Integration of Western Balkan Countries in the European Financial System.....	501
Claude Berthomieu, Jean-Charles Briquet-Laugier, Irina Syssoyeva (Masson)	
Testing Convergence in Europe: The Case of Integration of Balkan Countries in the European Financial System.....	510
Fabienne Bonetto, Anna Tykhonenko, Srdjan Redžepagić	
The Relationship Between Bank and SME: Evolution After Basel Capital Accord 2	521
Valter Cantino	
Underground Banking: Legitimate Network or Money Laundering System?	530
Bojan Đorđević	
The World Financial Crisis and Effects on Serbian Financial Sector	538
Đorđe Đukić, Mališa Đukić	
Comparative Analysis of Bank Concentration in Selected South East European Countries	544
Kesnija Dumičić, Anite Čeh Časni, Irena Čibarić	
Interdependence of Development of Financial Markets and Efficiency of Monetary-Credit Instrumentarium	555
Milenko Dželetović, Slobodan Rakić, Andrea Andrejević	
Private Equity Funds as Possible Source of Capital for SMEs in Transitional Economies – Case of Serbia.....	562
Dejan Erić, Saša Stefanović, Aleksandra Bradić-Martinović	
The Main Feature of B&H Financial Structure and Integration in EU Financial System.....	570
Mila Gadžić, Igor Živko	
La crise, l'Europe et les Balkans	577
Jean-Paul Guichard	

Effects of Capital Account Liberalization on Interest Rates in Croatia	583
Tomislav Herceg, Fran Galetić	
Deficiencies of Regional Securities Supervisors' Operational Independence with Particular Focus on the Serbian Securities Commission	591
Tatjana Jovanić	
Foreign Direct Investment and Economic Growth: the Role of Domestic Financial Sector.....	600
Gradimir Kožetinac	
Competitiveness in Banking Sector of Serbia	609
Marija Lazarević, Milica Mladenović	
Global Financial Meltdown: What Went Wrong, What Is Still Going Wrong and What the Consequences Will Be?	617
Marko Malović	
Balance of Payment as the Indicator of B&H Economy Situation and Its Trends.....	625
Željko Marić	
Applying MGARCH Models in Finance.....	633
Jelena Minović, Ivana Simeunović	
Venture Capital in the Central and Eastern European Countries and Croatia.....	642
Bojan Morić Milovanović, Tihana Šmitran, Dajana Cvrnje	
World Economy Crisis, Financial Hurricane or Structural Breakdown.....	651
Ismail Musabegović	
Role and Comparative Efficiency of European Banks in Serbia's Financial Sector	656
Anastasia Ri, Kamilya Suleymanova, Aleksandar Zdravković	
Stock Exchange Indexes on World Market – Influences on Financial Markets of Western Balkan Countries	664
Adnan Rovčanin, Sejfudin Zahirović, Jasmina Okičić	
Public Debt and the Financial Integration of the Balkan Countries in the Financial European System	675
Marius Samizafy	
The Importance of Required Reserves for Banks Liquidity Maintenance	684
Slavica Stevanović, Grozdana Belopavlović	
Various Innovating Instruments of Financial Markets Recommended in Case of a Fall in the Underlying Asset Price.....	689
Vincent Šoltés, Michal Šoltés	
Integration of Financial System of Republic Serbia into Financial System of EU- Banking: Trends and Challenges	696
Nataša Tanjević	
Housing Actualities and Development of Housing Finance in Croatia.....	703
Mladen Mirko Tepuš	
Internationalization of the Shareholder Capital in Banks and Creation of the New Financial Products in Serbia.....	713
Milan Vujović, Hasan Hanić	
Structural Characteristics and Profitability of Banking in Selected Transition Economies	722
Vlastimir Vuković	
SECTION V	
SOCIAL AND CIVIL DIALOGUE.....	731
The Process of Establishing a Better Quality Higher Education System in Serbia.....	733
Maja Ćirić, Sanja Đurđić	

At the Turns of Centuries and Millennia - Challenges of Globalization and the Technology of the Information Society.....	742
Slavenko Grgurević	
Training and Education of Employees as a Factor Affecting Competitiveness of Companies.....	750
Lidija Lesko, Zdenko Klepić	
Arts and Market Economy	758
Dragan Milinkovic Fimon	
Change Management for Implementation of Health Informatics Programs in Serbia	768
Jane Paunković, Nebojša Paunković, Vesna Baltezrević, Srđan Žikić, Nenad Crnčević	
Social Dialogue for More Effective Education and Human Resources Development in Montenegro	775
Mladen Perazić	
Corporate Social Responsibility and Stakeholders Theory in Context of Transitional Countries	785
Bahrija Umihanić, Dijana Husaković	
Development of Industrial Frame for Corporate Governance in Bosnia and Herzegovina	791
Zdenko Klepić, Josipa Grbavac, Nikola Papac	
Business Operation and Technology Strategy	801
Besim Čulahović, Zvonko Brnjas	

Preface

The International scientific conference „Challenges of Economic Sciences in the 21st Century“ held in Belgrade on 4th and 5th of December 2008 gathered over one hundred prominent scientific researches, university professors, and young economists from Italy, France, Portugal, Germany, United Kingdom, New Zealand, Hungary, Nepal, Nigeria, Slovakia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia and Serbia. The conference was organized by Institute of Economic Sciences Belgrade; Ministry of Sciences of the Republic of Serbia; Belgrade Banking Academy – Faculty for Banking, Insurance and Finance; University of Nice – Sophia Antipolis and University of Torino, Scuola di Amministrazione Aziendale on the occasion of the 50th Anniversary of the Institute of Economic Sciences.

Institute of Economic Sciences' field of activities is very broad, starting from macroeconomic studies elaboration, projections, forecasting, to international economic relation analysis, world economic and trade surveys, studies and strategies on economic, regional, and sustainable development, sector economic policies, as well as a large number of projects for economic subjects in almost all economic fields. Another IES orientation encompasses the consulting, knowledge innovation, continual training and education in the fields of current business economy, management, marketing, entrepreneurship, finances, etc. Through its “daughter” - Belgrade Banking Academy (BBA) - Faculty for Banking, Insurance and Finance, the Institute gives full contribution to human resources education at the highest academic and professional level.

The Conference title “Challenges of Economic Sciences in the 21st Century” was raised for the reason of dynamic changes that economic sciences are facing in the beginning of the new century, and we have identified five thematic sections:

- 1. Which Model of Market Economy for Countries in Transition? The Case of South Eastern Europe*
 - Macroeconomic Developments and Structural Changes*
 - Export Development and Internationalization*
 - Environmental Effects of Transition and Best Practices in the Region*
 - Sustainable Tourism Development*
 - Rural Development*
- 2. Entrepreneurship and SME activities*
 - Role of SMEs in Economic Growth*
 - Women's Entrepreneurship – Contribution of Women's SMEs in Economic Growth in Iransitional Countries*
 - Regional Differences in Entrepreneurial and SME Activity*
- 3. Economics of Knowledge and the Information Society*
 - Benefit of the Improved Knowledge Zone in the Region*
 - Financial Innovations*
 - The Role of Higher Educational Institutions for Economic Growth*
 - Human Capital Management*
 - Human Capital and Regional Development*
 - E-governance, E-business and E-learning*
 - Research, Technology and Innovation as Factors of Economic Growth*
- 4. Financial Systems Integration of Balkan Countries in the European Financial System*
 - Transformation of the Serbian Financial and Banking Sector*
 - Financial Liberalization and Growth*
 - Venture Capital, Finance, Taxation and Regulation*

*Foreign Direct Investment**5. Social and Civil Dialogue and their Impact on Economic Developments**Social Dialogue as a Key Prerequisite of Social Cohesion**Civil Dialogue and its Role in Developing Participatory Society.*

During the conference 62 papers were presented and apart from presentation, over 100 papers have been submitted by the authors, they were double blind reviews in order to achieve the high scientific level of the conference. For that reasons we publish this conference proceedings book in order to allow wider population access to this very important scientific achievement.

In Belgrade,
December 2008.

Dr Jean-Paul Guichard
Dr Valter Cantino
Dr Giuseppe Dutto
Dr Mirjana Radović-Marković
Dr Srđan Redžepagić
Dr Hasan Hanić

SECTION I
MODEL OF MARKET ECONOMY FOR
COUNTRIES IN TRANSITION

Influence of Distribution Channel on Development of Agricultural Sector Case: Agricultural Sector of Herzegovina

Sanja Bijakšić¹, Sandra Jelčić²

Introduction

Problems related to agricultural sector and food production in general have significantly escalated in the last twenty years. The reasons for this appearance are related to globalisation process from the one side and the process of creation of economic and regional integrations from the other. Accelerated growth of the world population cannot be neglected and this uncontrolled growth adds to number of other problems (for example exhausting certain resources necessary for life maintenance, lack of food, general fall in quality of living, increased level of pollution etc.). World population in 2000 was 6.1 billion people. According to predictions this number would increase to 9.7 billion people up to 2025.

At the same time, less developed areas are populated by 76% of population which yearly increases by the rate of 2%, while in developed countries population increases by the rate of 0.6% per year.³

The above mentioned issues equally strike both developed and undeveloped countries. The only difference is in the approach to the problem solving that depends on the level of development in the country and its standpoint.

Undeveloped countries are mostly represented by narrow, unspecialized and closed markets with low accumulative capability of economy. Developed countries have higher rate of accumulation, which enables faster growth along with higher investment opportunity. At the same time they try to protect their own agricultural sector with country intervention, which is reflected through introduction of different prohibitions and import restrictions. Simultaneously, they constantly try to stimulate export. Of course this situation brings undeveloped countries into the unequal position in “international market game”.

All these events in the international market did not bypass our country. Bosnia and Herzegovina is transitional country in which agrarian policy, from the present standpoint, was wrongly managed both before and after the last war events and. Today, we are facing the situation that on one side has remains of expensive and inefficient agricultural conglomerates and on the other side pint-sized family farms that cannot be competitive in contemporary market economy.

It is also necessary to emphasise that Bosnia and Herzegovina is extremely complex country with numerous open processes and needs to reform on the internal and international political plan.⁴

Agricultural sector of Herzegovina

Agricultural sector of Herzegovina cannot be observed without knowledge of the situation in the agriculture of the country, Federation respectively. Agricultural area in the Federation of Bosnia and Herzegovina is 1151 thousands hectares. Out of that number 762 thousands hectares is cultivable land, 423 thousands hectares are pastures and 2 thousand hectares is reed.⁵

¹ Sanja Bijakšić, Ph.D., Assistant Professor, Faculty of Economics, University of Mostar

² Sandra Jelčić, B.Sc., jr., Assistant, Faculty of Economics, University of Mostar

³ Kotler, Ph., Keller, K.L. Upravljanje marketingom, dvanaesto izdanje, Mate, Zagreb, 2008, p.79

⁴ Srednjoročna strategija razvoja poljoprivrednog sektora u Federaciji Bosne i Hercegovine (2006 – 2010), Federalno ministarstvo poljoprivrede, vodoprivrede i šumarstva, 2006, p.3

⁵ Analiza ostvarenih rezultata poslovanja subjekata u privredi i društvenim djelatnostima F BiH u 2005 godini, Federalni zavod za programiranje razvoja, Sarajevo, April 25, 2006, p.15

Natural and social factors influence agriculture development. Natural factors such as natural resources and characteristics of agricultural production are exceptionally favourable. Herzegovina region represents extremely broad natural ambience with the representation of different systems of soil but also with different for-use land value.

Agricultural share in BNP was 9.8% in 2004 and it was little bit lower in 2005 at 9.6%.⁶ Sectors of primary agriculture and forestry made 8.7% of total BDP in 2006 and they employed 7.4% of total work force.⁷ After this period it experienced slight increase and it was 8.94% in 2007.⁸

Agricultural sector of both the Federation and Herzegovina is characterized by expressed fragmentation of landed properties, followed by low productivity and agricultural products market instability. Land fragmentation arose as a consequence of dual ownership over the land. Land in private ownership was limited in previous system. At the same time agricultural land which was in public (state) ownership was without limitations. The result of this was concentration of agricultural land in public ownership, while land in private ownership was fragmented. Such solution of ownership over agricultural land also caused negative movements in this sector. Average size of farms that are privately owned is around 3 to 3.5 hectares and they are mostly made of 7 to 8 fragmented parcels. Farmer from Bosnia and Herzegovina produces for himself and for two to three consumers. Farmers from developed countries produce for 35 to 64 citizens. Of course, such fragmented farms are not competitive in contemporary market economy. Instead of concentration and specialization they are directed towards diversification of production.

Agriculture should be one of determinants of the economic system. Bigger attention is given to it now, although not at that level in which it is required. Agriculture should become central occupation of rural areas and with it healthy and perspective occupation, which could be a chance for employment of farmers and their families but also for a broader community. With such way of development agriculture should relate to itself in different activities from manufacturing to service sectors (for example development of handicrafts, rural tourism and similar) which would certainly influence development of the economy as a whole.

Distribution of agricultural products

Agricultural sector differs from other economic sectors so distribution of agricultural products also has many specific characteristic with regards to distribution of other products of broad consumption. Basic specificities of agricultural products in regards to other products are:

- those are mostly seasonal, easily perishable products and it is necessary to bring it to the consumers in primary usage value;
- they are mass in both production and consumption.

Changes in distribution channels are caused by changes in consumers' behaviour. The consumers in contemporary economies want to know what they buy, they want to know origin and ways of production and similar, especially if those are agricultural and alimentary products. Also there is more expressed need to do "shopping at one place". On such selling places consumers would be in possibility to do shopping of all necessary victuals but also of other products they require for satisfaction of household needs. As ideal place for such type of shopping supermarkets are profiling. Along with different products intended for satisfaction of needs in household they intrude as shopping places of fresh fruit and vegetables.

Distribution system of agricultural products requires integral and systematic approach to all parts of the process. Activities within this system are interconnected and make integral entity (collecting, sorting, storage, physical distribution and other).

⁶ Makroekonomski pokazatelji F BiH, Federalni zavod za programiranje razvoja, Sarajevo, February 19, 2005

⁷ <http://go.worldbank.org/M0LML8SD50> from October 31 2008

⁸ <http://bhas.ba> from October 10 2008

To make distribution of agricultural products efficient along with so many activities it is necessary to insist on logical conception of activities of the whole marketing system. That means development of both micro and macro segments.

Distribution of agricultural products of Herzegovina

The task of distribution is to deliver products from producers to end-users/consumers in the shortest time period and at the most affordable prices and to as many selling places as possible. If we take into the consideration distribution system of agricultural products in highly developed countries as well as in developed countries of Europe, we get to the conclusion that our distribution is undeveloped and with the lack of accompanying infrastructure. The most significant subjects, but also activities in distribution chain of these products, are: repurchase of fresh fruits and vegetables, fresh milk, meat and other agricultural products in fresh condition, food processing industry, different mediators, wholesale trade and retail sale. At the end of distribution chain we get to the last link – consumer. We have to take into the consideration that distribution is not only made of physical transport of end products but it also requires many other accompanying activities. Well-developed distribution system also requires existence of public storages of different type, refrigeration plants, financial institutions, transport companies, specialized marketplaces and shops, exhibition and sale fairs.

If we start from consideration what one developed system of distribution of agricultural products should have, we can say that in our case the biggest part stays at the ‘territory’. Agricultural products sale is mostly conducted through marketplaces of “stall” type. Selling place is often “bench”, kiosk, but also a lorry sale. The lorry sale is especially expressed when selling potatoes, cabbage, apples as well as certain types of less sensitive fruits and vegetables. These types of sale are not capable of fulfilling the needs of contemporary consumers in most cases and often they are not harmonised with legal regulations. Assortment of products that are sold in this way is limited and they are offered in quantities for which it is assumed that they would fulfil daily needs of the consumers.

Specially organized and specialized marketplaces such as marketplaces of eco-products, flower marketplaces and similar, still do not exist. Financial institutions that would exclusively give financial support to agricultural producers are not represented at the Federation level.⁹ Certain cantons along with participation of different micro credit organizations are trying to make some progress. If we take other mediators (for example marketing and similar ones that deal with promotion, advertising etc) into the consideration, we can emphasise that they do not function at all or in a very small degree in our market.

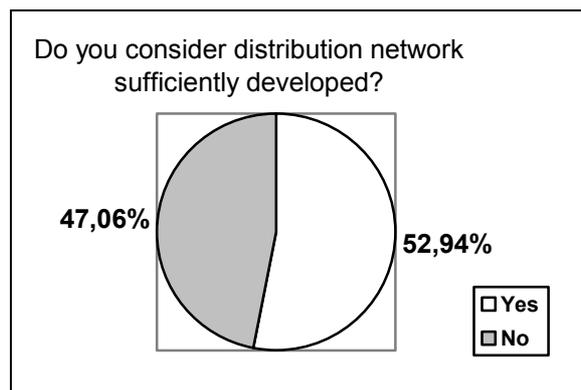
However, after the research has been conducted on what farmers from Herzegovina think on distribution system, the following can be emphasised:

over 50% (correctly 52.94%) of respondents consider distribution network sufficiently developed, and the most common channel that agricultural producers use are wholesale trade.

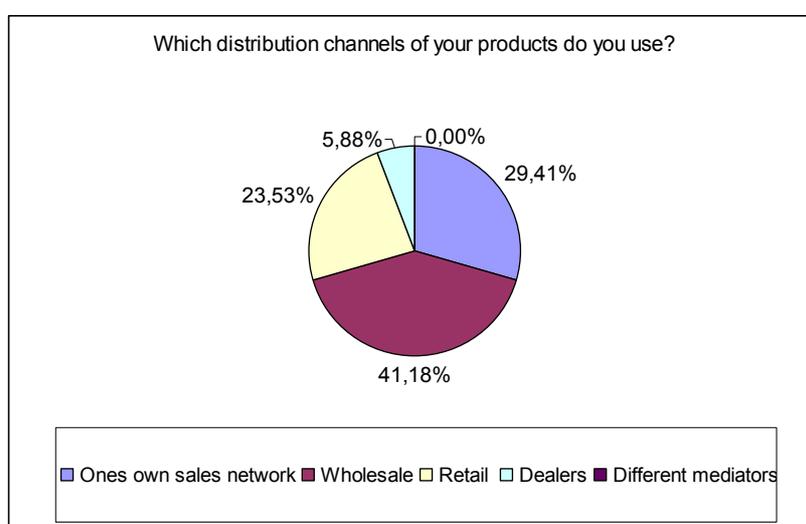
Graph 1. Do you consider distribution network sufficiently developed?

Do you consider distribution network sufficiently developed?	
Yes	52,94%
No	47,06%

⁹ In any case distribution system would be much better if financial institutions that deal with providing financial support to agricultural producers functioned. Special forms of cooperatives, agricultural banks would belong to this category but insurance companies could also be more adequately involved in this, etc.



Graph 2. Distribution channels



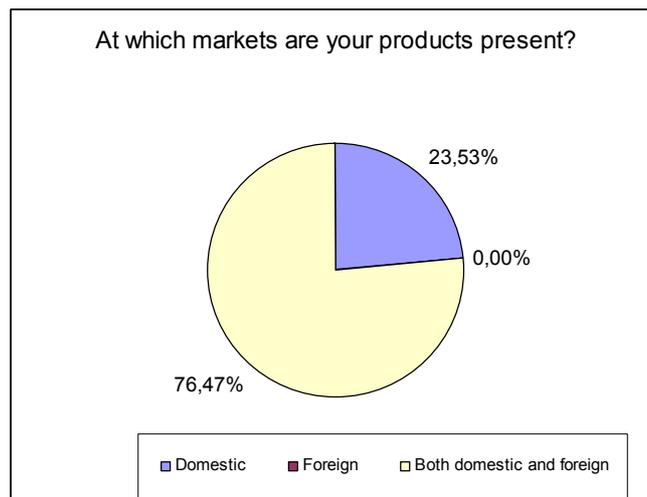
Such considerations and attitudes of managers of agricultural companies and family farms that have been questioned are a bit surprising because the real situation of distribution network does not reflect “rosy view” at all.

On the other hand, the offer at the market is more and more heterogeneous, great quantities of products are imported, which are often poorer quality than domestic ones but competition has become severe. The question is: how to improve such relatively bad position of Herzegovina agriculture and how to increase competitiveness of its products? We have to be aware that primitive and non-market constitution of agricultural sector at the same time contributes creation of loss of national economy through unrealised national products.

The positive thing is that the great numbers of domestic producers, besides market in Herzegovina, export their products abroad.

Graph 3. Presence of agricultural products at domestic and foreign markets

At which markets are your products present?	
Domestic	23,53%
Foreign	0,00%
Both domestic and foreign	76,47%

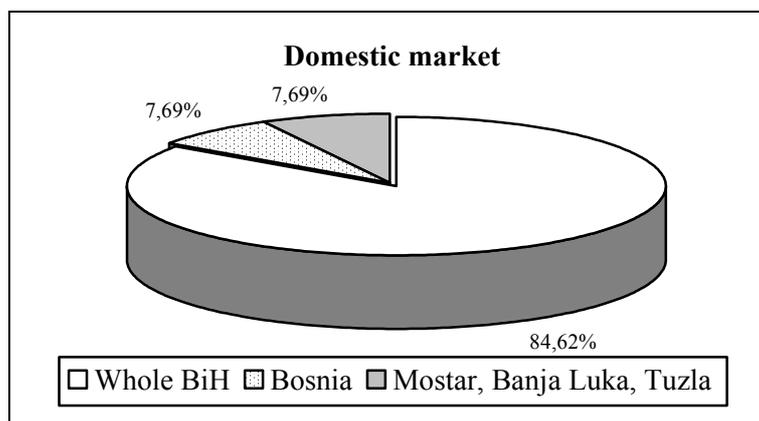


It is visible from the previous table that some companies distribute their products only at domestic market and the biggest part of them run a business in the area of the whole Bosnia and Herzegovina.

Graph 4. Presence of agricultural products at domestic market

Domestic market		
Whole BiH	Bosnia	Mostar, Banja Luka, Tuzla
84,62%	7,69%	7,69%

One of the ways on which we can influence development of distribution is strengthening direct sale, which has been neglected in our country (in this case direct sale has been observed as distribution channel of zero level).



Direct sale is not stimulated, it is not regulated by the law, brings with itself financial sale risks, and does not provide stability of offer (both in price and quantity).

Direct sale presents such a type of sale that it is conducted without mediators, i.e. agricultural producer sells directly its products to end consumer without mediators.¹⁰ In any case it would have positive effect on the increase of sale in a whole and dedication to domestic agricultural products can be crated

¹⁰ Kovačić D., Kolega A., Radman M.: *Izravna prodaja poljoprivrednih proizvoda u Hrvatskoj-mogućnosti i ograničenja*, Prilagodba Europskoj zajednici, hrvatske poljoprivrede, šumarstva i ribarstva, June 5-8, 2002, Zadar, p. 111

with it. The modes on which it could be conducted are multiple for example self-harvest (buyer harvests himself and picks products he/she wants), sales at the family farm¹¹, selling stall along the roads, sale from delivery car.

Conclusion

It would be necessary to introduce certain novelties in distribution system. Production of agricultural products is seasonal while their demand is permanent. In the area of Herzegovina system of storage, refrigeration plants and processing plants of agricultural products, is insignificant. It would be necessary to initiate these activities and modernize whole distribution process. It would be desirable to invest in structure of wholesale markets and activate specialized marketplaces, which do not exist or are in insignificant number in our country. The consumers would be more motivated to buy if they had approach to these marketplaces because they would have greater choice (for example marketplaces of eco-products, flower marketplaces, marketplaces with exclusively domestic products so called peasant's markets and similar). On such organized marketplaces producers/salespersons would guarantee for quality of products and deduction to domestic product would be created. This way of sale would have precedence for both producer and buyer. Producers would have direct contact and meet buyers, would have secure market and possibility of permanent placing of products, which also would reflect on their income. Consumers' pleasure is guaranteed for repeated purchase. The consumers would have a possibility of direct contact with producer, can be interested in the production mode (eco-cultivation, conventional cultivation), find out the level of products quality that creates deduction towards producer and his/her product.

One of the possibilities to improve distribution, but also sale, is organised sale at private farms. This is a principle that has become increasingly used in highly developed countries. On this way consumers come in direct contact with the producer, can be assured of his/her mode of production, specific relationship between producer and consumer is created and consumers repeat purchase, the prices of products are lower and this form can be linked with other forms of economic and service activities (for example development of rural tourism, crafts etc.)

As a mode of sales improvement we can also mention the Internet sale. However this form is certainly still far future in our market because small percentage of producers can shift to this system of sale and most consumers are not familiar with this manner of business running, its possibilities and application. Certainly the Internet provides to agricultural producers significant advantages in B2C but also in B2B. Those are first of all lower expenses of conducted transactions as well as easier entrance into the international market. Of course, agricultural product represents certain obstacle because of its specific characteristics that separates it from other products at the market.

In any case, as a conclusion we can emphasise that agriculture of Herzegovina has great comparative advantages (cultivable land, favourable climate, possibilities for watering, long history of agricultural cultures cultivation, human resources etc.). Along with more active application of marketing and modernisation of distribution system, development would probably be faster and elevated at the higher level. Of course, the state with its mechanisms should stimulate this process and protect agriculture in the way it is done in developed countries.

¹¹ When buying at family farm the buyer creates deduction to „autochthon“ domestic product and generally towards domestic agricultural products and for example can be assured in eco mode of production, choose products which he wants, can strengthen and develop rural tourism etc.

References

- Kotler, Ph., Keller, K.L. *Upravljanje marketingom*, Dvanaesto izdanje, Mate, Zagreb, 2008
- Kovačić, D., Kolega, A., Radman, M.: *Izravna prodaja poljoprivrednih proizvoda u Hrvatskoj-mogućnosti i ograničenja*, Prilagodba Europskoj zajednici, hrvatske poljoprivrede, šumarstva i ribarstva, June 5-8, 2002, Zadar
- Analiza ostvarenih rezultata poslovanja subjekata u privredi i društvenim djelatnostima F BiH u 2005 godini, Federalni zavod za programiranje razvoja, Sarajevo, April 25, 2006.
- Makroekonomski pokazatelji F BiH, Federalni zavod za programiranje razvoja, Sarajevo, February 19, 2005.
- Srednjoročna strategija razvoja poljoprivrednog sektora u Federaciji Bosne i Hercegovine (2006 – 2010), Federalno ministarstvo poljoprivrede, vodoprivrede i šumarstva, 2006
- <http://go.worldbank.org/M0LML8SD50>
- <http://www.bhas.ba>

Determinants of Bosnia and Herzegovina's Country-image

Nenad Brkić¹, Denis Berberović², Melnisa Šabović³

ABSTRACT - Country image represents an important source of competitive advantages coming from the high quality of products from a certain country, superior knowledge in specific areas or information from social, political and cultural country's environment, history and tradition. Products which are already present in the market, as well as those which are new, are being more and more valued in accordance with the country image, making the latter an important factor in the purchase decision process. Developing countries have the intention to build and manage their country image in order to enhance their economic activities. Bosnia and Herzegovina is among those countries. This Balkan country is eager to build a positive country image in order to support its role in the regional economic development by the spill-over effect. With the intention to specify factors which determine Bosnia and Herzegovina's country image, a research was undertaken among 333 university students in Sarajevo, Banja Luka and Mostar. Research results show that students perceive their country's image as negative. Participants also stated natural resources, as rivers and woods, historical and cultural heritage, as well as famous Bosnians and Herzegovinians as main drivers of Bosnia and Herzegovina's country image. They believe that politicians and politics they represent are the main reason for the negative country image.

KEY WORDS: Bosnia and Herzegovina, determinants, country image

Introduction

One of the most essential aspects in creating country's competitive advantage on the world tourism market (or any other market, for that matter) is surely its image. If one looks at a country strictly as a tourism destination, then its image is defined as „a set of beliefs, ideas and impressions that people have about a certain place”⁴. Furthermore, together with a number of attractions, infrastructure and people, image is considered as one of the top four strategies for drawing market attention. Therefore, a positive country image is even more essential for the so called “emerging” countries, such as Bosnia and Herzegovina.

Nevertheless, the process of changing country's image is rather slow, and the larger the country, the harder it is to change its image. The reason for this lies in the fact that tourism image consists of many different parts, including natural resources, social system which manages the tourism sector, as well as human factor which is rather important in the service sectors, notably tourism.⁵

There are several authors, who accentuate the difference between image and stereotype. Therefore, an image is set of individual beliefs, while stereotype is a set of common beliefs about a certain destination, which is a direct consequence of long-term country image⁶. Alternatively, others argue that these two elements should be considered as one, and thus define image as “an expression of objective

¹ Nenad Brkić, PhD, is associate professor at the Department of Marketing, School of Economics and Business in Sarajevo, University of Sarajevo.

² Denis Berberović, BSc, is teaching assistant at the Department of Marketing, School of Economics and Business in Sarajevo, University of Sarajevo.

³ Melnisa Šabović, BSc, is the executive manager of GSM, mystery shopping agency.

⁴ Kotler, P; Asplund, C; Rein, I; Haider, D: Marketing Places Europe; Second Edition; Prentice Hall; 1999; p. 162.

⁵ Wang, S: An Image Study of Oklahoma as an International Travel Destination; Graduate College of the Oklahoma State University; 2003; p. 19.

⁶ Skoko, B: Hrvatska (Identitet, Image, Promocija); Školska knjiga; Zagreb; 2004; p. 47.

knowledge, impressions, prejudices, thoughts and emotional thoughts of an individual or a group towards a particular place”⁷.

The elements that define country image are: exports („country-of-origin“ effect), country’s politics, its citizens, the attractiveness towards foreign direct investments, culture “exports” and tourist experiences in that country”.⁸ “A tourist, for example, in deciding where to spend his vacation, will definitely take into consideration previous positive experiences from other tourists, quality of products coming from that particular country, its culture, etc.”⁹ Besides that, potential tourists compare countries, and choose destinations according to their impressions and perceptions.¹⁰

It is important to note that tourism destinations can have overly creative images, positive or weak images, contradictory and negative images.¹¹

Of course, this can be a consequence of a different country image, which varies from person to person. However, a country can have a negative image because of natural disasters or human mistakes. There are numerous countries which “fight” with its negative image, one of them being Bosnia-Herzegovina.

The main aim of this research is to outline the determinants of Bosnia and Herzegovina’s image, more precisely those determinants that its citizens consider important. What was taken into account was a citizen role in building a country’s image, hence a need for a more scientific articulation of their views. Up to date research allows one to talk about the importance of internal image-building (meaning image-building within a country), after which it is possible to transfer that image to the entire country. Therefore, “it is possible to create a positive image of Sarajevo Canton through transferring certain image factors, such as brand names, services, cultural and sporting events, famous persons, natural resources and societal developments”¹². „At the same time, it is possible to transfer the image of Sarajevo Canton to other image elements in Bosnia-Herzegovina, including the level of purchase of Bosnian products in other countries, and frequency of choosing Sarajevo Canton and Bosnia-Herzegovina as tourism destinations.“¹³

Methodology

The research was conducted using a random sample method; 333 students at universities in Sarajevo, Banja Luka and Mostar were questioned using anonymous questionnaires. The questionnaire was in a written form, created solely for the purposes of this research, and consisting of two parts. The first part dealt with the demographic data, while the second part considered research questions-factors of image building in Bosnia and Herzegovina. The questionnaire asked three sorts of questions – dichotomous, open answer and multiple choices, while Likert’s scale was used for measuring. The analysis of collected data was processed in SPSS.

Research results

The analysis included 184 female students (55.3%) and 131 male students (39.3%). There were 18 invalid answers regarding gender questions (5.4%). The age groups of participating students are shown in the Table 1.1.

⁷ Lawson, F; Baud-Bovy, M: *Tourism and Recreational Development*; Architectural Press; London; 1977 (preuzeto iz Jenkins, O. H: *Understanding and Measuring Tourist Destination Images*; *International Journal of Tourism Research*; 1; 1999; p. 2

⁸ Johansson, J: *The New „Brand America“*, *Place Branding*; Vol 1; 2005; p. 156.

⁹ Avdić, S: *Branding turističke destinacije – primjer Kantona Sarajevo*; magistarski rad; odbranjen na Ekonomskom fakultetu u Sarajevu; 27. 03. 2008; p. 19.

¹⁰ Anholt, S: *Some Important Distinctions in Place Branding*; *Place Branding*; Vol 1; 2005; p. 119.

¹¹ Kotler, P; Asplund, C; Rein, I; Haider, D: *Marketing Places Europe*; Second Edition; Prentice Hall; 1999; p. 54.

¹² Avdić, S: *Branding turističke destinacije – primjer Kantona Sarajevo*; magistarski rad; odbranjen na Ekonomskom fakultetu u Sarajevu; 27. 03. 2008; p. 83.

¹³ *Ibid*; p. 83.

Table 1.1. Age groups of participating students

Age Group	Frequency	Percent
18 – 25	267	80.2
26 – 35	38	11.4
36 – 45	8	2.4
46 – 55	3	0.9
Invalid answers	17	5.1
Total	333	100

Taking into account that Sarajevo, Banja Luka and Mostar are main university centers in Bosnia and Herzegovina, with a large number of students coming from other parts of the country, it can be said that interviewees come from geographically diverse regions. However, most participants come from Sarajevo- 123 (36.9%), Banja Luka – 75 (22.5%), Mostar – 33 (9.9%), Donji Vakuf - 13 (3.9%), Široki Brijeg - 8 (2.4%), Čitluk, Ljubuški and Teslić - 4 (1.2% from each town), Breza, Stolac, Grude and Čelinac - 3 (0.9% from each town), Travnik, Tomislavgrad, Kiseljak, Tešanj, Kakanj, Visoko, Prnjavor, Mrkonjić Grad and Kneževo - 2 (0.6% from each town), and 1 student each from Bugojno, Goražde, Posušje, Jablanica, Vitez, Čapljina, Zavidovići, Vareš, Derventa, Bosanski Petrovac, Han Pijesak, Modriča, Prijedor, Doboj, Gradiška, Laktaši and Srbac (0.3% from each town). There were 22 invalid answers (6.61%).

Looking at interviewees nationalities, there were 133 Bosniaks (39.9%), 97 Serbs (29.1%), 64 Croats (19.2%), 19 others (5.7%), while 20 participants (6.0%) did not answer this question. Therefore, one can state that the sample was also equally represented according to the national structure of Bosnia and Herzegovina.

The interviewees were mainly undergraduate students, 284 of them (85.3%), while only six (1.8%) were at the graduate level. There were a total of 43 invalid answers (12.9%) to this question. Undergraduate students were divided into groups according to their year of study (shown in Table 1.2):

Table 1.2. Undergraduate participants

Year of study	Frequency	Percent
First year	152	45.6
Second year	59	17.7
Third year	19	5.7
Fourth year	52	15.6
Invalid answer	51	15.3
Total	333	100

The structure of interviewees according to their monthly salary is given in Table 1.3:

Table 1.3. Interviewees structure according to their monthly income

Income level	Frequency	Percent
No income	17	5.1
Income of up to 500 KM	53	15.9
From 501 up to 1.000 KM	118	35.4
From 1.001 up 2.000 KM	78	23.4
More than 2.000 KM	38	11.4
Invalid answers	29	8.7
Total	333	100

The first question from the second part of the questionnaire asked for an overall perception of Bosnia and Herzegovina's image. A total of 80% of interviewees (24%) considers that Bosnia and Herzego-

vina has a very negative image, 129 or 38.7% thinks that the country's image is negative, 94 or 28.2% believes that the country has neither positive nor negative image, while six students or 1.8% of them thinks that Bosnia and Herzegovina has positive image. Only two students (0.6%) consider Bosnia and Herzegovina a country with very positive image. There were 22 invalid answers or 6.6%. The grade scale was from 1 to 5, where 1 was the lowest (*very negative image*) and 5 was the highest (*very positive image*). The average grade given was 2.10, hence a conclusion that only a small number of interviewees considers Bosnia and Herzegovina a country with a positive image, while a large majority still believes that Bosnia and Herzegovina has, more or less, a negative image.

In the second question, the participants were asked to grade (from 1 to 5) all of the 16 aspects of country's image. Table 2.1 shows a detailed overview of some of the aspects.

Table 2.1. Grades given to certain image aspects of Bosnia and Herzegovina

No.	Image aspects	Grade (1-5)
	Natural resources	3.85
	Cultural values	3.67
	Famous athletes	3.56
	Prominent scientists living abroad	3.53
	Positive examples of international companies operating in Bosnia and Herzegovina (e.g. Coca-Cola, etc.)	3.52
	Prominent citizens living in Bosnia and Herzegovina	3.44
	Examples of famous companies from Bosnia and Herzegovina	3.34
	Famous cities and towns	3.33
	Banks and other financial institutions	3.32
	Education system	3.27
	Organization of international sports events	3.15
	Organization of international conferences, meetings and congresses	3.11
	Brand names of Bosnian products and services	3.04
	Social and political system	2.65
	The image of Bosnian government and its politicians	2.58

The highest grade (3.85) was given to natural resources, the aspect which students consider the most important in creating a positive image of Bosnia and Herzegovina. In addition to this, cultural values (3.67), famous athletes (3.56), well-known scientists living at home and abroad (3.53 and 3.44 respectively), as well as positive experiences of international companies operating in Bosnia and Herzegovina (3.52) received the highest grade, while the lowest were given to socio-political aspects and the image of Bosnian politicians and its government (2.65 and 2.58 respectively).

The open question stating "Which BH brand names do you think contribute the most to country's image", was answered citing the following companies: *Violeta*, and *Nektar beer* (10.5% answers), *Sarajevsko beer* and *Sarajevo Mineral Water* (both 9.6%), *Travnik Cheese* (8.8%) as well as other brands that help create a positive image of Bosnia and Herzegovina¹⁴.

The fourth question "Which tourism regions do you consider important in creating a positive image of Bosnia and Herzegovina?" dealt with the most popular destinations in Bosnia and Herzegovina. The most common answers were Jahorina Mountain (11.7%), which is also very attractive winter resort for tourists from the region, followed by Neum, Bosnia and Herzegovina's only coastal town (9.8%). Other answers include Bjelašnica Mountain with 7.9% of answers, the *City of Mostar* (7.5%), *Međugorje* (7.3%) and *Sarajevo* (6.3%), followed by *Vlašić* Mountain with 6% of answers¹⁵. It is interesting to note that most interviewees consider Bosnian mountains (Jahorina, Bjelašnica and Vlašić) and cities (Neum, Mostar, Međugorje and Sarajevo) to be the most important places in creating a positive image of Bosnia and Herzegovina. These answers are complimented with the first question, where

¹⁴ The frequency of other answers is statistically irrelevant.

¹⁵ The frequency of other answers is statistically irrelevant.

students listed natural resources and cultural values as the most essential aspects of positive image creation. However, one can still notice that the answers to this question are dominated by places of great natural importance, for three first places were taken by centers of natural beauties (Jahorina, Neum and Bjelašnica), while Mostar, Međugorje and Sarajevo follow them.

As for the cities and towns that contribute the most to positive image creation in Bosnia and Herzegovina, participants listed Sarajevo with 38% of the answers, followed by Mostar with 28.9% and finally Banja Luka with 14%.

The following question considered companies that, according to interviewees' opinion, contribute to positive image of Bosnia and Herzegovina. This was an open type question, and 94 different answers were given, out of which the most common and thus statistically relevant were *Aluminij Mostar* (12.8%), *Klas Sarajevo* (9.7%) and *Bosnalijek Sarajevo* (8.4%). Other answers were statistically irrelevant.

“Which cultural values do you consider important in creating a positive image of Bosnia and Herzegovina” was the following question. The most common answers are shown in Table 2.2:

Table 2.2. Cultural values which contribute to positive image-building in Bosnia and Herzegovina

No.	Cultural values	Percent
	Mostar Old Bridge	21.5
	Religious buildings	8.0
	National folklore	7.2
	Bašćaršija in Sarajevo	5.9
	Stećci (monumental medieval tombstones)	4.6
	Museums	4.2
	Traditional values	3.4
	Sarajevo Film Festival	2.5

On the other hand, a question “Which well-known specialists contribute to positive image-building in Bosnia and Herzegovina” saw answers such as *Dr. Dragoljub Stojanov* – a well-known economist (10.2%), followed by *Dr. Mladen Ivanić* – former Minister of Foreign Affairs (6.8%), *Danis Tanović* – Oscar winning director (5.7%), Director of Aluminij Mostar *Mijo Brajković* (5.1%), and politicians *Dr. Jadranko Prlić* and *Dr. Haris Silajdžić* (each 4.2%), *Dr. Zlatko Lagumdžija* (3.4%). Other answers are statistically irrelevant.

A list of famous Bosnian citizens who live abroad is presented in Table 2.3:

Table 2.3. Famous BH citizens living abroad who contribute to positive image-building in Bosnia and Herzegovina

No.	Famous BH citizens living abroad	Percent
	Vahid Halilhodžić (soccer coach)	19.7
	Asim Kurjak (medical expert)	13.6
	Ivica Osim (soccer coach)	12.1
	Danis Tanović (director)	7.6
	Dragoljub Popović (scientist)	7.6
	Ivan Lovrinović (scientist)	4.5
	Sergej Barbarez (soccer player)	3.0

The following question asked was “Which famous athletes do you think contribute the most to positive image-creation in Bosnia and Herzegovina?” The answers included 61 different names, and *Hasan Salihamidžić* was listed as the most famous (19.1% of all answers), followed by *Dražen Ninić*, a kick-

boxer with 13.2%, and *Sergej Barbarez* (soccer player) with 12%. Other answers are statistically irrelevant.

Furthermore, a question “What persons from cultural life contribute the most to positive image-building in Bosnia and Herzegovina”, the interviews listed *Danis Tanović* (24.2%), *Ivo Andrić*, a Nobel Prize winner with 9.6% of answers, while *Pjer Žalica*, a famous director was placed third with 5.6.% of answers. Other answers are statistically irrelevant.

The most common answers to the question “Which natural resources do you consider the most important in building a positive image of Bosnia and Herzegovina” are listed in Table 2.4:

Table 2.4. Natural resources which contribute to positive image-building in Bosnia and Herzegovina

No.	Natural resources	Percent
	Forests	26.9
	Waters	24.3
	Rivers	12.4
	Mountains	9.5
	Mine ore	9.7

Taking into consideration the fact that interviewees listed waters and rivers as two separate answers, they are shown separately in Table 2.4. Nevertheless, it would be logical to consider these two resources together, and thus conclude that water is considered the most important natural resources with a total of 36.7% of votes. Second place would then be taken by woods, followed by mountains and mine ore. The frequency of other answers is statistically irrelevant.

A question “Which characteristics of Bosnian socio-political system do you consider to be most important in forming a positive image of Bosnia and Herzegovina” saw *multiethnic/multicultural environment* (29.2%) and *freedom of speech* (12.5%)¹⁶ as the most frequent answers.

Aside from being asked to answer questions on positive characteristics of Bosnia and Herzegovina’s socio-political system, students were requested to give their opinion on positive trends in country’s economics. Consequently, the most frequent answers to this question were: a *stable currency* (29.5% of all answers) and *privatization* (15.4%). However, it is important to note that in case of privatization, the interviews did not grade the privatization process itself, but its presence in Bosnia and Herzegovina’s economy, which they consider a positive trend.

Table 2.5 illustrates the most important service industries that students consider important in forming a positive image of Bosnia and Herzegovina.

Table 2.5. Services which contribute to positive image-building in Bosnia and Herzegovina

No.	Service sector	Percent
	Tourism	41.5
	Gastronomy	21.5
	Banking	13.1
	Communications	13.1

The highest number of interviewees (41.5%), susceptible, considers tourism to be the most important aspect of image-building in Bosnia and Herzegovina. Gastronomy received a much lower mark (21.5%), while banking and communications each received 13.1% of all answers. The frequency of other answers is statistically irrelevant.

¹⁶ The frequency of other answers is statistically irrelevant.

The question “Would foreign direct investors contribute to positive image creation of Bosnia and Herzegovina” was recorded according to three possible answers – yes, no and maybe. 74.8% of interviewees answered *yes*, while only 6.9% said *no* and 7.2% said *maybe*. There were 11.1% of invalid answers.

The following question was “Which industry sector should be the most important for Bosnia and Herzegovina’s economy in the process of creating a positive image?” Seven industry branches were offered as possible answers, and graded on the scale from 1 (not important) to 5 (very important). Table 2.6 shows average grades for each sector:

Table 2.6. Industry sectors which contribute to positive image-building in Bosnia and Herzegovina

No.	Industry sector	Grade (1-5)
	Tourism	4.28
	Agriculture	4.09
	Wood industry	4.08
	Gastronomy	3.95
	Industrial production	3.87
	Trade	3.79
	High-tech Industry (computers, software, etc.)	3.61

Tourism was graded the highest, with an average grade of 4.28, while agriculture and wood industry received 4.09 and 4.08 respectively. These grades clearly show students’ opinions about the importance of tourism, as well as forests as the most important natural resource which can contribute to positive image creation in Bosnia and Herzegovina.

One of the last two questions was “In what degree do you consider Bosnia and Herzegovina’s diplomatic missions abroad to contribute to positive image creation?” Five different answers were given, and the results of this analysis are shown in Table 2.7:

Table 2.7. The importance of diplomatic missions abroad

No.	Answers	Percent
	No contribution at all	24.6
	Do not contribute	23.4
	Neither contribute nor do not contribute	33.9
	Contribute	9.9
	Absolutely	4.8
	Invalid answers	3.4

It is evident that most interviewees do not consider diplomatic missions as important players in creating a positive image of Bosnia and Herzegovina. Thus, the result of 81.9% shows that most students believe that diplomatic representations abroad do not complete one of their most important functions, which is country promotion abroad. There are two possible explanations for these poor results. Firstly, it maybe that Bosnia’s missions abroad indeed do a lot towards creating a positive image of Bosnia and Herzegovina, but the public in Bosnia and Herzegovina is not adequately informed. Taking into consideration an extremely negative perception of political structures in Bosnia and Herzegovina (including diplomatic missions abroad), the citizens of Bosnia and Herzegovina are very prone to negative opinion on the efficiency and effectiveness of BH diplomatic representations. Secondly, it can be said that state representations abroad do not engage in important activities that could contribute to positive image-building in Bosnia and Herzegovina.

The aim of this research was to identify the determinants of Bosnia and Herzegovina’s positive image in the world. However, we also asked a question regarding a negative image of our country, which was

“According to you, what factors determine Bosnia and Herzegovina’s negative image”. The answers to this question are outlined in Table 2.8:

Table 2.8. Factors which negatively influence the image of Bosnia and Herzegovina

No.	Factors	Percent
	Politics and politicians	27.1
	Corruption	16.2
	Violence and criminal activities	7.2
	Economy	5.5
	Judicial system	5.2

Politics and *politicians* are considered to be the main drivers of negative image of Bosnia and Herzegovina. Together with other social factors, such as corruption, violence, criminal activities, poor economic development and weak judicial system, they contribute not just to devastating situation within the country, but also influence the image it has abroad. The frequency of other answers is not statistically relevant.

Conclusion

Country image is defined as a set of believes, ideas and impressions that people may have about a certain destination. This image can be either positive or negative, and it changes according to country’s size. Up do date research showed that it is possible, through the means of internal public, to transfer the image of one part of Bosnia and Herzegovina to the entire country.

The main conclusion of this research was that interviewees perceive Bosnia and Herzegovina as a country with a negative image. However, research results show three important determinants of positive image, and one determinant of Bosnia and Herzegovina’s negative image.

Natural resources are undoubtedly the most important determinant in creating a positive image of Bosnia and Herzegovina. Here, special focus is put on Bosnia’s mountains, rivers and lakes, as well as forests.

The second essential determinant is considered to be that of cultural values. Cities and towns of Bosnia and Herzegovina with rich cultural and historic traditions were one of the most commonly cited places among interviews, and are thus considered to play an important role in shaping a positive image of Bosnia and Herzegovina.

Finally, we can also put human resources as a very important factor in creating a positive image of Bosnia and Herzegovina. Here, great attention was given to world known citizens of Bosnia and Herzegovina (scientists, academics, writers, directors and athletes).

Research showed that the one of the main negative determinants of Bosnia and Herzegovina’s image is its political situation, including corruption, violence, and unstable economic and legal environments, which all lie in the core of country’s socio-political life.

These conclusions could greatly help state institutions in Bosnia and Herzegovina, notably those whose main activities include those of country promotion and promotion strategy creation. Natural resources and cultural and historical values are indeed recognized by country’s leading politicians, and as such, are included in promotion materials of Bosnia and Herzegovina. Nevertheless, the same is not true for prominent Bosnians and Herzegovinians, which placed third out among the most important aspects of building country’s positive image. Also, state institutions do not recognize these people as such. Therefore, this research suggests that this trend should be changed. Therefore, it is recommended that our final point – meaning politicians as key leaders of Bosnia and Herzegovina’s negative image - should include prominent citizens of Bosnia and Herzegovina in their promotion activities. However, due attention should be paid to avoiding persons coming from well-established political circles or parties.

References

- Anholt, Simon: Some Important Distinctions in Place Branding; *Place Branding*; Vol 1; 2005.
- Avdić, Sanela: Branding Tourism Destinations – Premier of Canton Sarajevo; Master Thesis; defended at the Faculty of Economics at the University of Sarajevo; 27. 03. 2008.
- Jenkins, Olivia H: Understanding and Measuring Tourist Destination Images; *International Journal of Tourism Research*; 1; 1999.
- Johansson, Johnny K: The New „Brand America“, *Place Branding*; Vol 1; 2005.
- Kotler, Philip; Asplund, Christer; Rein, Irving; Haider, Donald H: *Marketing Places Europe*; Second Edition; Prentice Hall; 1999.
- Skoko, Božo: *Hrvatska (Identitet, Image, Promocija)*; Školska knjiga; Zagreb; 2004.
- Wang, Sousheng: *An Image Study of Oklahoma as an International Travel Destination*; Graduate College of the Oklahoma State University; 2003.

Istrian Sustainable Tourism Destinations

Jasmina Gržinić¹

ABSTRACT – *The opening of intercultural understanding of the Mediterranean region and the recognition of common roots and diversity, is a basis for the process of internationalisation of tourism products. Connections between western Europe and the eastern countries of the Mediterranean intends to connect destinations in order to promote Istria as an sustainable destination. The Adriatic is part of an even bigger sea. A great part of travellers that are visiting this part of Europe present travel itineraries that leave from the Adriatic to reach ports and places of the Oriental Mediterranean, from Turkey, to Greece. Istria is there a central cell of a vast aggregation in the Mediterranean direction. The coastal Istrian zone is still in a good condition in comparison with the most of European Mediterranean but processes that are currently active in the Croatian tourism could endanger it. The construction of apartments have a negative influence on environment but still not as in the Mediterranean tourism surrounding area. On the other hand tourism income tax and low regulatives connected to tourism land property enables control of tourism development and developing of appropriate destination management. This article can help establish the comparisons among different part of tourism in order to measure Istrian and Croatian tourism competitiveness according to the actual sustainable trend on the tourism market.*

KEY WORDS: *competitiveness, Istria, tourism, sustainability, Mediterranean regions*

Introduction

Tourism is a consumer of natural environments, historic buildings, urban spaces and local culture, which are facing the danger of being abandoned if the destinations become overcrowded and overdeveloped. (Dumont, Ruelle & Teller, 2005). Nature and the environment are international tourism business strategies. Nature is a common vehicle for the promotion of nations as destinations, a practice that is sometimes correlated to a history of placing nature in a central position (cf. Gossling and Hultman: 2006).

When nature and environment become mobile commodities, the governance of nature becomes a matter for others actors (Hall: 2005, 2006). The authors ment under other actors sub-state actors such as regional tourism, marketing and development agencies, county councils and local marketing agencies.

According to the CoastLearn programme (EUCC project)², sustainable tourism is an industry that involves social responsibility, a strong commitment to nature and the integration of local people in any tourist operation or development. In order to achieve continuous and sustainable development of tourism, three interrelated aspects should be taken into consideration: economic, social, and environmental.

Furthermore, it is important to note that since economic valuation of benefit is based on the concept of willingness to pay, the shaded area measures people's «preferences» for changes in the state of their environment (Pearce: 1993).³

¹ Jasmina Gržinić, Assistant professor, Jurja Dobrile University in Pula, Department of economy and tourism «Dr. Mijo Mirković» Pula.

² CoastLearn, a distance-training programme for accession countries, the New Independent States (NIS) and the Mediterranean, funded by the EU. The overall aim of the programme is to promote integrated planning and management of coastal resources and consequently sustainable development along the coast (Perez, 2006).

³ What this suggests is that when economists attempt to measure the benefits from improved environmental quality, they are

The Mediterranean is the world's number one tourist destination⁴. Traditionally, in the market segmentation of the Mediterranean region leader position belongs to the Spain (40,8%), then Italy, (30%) Greece (11,8%) and Croatia (3,8%).

Istria is a region with rich cultural heritage and beautiful nature. There are a number of increased area with no protection and improved educational standards regarding environmental issue. Also there is no clear procedure in the production of environmental impact assessment studies. Only individual Croatian cases deserves attention (cf. Ugljen WTO Ugljan Croatia sustainability report⁵ with the Ugljan-Pasman study area).

This article leads us to define the research questions of the thesis in the shape of the following questions:

How to adopt and efficiently implement all existing EU laws and standards in Croatian tourism and does it mean internationalisation of tourism business to the Istrian destinations sustainability?

Tourism indicator concept of sustainability

The Agenda 21, defined at the Rio Earth Summit, in Chapter 40 defines the need for appropriate information that supports decision-making, and suggests the elaboration of indicators of sustainable development⁶. Promoting sustainable tourism within Local Agenda 21 processes is a way to strengthen local stewardship of the environment⁷.

Only an aware and completely changed industry can sustain tourism (Farrell and McLellan: 1987:13). The concept of sustainable development is recognised by both those who describe the conflicts (Smith & Jenner: 1989) and those who advocate a symbiotic approach (Romeril: 1989).

In Croatian tourism indicators need to act as an early warning system to permit timely reaction. WTO document⁸ is focused on how to develop useful indicators for the planning, management and monitoring in tourism development. Properly defined, indicators serve to provide timely, accurate and reliable information on changes in environmental, social and economic conditions at tourism destinations.

Key measures where indicators will be important are⁹:

indicators of Quality (Level of tourists' satisfaction or level of satisfaction of local residents relative to tourism or specific elements, "Yes or No" questionnaires of evaluation in certification systems, existence of tourism development plan, or plan with tourism components at local, regional and national levels, Blue Flag certification.).

Employment and Economic welfare (total numbers and % from census and government surveys - also tourism related employment/unemployment).

indicators of Cultural assets (Inventory of sites prepared and maintained, Availability of information on sites, Number of visitors to sites; State of sites and condition; Local attitude towards tourists and tourism).

Stability and Seasonality (volume of tourism by type/origin from local municipalities - tourism bureaus, Level of tourism business in community, Garbage volume).

With establishing these measures Croatian tourism can lead to more controlled and higher quality tourism.

measuring not the value of the environment but the preferences of people for an environmental good or environmental bad. (Hussen, A. 2004., Principles of Environmental Economics, second edition, Routledge, London & N.Y., p. 146.)

⁴ It is expected that this number will increase to 655 million by the year 2025.

⁵ Workshop on sustainable tourism indicators for the Islands of the Mediterranean, Kukljica, Island of Ugljan, 21-23 March 2001.

⁶ <http://www.un.org/esa/sustdev/documents/agenda21/english/agenda21chapter40.htm>

⁷ The document is the essential part of the Development Strategy of Croatian Tourism till 2010, www.strategija.hr

⁸ What tourism managers need to know: A practical Guide to the Development and Use of Indicators of Sustainable Tourism, 1996. Wto.

⁹ Indicators of Sustainable Development for Tourism Destinations, A Guidebook, (2004). According to case study Tunisia: Indicators and Standards for Tourism WTO, p. 435-439.

Istrian destinations in the internationalisation of business

Zhang and Jensen (2007:230) have explored the presence of comparative advantages in trade in (tourism) services between states. According to them there is a strong support for the relevance of certain supply-side factors in explaining international tourism flows such as natural endowments, created assets associated with technology, infrastructure and international knowledge spillovers.

Istria is a small Croatian county and largely influenced by tourism. There is a risk of losing destinations' values replaced by the new one in the future despite its comparative advantages. Istrian region as a part of the Mediterranean itineraries present an integrated action model of the tourism routes with the following issues¹⁰:

- A tourist offer in Istria is still associated with the summer period (high seasonality);
- Difficulty in creating economic and professional development opportunities for the sector operators;
- Risk of marginalising some territories with potential tourist resorts;
- contribution to less well-known and exploited resources and cultures;
- no enough active networks, in order to develop "integrated" tourist products;
- Insufficient knowledge by the population and tourists of culture, local customs, history of the maritime routes of Adriatic Europe;
- Need to qualify the sector operators on the adoption of new methodologies and the application of new tools for the tourist development of sea towns and cities.

In the narrow coastal belt, where almost all tourism is sea based, it is accomplished 95% of total and 97% of foreign overnights. It is obvious from the table 1. that region of Dalmatia had a rapid growth of tourism nights during the 2000-2007. year period and 5.976.577 overnights more than Istrian region. We can conclude that only region of Dalmatia has achieved the numbers of pre-war period nights in tourism.

Table 1. Basic data about tourism regions

Tourist region		Istria	Kvarner & mountains	Dalmatia	Continental Croatia	Total
Area in sq km	total	2.813	8.940	12.943	31.898	56.594
	%	5,0	15,8	22,9	56,4	100,0
Population in 2001	Total	206.344	359.182	849.182	2.965.982	4.381.352
	%	4,7	8,2	19,4	67,7	100,0
Pop. per km ²		73,4	40,2	65,7	93,0	77,4
Overnights in 1989	total	19.743.443	14.971.753	23.484.162	3.649.529	61.848.887
	%	31,9	24,2	38,0	5,9	100,0
Overnights in 2000	total	14.286.770	9.894.307	12.891.210	1.335.643	38.405.930
	%	37,2	25,8	33,6	3,5	100,0
Overnights in 2007	total	17.613.132	12.430.024	23.589.709	2.372.627	56.005.492
	%	31,4	22,2	42,1	4,2	100,0

Source: Klarić, Z. (2008). Promote Sustainable Tourism in the Mediterranean, National Study for Croatia, Sophia-Antipolis, Regional workshop, 2-3 July.

Istrian concept of the future development are alternative tourism forms and elite tourism as a better prospect than mass tourism. Farm holidays in Istrian agro tourism-development-strategy is constructed with special emphasis on competitiveness and the role of the state. Istrian agro tourism concept is an successful agritourism strategy presented in the form of¹¹:

¹⁰ According to Adriatic New Neighbourhood programme INTERREG/CARDS-PHARE.

¹¹ According to conclusions from the International conference „Rural tourism development perspectives“ Hvar island, Croatia, Oct. 18-20, 2007.

Organisation and cooperation;
 Training, consultancy and information;
 Branding;
 Quality;
 Theming, special interest;
 Marketing.

Tourism product has been renovated with special tourism forms like wine roads, horse riding, organic farms, wellness and spa tourism offer. Stimulations of tourism investments in rural and cultural tourism result in the development presented by the number of travelers in Istria. The role of the public sector is manifested through ministry of tourism and ministry of agriculture and integration with a consortium of Istria's agritourism and rural tourism «Ruraris»¹² and farm holiday organisations.

Brijuni – tourism sustainable destination

Small islands, coastal areas, wetlands, mountains and deserts, all now popular as tourist destinations, are five of the six 'fragile ecosystems' as identified by Agenda 21 that require specific action by governments and international donors. As the scale of tourism grows, the resource use threatens to become unsustainable. With a degraded physical environment, the destination is in danger of losing its original attraction, increasing the levels of cheaper mass tourism and forcing more "nature-based" tourism to move on to new destinations, which are likely to be even more inaccessible and fragile¹³. The example is a rural tourism concept in Istria and National parks.

EUROPARC, The Federation of National and Nature Parks of Europe, has established a Charter for Sustainable Tourism in Protected Areas. This must be based on careful consultation and be approved and understood by local stakeholders. It should contain¹⁴:

- A definition of the area to be influenced by the strategy, which may extend outside the protected area;
- An assessment of the area's natural, historic and cultural heritage, tourism infrastructure, and economic and social circumstances; considering issues of capacity, need and potential opportunity;
- An assessment of current visitors and potential future markets;
- A set of strategic objectives for the development and management of tourism, covering:
 - conservation and enhancement of the environment and heritage;
 - economic and social development;
 - preservation and improvement of the quality of life of local residents;
 - visitor management and enhancement of the quality of tourism offered.
- An action plan to meet these objectives;
- An indication of resources and partners to implement the strategy;
- Proposals for monitoring results.

The use of external verifiers, has helped the parks to identify ways to strengthen their actions towards sustainability and the Charter has served as a valuable incentive towards good practice in the Brijuni National park.

The development orientation of "Brijuni National Park" aims at economically sustainable development based on viable tourism, hotel management and traditional agriculture founded on environmentally acceptable technologies, with the purpose of its permanent preservation for future generations¹⁵.

The concept of a 'sustainable tourism product' is here understood broadly as meaning those that use resources in an environmentally responsible, socially fair and economically viable way, so that users

¹² www.ruralis.hr

¹³ Sustainable tourism – Turning the Tide, *Towards Earth summit 2002*, Wto, Economic briefing No 4. p 3.

¹⁴ Making Tourism More Sustainable, (2005). A guide for policy makers, UNEP (UN Environment programme and WTO, p.62.

¹⁵ <http://www.brijunirivijera.hr>

of the product can meet their current needs without compromising future generations from being able to use the same resources. Measuring sustainability is a complex issue and the criteria vary according to the product type and local conditions.

Deciding what is ultimately sustainable for a particular community is a balance between local circumstances and expectations and best practice in technology and environmental management. (Marketing sustainable tourism product, 2005, UNEP, p. 9).

In the period January-December 2005 the Institution realized 35,233 overnight stays. The average price per overnight was 317.00 kn, whereas the realized average price per room was 541.00 kn.

During the same period, Veliki Brijun, Mali Brijun and Sv. Jerolim islands, within the area of Brijuni National Park attracted 157,249 visitors.

Guests of "Brijuni National Park" are environmentally aware and sensitive to every unnatural method of affecting nature, and motivated in contributing to a healthy way of life and creating a more pleasant environment. Establishment of clear rules regarding building issues are dominant regional strategy about national park and the future tourism project Brijuni Rivijera¹⁶. Establishment of measures against apartmentization is needed strategy on the national strategy level.

Table 2. Number of tourists - Year 2006. and 2007.

	2006.	2007
Month	Tourists	Number of excursions
I	602	243
II	372	551
III	2.401	3.311
IV	13.666	17.313
V	23.492	26.319
VI	27.749	28.074
VII	26.288	27.164
VIII	32.965	35.588
IX	25.743	23.776
X	12.117	11.586
XI	1.721	2.228
XII	1.315	1.920
Total	168.431	178.073

Source: Brijuni National park evidence (documents and reports 2008)

The main goal of the Istrian tourism in the future should be the establishment of new large protected areas like this national park. The presentation of the Proposal of sustainable development project strategy of the Public Institution "Brijuni National Park" was made in the Year 2005 with the initiation on the creation of a new website. Keeping a clean environment and image is a priority.

Unfortunately, waste waters are not filtered. (There are analyses of waste waters 4 times a year at the Institute for Public Health Pula). Analyses of sea water at the beach did not show any pollution (exceptionally on 2 occasions in 15 years) so that the mentioned "chemicals" from waste waters get diluted until they reach the sampling location - beach.

According to some partly tested indicators the results are graded as:¹⁷

- amount of chemicals in water - 3
- state of marina - port - 4
- opinion of tourists on the quality of water (collected) - 5
- perception of the cleanliness of beaches (monitored) - 5

¹⁶ibid

¹⁷Institute for Public Health Pula and consumer's opinion results collected by institution of National park.

level of pollution with litter (image of a clean destination) - 5
 image of a clean island (questionnaires) - 5

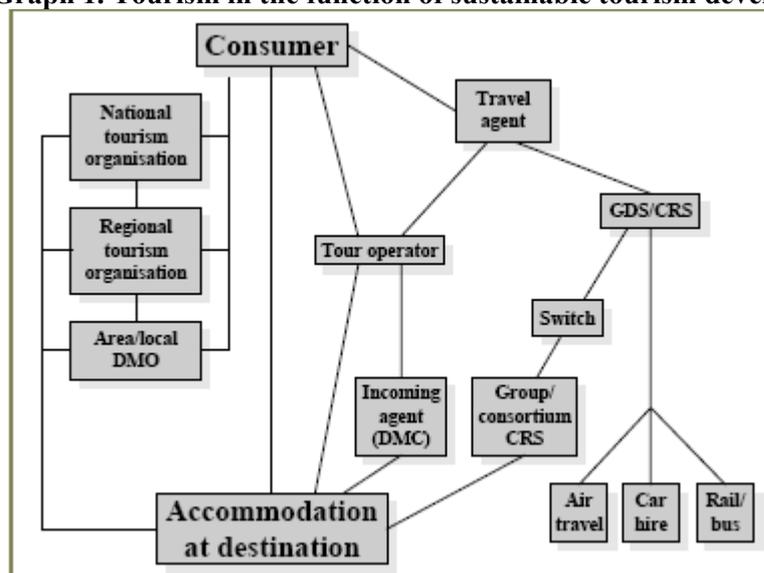
There is a negative impact of the closeness of Pula and the passing vessels on the National park Bri-juni. Evaluation after sampling and analysis of sea water at the beach (IPH Pula) is generally very positive. Evaluation of analysis of drinking water is always positive and it must be pointed out to the tourists that tap water is safe to drink since that is not the case in many of the places of their origin.

Future of sustainability in Istria – DMO concept

The needs and expectations of modern tourists are changed and there is certainly no valid "sun, send, sea" approach to destination management. The term "destination" refers broadly to an area where tourism is a relatively important activity and where the economy may be significantly influenced by tourism revenues. Destination management is complicated by the fact that a single, recognizable destination may include several municipalities, provinces, or other government entities - in island environments it may be the entire country¹⁸.

Managing tourism destinations is an important part of controlling tourism's environmental impacts. By 2012, the Destination Management Organisation will be the dominant force in the world's largest industry. DMOs are agencies or marketing consortia (normally publicly funded, sometimes supplemented by membership subscriptions) that promote a 'destination' to outbound tour operators and both domestic and foreign consumers through a variety of media, and provide information on local products and suppliers. Sometimes, suppliers (e.g. subscribed members) receive preferential treatment¹⁹.

Graph 1. Tourism in the function of sustainable tourism development



Source: Henrikson, R., (2005). The role of ICT in tourism and related changes in skills: electronic commerce and revenue management, Associates of Tourism Enterprise and Management – adapted from Werthmer and Ebner, p. 65., *Trends and scill needs in tourism*, Cedefop Panorama series, 115, Luxembourg, Office for Official Publications of the European Communities.

Notes: GDS-global distribution syste, CRS-central reservation system, DMC-destination management company, DMO-destination marketing organisation.

Oman's Ministry of Tourism²⁰, which is responsible for developing and promoting the country's tourism product said that the challenge for DMOs is often less about marketing sustainable tourism prod-

¹⁸ The Sustainable tourism Gateway (<http://www.gdrc.org/uem/eco-tour/st-infosheets.html>)

¹⁹ Making Tourism More Sustainable, (2005). A guide for police makers, UNEP (UN Environment programme and WTO, p.13.

²⁰ responsible for developing and promoting the country's tourism product.

ucts, but more about raising awareness of what the sustainable development of tourism means for suppliers, which in turn will help to ensure the more sustainable development of tourism products.

Destination management organisations are helping actors in promoting previously mentioned positive economic growth. According to WTO tourism barometer Year 2008 the current economic imbalances, in particular the rising energy prices, are very likely to influence tourism spending. But specific demand shifts – determined by disposable income, travel budgets and confidence - will vary from country to country, and from region to region, depending on their local economies, labour markets and consumer confidence. International tourism is as yet expected to keep growing at a solid pace in the mid-term, broadly in line with UNWTO's Tourism 2020 Vision forecast long-term growth rate of about 4%.

Destination Management organisations are responsible for identification of the environmental constraints and economic valorisation of Istrian tourism results. The Croatian term 'Destination Management Organisation' (DMO) encompasses a wide range of organisations, including:

- National tourism organisations;
- Regional provincial/state tourist organisations;
- City tourism organisations;
- Coastal resort organisations;
- Sports resort organisations.

Participating governance structures led by local authorities, with the involvement of local NGOs, community and indigenous representatives, academia, and local chambers of commerce, make up what can be recognised as "Destination Management Organizations" (DMOs) in Istria. Istrian DMOs take the form of local tourism boards, tourism councils, or development organizations. The network of local tourism businesses (hotels, attractions, transportation services, service providers such as guides and equipment rentals, restaurants, etc.) are also a significant part of a destination but it is still not expanded in its possible potential.

These are challenging times for DMOs, which are faced with changing funding models, new technology, increased competition and changing consumer needs. On the other hand destination Management Company (DMC) is a company that specializes in the organization and logistics of meetings, incentives and events with a many years of experience in organizing programs, and their creativity. The key-word when working with a DMC is 'customized'. No matter what the event or the occasion, Destination Management Companies will always find a surprising and tailor-made solution²¹. Also a DMC will even make hotel reservations, arrange transportation and provide travel management. Destination Management Companies remain behind the scenes while ensuring that everything runs according to plan. «Atlas» is a Croatian destination management company founded in 1923. It is initiator and creator of various travel programmes in accordance with the global trends with more than 80 years experience.

Atlas DMC offers:

- Online accommodation reservations,
- Online reservation of excursion, transfers, car rental, coach tours and fly & drive,
- The possibility to apply online for quotations for tailor made group programmes, incentives and other events,
- 24 hours online confirmation,
- Multilingual call centre,
- Possibility to manage private allotments,
- Online access to detailed accommodation descriptions with photos,
- Possibility of printing vouchers,
- Online sales statistics & handling of booking,
- Single or multi product reservations.

²¹ http://articles.directorym.com/What_is_a_Destination_Management_Co_-a927407.html

The other leading Croatian DMC is “Dubrovnik travel” for high level international MICE & other Exclusive Group Programs. DT has also won several unique local and regional awards for being a successful Croatian travel company. Dubrovnik travel include organising tailor made shore trips for groups and all shore services for cruise ship passengers in all ports of the sunny coast on the Adriatic.

Some travellers have an idea what they want to visit, but some of them are very spontaneous and leisure travelers. Destination management companies can influence them before they plan and book their trip with their interactive communicative platforms. Maximising the potential of the Internet and keeping up-to-date with the latest developments is essential in this Information Age²².

In Istria there is still no recognised significant progress in elevating the relevancy of DMOs and DMC which branding can and will improved their positioning. It is important to establish a DMO and product/brand based organisational structures with a discussion of some implications for managers to develop tourism in a sustainable way. Croatian Incoming turoperator «Uniline» situated in Pula tries to become an respectable DMC with experience in creating theme travels, conferences, team-buildings, different kind of events and solutions for different clients.

A growing number of tourist destinations are establishing public/private partnerships to set up destination management systems²³. Coordinations and implications for managers in both private and public sectors are the first fase of the private and public sector integration according to the trends of globalisation, localisation, technological changes and other forms of «New tourism» model of living, spending and working²⁴.

Conclusion

Institutions in tourism are growing more transparent in their operations and there is no subject on the tourism market that can conduct own business without integration between each other. In tourism industry is more powerful pressure to adopt environmentally technologies, and work with local area groups but also to participate in other local activities. On the other hand, tourist are becoming increasingly sensitive to environmental issue in the world where consumerism is still growing rapidly. Growing competitive economic model present the need for research and development, consultancy increased considerably. Croatian tourism with pronounced seasonality, higher prices of products and services and insufficient investments in hotel and restaurants has no adequate responding strategy to the heightened competition of the Mediterranean countries. Istria as a prospective and respective European region takes responsibility for developing and promoting Croatian tourism. Competitiveness needs to be based on a new sustainable products which can be put in a place: with absolute public-private cooperation. The action will be carried out through a series of Applied Research activities – institutional training – testing - technical assistance – community regeneration and development - aimed at:

- promoting policies for the development of the economy as well as small and medium-sized enterprises thereby fostering the creation of new jobs in the tourism sector;
- promoting the mutual knowledge of the economic and social situation of the Adriatic basin;
- promoting and consolidating the exchange of skills and research studies concerning business internationalisation processes and management, undertaking collaboration and inter-exchange programmes.

²² <http://www.frontlinecommunication.co.uk/dmoworld/newsletterweb9.html>

²³ BonjourQuébec.com, an alliance of Tourisme Québec and Bell Canada, is one such example. The WTO and the United Nations Conference on Trade and Development (UNCTAD) both encourage this approach. (cf. in Pélouin, C. Meeting DMO challenges, Tourism online, Vol. 6. June 2008, <http://www.corporate.canada.travel/corp/media/app/en/ca/magazine/article>).

²⁴ cf. Dwyer, L. (2006). *Trends underpinning tourism to 2020: implications for tourism management*, New perspectives and values in world tourism & Tourism management in the future, 20-26 November, Alanya, Turkey, p. 1.-21. www.akdeniz.edu.tr/alanya/conference06/doc/Book_of_Abstract.pdf

Destination management organizations (DMOs) are the new formula of the travel industry in Croatia and adapt to changing consumer needs. DMOs must take on the role of knowledge brokers, acting as information clearinghouses for consumers and suppliers alike. In Istria most small and medium-size businesses are not very familiar with this form of marketing. Existing destination management system need to encourage tourism organizations enables suppliers to easily create tourism packages as a tools. Tourism educator must recognise that Istrian DMOs are the first and extremely important organizations, working in a very heterogeneous environment as the only way participating in today's turbulent world world and tourism concurrent surrounding.

References

- Coles, T and Hall, C.M. (2007), *International business and tourism*, Routledge.
- Conrady, R and Buck, M. (2007), *Trends and Issues in Global Tourism 2007*, Springer.
- Douglas, R et al. (2001), *Special interest tourism*, Wiley.
- Dwyer, L. (2006). *Trends underpinning tourism to 2020: implications for tourism management*, New perspectives and values in world tourism & Tourism management in the future, 20-26 November, Alanya, Turkey, p. 1.-21.
- Farrell, B.H. & McLellan, R.W. (1987). Tourism and Physical Environment Research, *Annals of tourism Research* 14(1): 1-16.
- Gossling, S. and Hultman, J. (eds.) (2006) *Ecotourism in Scandinavia: Lessons in Theory and Practice*. Wallingford: CABI Publishing.
- Hall, C.M. (2005) *tourism. Rethinking the Social Science of Mobility*. Harlow: Pearson/prentice Hall.
- Henrikson, R., (2005). The role of ICT in tourism and related changes in skills: electronic commerce and revenue management, *Associates of Tourism Enterprise and Management – adapted from Werthmer and Ebner, p. 65., Trends and scill needs in tourism*, Cedefop Panorama series, 115, Luxembourg, Office for Official Publications of the European Communities.
- http://articles.directory.com/What_is_a_Destination_Management_Co_-a927407.html
- <http://www.brijunirivijera.hr>
- <http://www.corporate.canada.travel/corp/media/app/en/ca/magazine/article>
- <http://www.frontlinecommunication.co.uk/dmoworld/newsletterweb9.html>
- Hussen, A. 2004., *Principles of Environmental Economics*, second edition, Routledge, London & N.Y., p. 146
- Indicators of Sustainable Development for Tourism Destinations, A Guidebook, (2004). According to case study Tunisia: Indicators and Standards for Tourism WTO, p. 435-439.
- International conference „Rural tourism development perspectives“ Hvar island, Croatia, Oct. 18-20, 2007. Book of papers.
- Making Tourism More Sustainable, (2005). A guide for police makers, UNEP (UN Environment programme and WTO).
- Smith, C. & Jenner, P. (1989). *Tourism and the Environment*, Occasional Studies. EIU Travel and Tourism Analyst 5: 68-86.
- Sustainable tourism – Turning the Tide, *Towards Earth summit 2002*, Wto, Economic briefing No 4. p 3.
- The Sustainable tourism Gateway (<http://www.gdrc.org/uem/eco-tour/st-infosheets.html>)
- What tourism managers need to know: A practical Guide to the Development and Use of Indicators of Sustainable Tourism, 1996. Wto.
- Workshop on sustainable tourism indicators for the Islands of the Mediterranean, Kukljica, Island of Ugljan, 21-23 March 2001.

Sustainable Development in Term of Spa and Rural Tourism in Serbia*

Vladana Hamović¹, Drago Cvijanović², Željko Arsenijević⁴

ABSTRACT – Tourist activity ranks among the most dynamic and the most propulsive economic branches, with multiplicative effects. It gives the tourism strong moving function in wide activities spectrum, which involves more and more in economic development priorities of numerous receptive countries and their specific parts. Richness, preservation and attractiveness of natural resources, than numerous traditional agricultural households, gradual growth of domestic population's life standard, as well as increasing interest of international tourist market for rural tourism adventures, are pretty solid base for rural tourism development in Serbia. Liable and sustainable development of spa and rural tourism satisfies the needs of modern tourists and freedom of tourist courses, as well as satisfaction of economic, social and other needs, but along with keeping the characteristics of natural and social environment and cultural heritage.

KEY WORDS: liable and sustainable development, tourism, spa, rural

Introduction

Although certain estimations point out that 75% of the total world tourist demand is focused on natural values and areas, it is difficult to determine precisely how big the part of the enormous world tourist cake is flowing away toward the rural territory (in 2006 number of participants in the international tourist flows was about 846 million) However If the expressive selectivity demand is taken in consideration it can be concluded that its significant part is targeted to the rural areas. It is, of course, referred to those destinations in which this segment of the total tourist product is existing in the higher level of development and organization.

In the significant characteristics of the modern tourist demand, essential for development of tourism at the rural area, is certainly included a conclusion that demand is emerging to non-urban rural and protected natural areas, spas and villages with significant **health-recreation and cultural-historical values**. Together with this, quests for ecological quality and health-recreation function of receptive areas are increasing, which also must be suitable for moving, recreation and possibility for application of demanded activities.

Responsible and sustainable development of tourism

International tourist movements represent only a small part of the total world trends, for according the relevant evaluations, domestic tourist turnover makes even up to 70% of the total tourist turnover. Taking a role of a leader and realizing an important part in gross national product (GNP) and total employment, tourism has taken a significant responsibility regarding economic, social, cultural and

* This paper is a part of researching project 149007, financed by Ministry of Science of Republic of Serbia, named: „Multifunctional agriculture and rural development in function of Republic of Serbia's accession to the European Union”

¹ Vladana Hamović, Ph.D., Scientific Adviser, Institute of Agricultural Economics, Belgrade, Volgina 15, Serbia

² Prof. Drago Cvijanović, Ph.D., Scientific Adviser, Institute of Agricultural Economics, Belgrade, Volgina 15, Serbia

⁴ Željko Arsenijević, M.A, Director PP «Čerubdžije», Surčin, Belgrade, Serbia

natural environment. Responsible and sustainable development of tourism understands the right for tourism and the freedom of tourist movements, satisfaction of economic, social and other needs but with maintaining on the characteristics of natural and social environment and cultural heritage.

World Tourist Organization, World Council for Traveling and other international organizations are seriously engaged in problems of responsible behavior of all subjects in tourism with an aim to set the universal rules of behavior for participants of all countries in tourist development. The ideal frame for accepting certain guidelines, in the first place referring to the protection of living space, represents AGENDA 21. It is the document adopted by the governments of 182 countries at the conference of the United Nations about the living space and development, respectively on the World's summit in Rio de Janeiro in 1992. As the logical follow of the actions, AGENDA 21 for tourist economy was adopted in 1996. The aim of this document is to help the parts of governments in charge for tourism, national tourist organizations, business associations and enterprises dealing with tourism, to realize their potentials for achieving the sustainable development at the local, regional, national and international level. But, guidelines and management actions in connection with sustainable development of tourism are adaptable in all forms and in all types of destinations, including mass tourism and different market segments of tourism.

Possibilities for development of sustainable tourism

Many places in Serbia have respectable resources for developing of sustainable tourism which ought to be put into function not only in these places but in much wider environment. All the more so, for tourism possesses all predispositions, except financial, to become the factor of the further development in Serbia especially if it is taken in consideration its multiplicative effect on economy. The greatest part of natural and tourist attractiveness has yet to be included in the farther plans and programs of Serbian development, and then in all modern tourist and economic flows in the country. With involving numerous economic actions during the longer term period, tourism may become the factor of stability and growth of total economic activity. All together the important role ought to have a selective, marketing orientated, properly coordinated the strategic development of the whole destination. In that way, positive results which should be and are imperative of tourist and total economic development are realistic and possible to be realized.

In the years to come, and especially from the aspect of accession to the EU countries, it is necessary to make position of each tourist destination at the tourist market which has objective conditions for it, with two key aspects, **spa and rural tourism**. In view of this, one of the priorities that stands before each destination that has conditions for tourist development as well as before all the factors of tourist offer, to start an active work in formulating an image which, from one side could more easily make tourist offer positioning of a certain area toward the potential markets, and from the other one attract potential tourists.

Definition of the tourist product

Strategic positioning of tourist offer of a determined destination in Serbia cannot be done in a short time. But what we already have can be quickly used as an area branding as tourist destination and prepared for commercialization on domestic market as well as on the international one. Selection stays in the arms of managers of tourist destination and their valid estimation of products and steps to be made for their marketing exploitation. The basic trends of farther development in most Serbian places are, in the first place, **spa tourism**, for the potentials of many spas are big natural resources which must be valorized as well as **rural tourism** for which there are objectively good bases and where, with minimum investments and necessary adaptations, is possible to proceed in capacity commercialization. Beside these two basic aspects there are conditions for development of *mountain tourism*, *tourism of special interest*, which are based on the richness of natural and anthropogenic elements at the whole destination, which offer great possibilities for tourist commercialization (sport, hunting, fishing, hiking

and recreation tourism, cultural-historical) and at last *transit tourism* enabled by geographical position and importance of road directions which pass through many attractive tourist parts of the land and which are a good base for positioning and farther planning of tourist activity.

Shapes and importance of spa tourism

World trend on tourist markets indicates farther development of health tourism mostly caused by the change in the way of living. Serbia possesses over 50 health-treatment destinations as well as a doubtless quality of thermal waters on which their offer is based, which shows a great Serbian development potential in the future. Although the product of health tourism can be divided in two marketing segments, respectively health and wellness, following the examples, not of only the countries with developed spa/wellness product, but also the usual categorization of the international association for health tourism, the Serbian product of health tourism ought to be classified in the following way: 1. **Destination spa**, except the classical offer includes all fitness and wellness components, where the visitor has right to choose the program that suits him the most. With classical hotel accommodation the demand for private accommodation is here present as well. 2. **Medical spa** presents the category which in the following ten years has the most of potential for the growth and understands all services with health and wellness components in the environment that integrate classical and special treatments and therapies. This type of treatment in our spa offer, demands certain improvements and adaptation. 3. **Mineral spring spa** is the segment of health tourism based on the offer of the natural, mineral and thermal waters, respectively on the offer of different hydro-therapeutic treatments. This segment in Serbian economy has relatively good status and potential of fast positioning in the world spa offer. 4. **Resort/hotel Spa** is today perhaps the most popular aspect of demand but also companies' or individual's strivings to increase their own profitability. The health tourism in Serbia has so far been oriented on quality and because of this has not yet been able to meet the standards of quality and demands of the choosy international market.

The greatest potential of health tourism product in Serbia is in its dominant direction toward the medical treatment and rehabilitation since the international demand for specialized health treatments are increasing. But parallel with the growth of this kind of market the elements of luxury is increasing as well and this represent, for the spa offer of Serbia, a restrictive factor. That is the reason why it ought to be made a marketing selection by which it could be possible to launch the existing offer. For the short term, Serbia can turn toward the faster development and commercialization of products **Medical spa and Mineral spring spa** starting from moderate prices and high quality of services.

Health-treatment centers of Serbia abound with different kinds of thermal water springs, and the hotels with traditional programs introduce the climbing offer of wellness and anti-stress programs, massage, aromatherapy, fitness trainings and similar things. Beside that those programs should be significantly refreshed by financial investments especially in quality of accommodation as well as recreation and rehabilitation equipment.

The form and importance of rural tourism

The richness, preservation and attractiveness of natural resources, a large number of traditional rural households, gradual growth of domestic population's living standard as well as the increasing interest of the international tourist market for rural tourism adventures, are rather solid base for development of rural tourism in the whole Serbia. Rural tourism means in fact that some locations with their offer represent the opportunity for the tourists to take part in everyday rural life and possibility of watching or taking part in traditional agricultural works. This kind of tourism is here with us in its starting phase and is orientated to domestic market. Eco tourism is the kind of tourism which supports protection of the natural resources and is extremely popular in the West European countries, and points out that this segment of offer ought to be targeted to these countries. Ethno tourism supports the customs of particular area, tradition and habits and wishes to promote them through concrete forms of life. Activities

in natural and cultural tourism cover the recreation and leisure time (hunting, fishing, mountaineering, biking, riding, and tracking) as well as the sightseeing of significant cultural, historical and archeological characteristics of a particular area. Namely, different forms respectively segments of the rural tourism should be differed and adapted to those which cover the most of the conditions.

Categorization and standardization

Categorization and standardization of the spa places are subjects to a special category of arrangement since it is dealing with health institutions for which, according the purpose and intention, criteria and categorization, are defined. Accommodation capacities must be in accordance with other categorization of the accommodation. When rural tourism is considered it means the arrangement, adaptation, and ability of numerous rural environmental totality to the needs of tourism. Adequately built houses for rest in nature, which characterize silence and peace, are the real “oases” for the people from highly urbanized industrial centers. The basic pre-conditions which should be provided for successful development of this specific form of tourism, is the necessity for professional **choice** of precisely definite number of households which could be engaged in rural tourism, together with clearly stated all conditions(standards) which the household is obliged to cover in order to be allowed to deal with tourism and of course, **of utmost necessity** of rural households categorization which are to be engaged in tourist activity. That dealing with rural tourism is not a facultative thing but a regulated one, are the regulation books of the European associations for categorization of the accommodation capacities and conditions and application of standards in rural tourism. Except the regulations for application, the conditions of equipment of the object itself, its environment, then the significance of the very object regarding the environment, care about guests, their security and privacy, are described in details.

It is true that in Serbian the regulation book about classification, minimal conditions and categorization of catering objects (off. Gaz. RS 66/94 and 3/59) is existing, but having in mind modern tourist flows and moving of demand on domestic and international market as well as the Serbian striving to take part as soon as possible in international tourist movements, work on their adaptation and unified application, must be done fast. To exceed regional and national differences, a balance between the flexible application of certain categories and the general warranty of the mutual minimum of standards for foreign tourist, is needed. Deviation under the minimum of standards is possible to 25% if it can be compensated by observing higher than issued standards, with other points from the same group of criteria. The absolute minimum which is not achieved cannot be compensated and is excluded.

To apply such and similar regulations, local population dealing or was dealing with rural tourism, must be educated to offer suitable level and quality of tourist services. Education of the local population is in charge of Tourist organization if it exists in the certain place or at least at the locality in question and which has to play the main and decisive role. But also not less important role have the other state and specialized organizations. If the development and effects of rural tourism is expected, sojourn in a village must be the subject of quality program compilation and must not be let to local resourcefulness. It is also very important to definite the urban conditions for development of rural tourism from the state as well as from the local organs.

Conclusion

Well, sustainable tourism in the function of spa and rural development but also in other potential aspects of tourism for which with us, objective conditions are existing, should:

- Make optimal use of environmental resources that seem crucial for tourism development, maintaining the important ecological processes and helping the preservation of the natural heritage and biodiversity

- Respect socio-cultural authenticity of the host and the environment, protect the inherited cultural heritage and help in understanding different cultures

- Supply the sustainable long-term business, producing socio-economical benefits, evenly for all

target groups, which means a stable employment, possibility to acquire income and social care for the households that in the same time would influence the reduction of poverty.

To achieve sustainable tourism is a continual process which demands regular monitoring of affects and usage of necessary preventive or concrete measures whenever it is needed.

Sustainable tourism should provide a high level of tourist satisfaction and to enable them a complete experience, developing in the same time with them, the consciousness about sustainability and improving the sustainable tourism.

References

- Agenda 21 for the Travel and Tourism Industry, World Travel and Tourism Council, World Tourism Organization, Earth Council, 1995.
CenORT- Centar za odgovorni i održivi razvoj turizma, Beograd, 2008.
Global Code of Ethics for Tourism, World Tourism Organization, Madrid, 1999.
WTO, Report, Thailand, 2004.

Process of Fiscal Decentralisation in the Slovak Republic in Comparison with Chosen Countries

Lenka Horváthová¹, Marianna Neupauerová²

ABSTRACT – During last two decades of 20th century, phenomenon of decentralisation started to attract attention of governments in many countries. Industrialised as well as developing countries begun to refuse monopole decision-making process of central government. In the post communist countries, the decentralisation of public administration was the result of economic transformation from central planned economy to market one. Fiscal decentralisation was a part of public administration reform. Fiscal decentralisation concerns significantly regional self-governments and their financing.

The paper analyses process of fiscal decentralisation in the Slovak Republic in its two phases, its advantages and disadvantages. It compares level of fiscal decentralisation in the Slovak Republic with chosen countries. The paper was worked out within the project VEGA 1/0253/08.

KEY WORDS: public sector, public administration, fiscal decentralisation, regional self-governments, local self-governments

Introduction

Fiscal decentralisation is generally understood as a way how to strength own revenue of self-administrations if they have possibility to define level of local taxes or of supertaxes. At the same time it is important to ensure territorial principal of these taxes. The receiver of the tax or the supertax is automatically self-administration which inhabitants pay their taxes to. [1] It is the process of targeted division of tasks between state and other levels of territorial administration in the field of public goods. What is more this decentralisation of competences can take into consideration specific characteristics and particularities of a region.

Centralisation tendencies are typical for the first half of 20th century. These tendencies had been influenced especially by effects of the 1st and 2nd world war. It was necessary to direct economy centrally during those periods. Redistribution and stabilisation function of central government as well as concentration and centralisation of the capital became very important. Many countries strengthened role of central government and position of central budget within overall budget system.

We can observe a change in the second half of 20th century, when a decentralisation trend appeared. However economic recession in 1970 reduced transfers from central budget to budgets on lower government levels. Later on central direction was abandoned and tasks were gradually delegated into regional and local levels – lower government levels were strengthen. Role of regional and local government has increased in almost all democratic countries in Europe and in the USA.

Fiscal decentralisation in Slovak Republic

Fiscal decentralisation in the Slovak Republic (SR) is a part of new financing system of self-governments. The principal of the system is to fortify financial autonomy of particular territorial self-governments in providing public goods. Tax revenues of self-governments are increased as they repre-

¹ Lenka Horváthová, researcher, Technical university of Košice, Faculty of Economics, lenka.horvathova@tuke.sk

² Marianna Neupauerová, assistant professor, Technical university of Košice, Faculty of Economics, marianna.neupauerova@tuke.sk

sent significant part of own revenues of self-governments. In the most of countries in transition the process of fiscal decentralisation was divided into two stages. This was the case of the SR, too. At the beginning, only expenditures were decentralised (Act on Competencies 416/2001). Later on, since January 2005 revenues of self-governments have been decentralised, too.

Fiscal decentralisation in the Slovak Republic (SR) is a part of new financing system of self-governments. The principal of the system is to fortify financial autonomy of particular territorial self-governments in providing public goods. Tax revenues of self-governments are increased as they represent significant part of own revenues of self-governments. In the most of countries in transition the process of fiscal decentralisation was divided into two stages. This was the case of the SR, too. At the beginning, only expenditures were decentralised (Act on Competencies 416/2001). Later on, since January 2005 revenues of self-governments have been decentralised, too.

Reform of public administration comprising decentralisation had been prepared in the SR since 1998. First stage of fiscal decentralisation started in 2001 as the consequence of approved Act on Competencies. More than 400 competencies were gradually transferred to lower self-governments during period between 2001 and 2004. The delegation of these competencies was associated with adequate transfer of property and financial resources. The Act on Competencies enabled to decentralise expenditures but competencies were still financed through subventions.

During the second period of fiscal decentralisation, since January 2005, budget revenues were decentralised, too. Self-governments have received even competencies in the field of creation of their financial resources. Consequently, financial autonomy of villages, towns and regions were confirmed. Since that time, self-governments can collect and determine level of taxes where the tax basis is fixed and revenue is sufficient as well as regular. Property taxes and income taxes are usually convenient type of the taxes.

Before January 2005 local budgets were financed usually by tax revenues and subventions from state budget. Tax revenues represented 40% of self-administration budget and were created by own tax revenues and central tax revenues. Own tax revenues were local taxes (real estate tax, it was collected by self-administration however tax rate had to respect limits determined legislatively, consequently tax competencies of self-government was suppressed and market value of real estate was not taken into consideration) and fees (mostly of facultative character). Central taxes (individual income tax, corporate income tax and vehicle tax) had function of shared taxes and their yields were transferred to self-administration. Act on State Budget determinate which part of tax and of which tax will be transferred to self-administrations and how the yield will be divided among particular villages, towns and regions. The main criteria how to divide the yield of the taxes was the number of inhabitants living permanently at the territory of a self-administration [11]. However, there were some negative effects of such a distribution. Revenue of villages was approved by Parliament shortly before the end of next budget year. Consequently, particular self-governments could not plan their revenues in advance.

Subventions were important revenue of self-administrations, too. Competencies transferred from central government institutions to self-governments were financed through subventions. Amount of subvention was approved at central level by Act on State Budget.

However, it appeared that this regime was an obstacle in realisation of fiscal decentralisation. It did not respond to European standards, decision making process of self-administrations faced unstable financial politics, absence of objective decisional criteria in division of financial resources from state budget. What is more, local and regional specifics were not respected. Self-administrations could not plan in advance their revenues. Consequently, during the second stage of fiscal decentralisation in the SR, the act determined fixed rules for division of revenues from individual income taxes among state, regional and local budgets. Government defined objective criteria that determined how to divide revenue among municipalities and regional self-governments. Besides number of inhabitants, area, altitude, social and age structure, density of inhabitants in self-governments was also taken into consideration. It enabled to respect position of smaller municipalities as well. Another acts specified budget determination of other direct taxes (corporate income tax is state tax, vehicle tax is regional one, real estate tax is in the full competence of municipalities, etc.) and budget rules of self-

administrations. Creation of revenues became more transparent and even simpler. At the same time local specifics were respected.

Fiscal decentralisation in Poland

In Poland, important reforms preparing decentralisation of public administration have been realised since January 1999. [6] Reform determined new administrative division of the country (16 regions – “voivodeships” with their own administration, districts – 308 village districts and 65 towns with the status of districts, 2489 municipalities). The objective of the reform was to simplify implementation of regional policy. There is no relation of superiority or inferiority among particular government levels. One of the aims of the public administration reform in Poland was to create possibilities of mutual cooperation in the field of certain functions.

Key field of the public administration reform was decentralisation of roles accompanied by public finance decentralisation. However, transfer of roles to lower government levels did not mean automatic transfer of financial resources. Thus, important part of roles was financed through state budget subventions. It was not only the case of state administration functions but also the case of own self-government functions. Consequently, self-governments were not motivated to gain own financial resources and to use them efficiently. That evolution led to decreasing independence rate of lower government levels.

Fiscal decentralisation in Hungary

Just one lower government level had existed in the Hungarian system of fiscal federalism since 1999. It was local level. Subventions were defined as a difference between local expenditures and local revenues. Centrally controlled system of local government financing through subventions from state budget was marked by several changes in 1990'. System of subventions was substituted by so called revenue orientated system in 1990. In the new system, potential expenditures for public goods were determined according to available revenues of local governments. Basic principle of that system was that central budget contributed to obligatory roles and directives, which shall be involved into own revenues.

In Hungary, process of fiscal decentralisation faced likely as in other countries several problems. Number of self-administration had growing trend in the period and more than 50% of self-administration units had less than 1000 inhabitants. 300 self-administrations had even less than 200 inhabitants. Residential structure was fragmented and local governments had large competencies, they executed almost all functions in the field of state competencies. Local governments had identical competencies and in numerous municipalities financial resources were not sufficient to provide effectively demanded public goods. Even the smallest municipalities had the same competencies and responsibility as the capital city. Too deep decentralisation of competencies was the greatest problem of Hungarian system. Consequently, an idea to create a regional degree of government was suggested. It was supported also by Hungarian ambition to become member of the European Union. Thus, creation of region government degree became part of public administration reform. After the year 2000, competencies in several fields (health care, secondary schools and main roads) were transferred into regional levels [5].

Fiscal decentralisation in Italy

Italy started with decentralisation through several reforms in 1990', too. The process of fiscal decentralisation and liberalisation was fortified in 2001 when several reforms, leading to increasing governing efficiency, were approved. Because of economic crisis (deep regional differences within the coun-

try) and ambition of Italy to join the European monetary union, it was important to increase local autonomy. Italy was inspired by experience of the OECD countries where fiscal federalism was a condition to achieve two significant aims, i.e. to create possibilities for lower government levels to realise fully its functions and to balance system of public accounts.

In 1998, important reforms were realised (Bassanini's reform and Bersani's reform [2]). They stressed the principle of subordination in the field of public finance and they led to increasing efficiency in public goods providing. They should be provided mostly in decentralised manner. It was possible to negotiate especially for poorer regions if they were more engaged into preparation and if they were more motivated to apply for finance from structural EU funds. Since 2000, specific state transfers have been substituted by shared taxes and compensating transfers. New competencies of the regions were accompanied by new regional taxes. Consequently, tax rates could be adapted to local needs.

In 2001, Berlusconi's government realised a reform with the objective to consolidate federalist process. Regions gained more competencies especially in the field of tax legislation and expenditures. However, they were not able to manage effectively their competencies and many case had to be dealt in Constitutional Court with. Another obstacle of the reform was the fact that legislative competencies of the regions were not fully implemented in practice because central government did not define basic framework of these competences. Consequently, it was not possible to fortify revenue autonomy of local governments, which should have financed from their own revenues their current needs. Central government should have only provided special transfers and investment needs could be financed through credits. Autonomy of regions was strengthened only in 2006 (Prodi's government).

Despite the fact that coherence of the fiscal decentralisation and fiscal federalism process was interrupted in Italy (e.g. competencies of lower government levels clashed, vertical tax competition existed, provided public goods were uniform, etc.) fiscal federalism seemed to be as an appropriate manner how to promote Italy.

Fiscal decentralisation in France

Tendency to decentralisation started in France during last two decades of 20th century. Since 2003, France is officially declared as "decentralised republic" (*république décentralisée*) [8] and its decentralisation policy comprises financial autonomy at local level. The principal of fiscal decentralisation was integrated even to the constitution.

At present, there are more than 50 000 self-administrations in France. It means more than 50 000 local budgets (36 000 municipalities, 18 000 organisations of inter-communal cooperation, 96 departments and 24 regions. [9]) Territorial self-administration in organised into three levels: municipalities, departments and regions (including communities with special status and overseas communities). Despite the fact, that according to constitution, free administration executed by elected representatives was ensured already in 1958 and liberty in budgeting and financing was ensured in 1982, self-administrations were still significantly dependent on central level. Since 2003 they have had the right to take their own decisions about competencies which they can ensure better on their level. This is basic principle of fiscal decentralisation – subordination principle. As in other countries, the process of fiscal decentralisation was realised in several stages also in France.

The first stage of fiscal decentralisation was realised from 1980 to 2002. In 1982, competencies and adequate financial resources were transferred into all tree levels - they were financed from state budget in the form of subventions.

The second stage of decentralisation started in 2003 when the constitution was novelised and other important acts were adopted. These legislative changes gave greater financial autonomy to self-governments. Overall transfer of competencies from state to self-administrations was accompanied by the competence to create equivalent sources [3]. Self-administrations became legal persons; they had rights and obligations to execute their competencies freely. They managed their budgets, made inde-

pendent decisions about revenues and expenditures. Even at the second stage of fiscal decentralisation some competencies were transferred onto lower government levels. However, there was also a certain recentralisation in some cases. Some competencies decentralised in 1983 were transferred back to the central government level.

Several principal were underlined in the process of fiscal decentralisation in France: subordination principle, financial autonomy principle and principle of citizen participation in decision making process in a certain territory. Similar or even the same principals are respected in other countries.

Fiscal decentralisation in the Czech Republic

The Czech Republic (CR) is a unitary state with two government levels, central and local government. When local self-government was renewed in 1990, functions were divided according to subordination principle, i.e. a function is executed by the government level that is able to execute it efficiently and that has sufficient information about preferences and requirements of inhabitants.

Local government level is divided from central government level. The only connection between them is system of subventions. Up to 2001 municipal level was the only level of local government and all those municipalities had the same rights and duties regardless their size. In 1999, there were 6 239 municipalities in the CR of which approximately 80% had less than 1000 inhabitants, approximately 90% had less than 2 000 inhabitants and almost half of inhabitants lived in towns with more than 10 000 inhabitants [4]. That is a sign of fragmented residential structure (as it is in Hungary and in Slovakia).

In 2001, a new governmental level was created in the CR. Reform of public sector started by creation of 14 regions. Regions have existed already since 1993 but their number was changing and they were centrally directed, they had neither their own incomes nor rights. Two-degree system of territorial self-administration (municipalities and regions) does not have elements of subordination and dominance among its elements, as each territorial self-administration has defined its own competencies (similarly as it was in the SR).

During the period after the 2nd world war up to 1992, tax revenues of self-administration were relatively small in the CR. A significant change was realised in 1993 in connection with the change of tax system and with important change of tax determination in favour of villages. That influenced remarkably financial independence of the CR. Overall yield from real-estate tax goes to the municipality budget; individual income tax and corporate income tax are shared taxes. Revenue from these taxes was divided among inhabitants according to number of inhabitants. However, age and social structure of inhabitants and their real needs were not taken into consideration. Since 2002 value added tax (VAT) has been a shared tax as well. At present, VAT is divided not only among municipalities and state budget but also among regional budgets [10]. In the CR, besides local fees that have character of local taxes, also administration fees are classified among tax revenues of self-governments.

Fiscal decentralisation in Germany

German system of federal organisation differs from other countries. It has numerous signs of a unitary state. There is one strong central government with wide field of its impact (unified legislation and tax system in whole territory). However, it has also signs of federative organisation – middle government level represents 16 states, lower government level represents local level. German federative system is based on the effort to unify life conditions for whole nation and it is built on the idea of collective welfare and equity especially in the field of public goods. Conditions among government levels are balanced thanks to asymmetric vertical subventions and on the same government level through horizontal subventions (among lands). [12]

After unification of Germany (1990), philosophy of German federative organisation was put to the proof as the western part of Germany was richer and had higher productivity. Eastern part of Germany was much poorer, had lower productivity of work and had low tax capacity. In order to fully respect principle of equity, it would have been necessary to increase tax burden in western Germany and consequently, huge horizontal and vertical transfers would have been organised in eastward direction. That would have decreased level of welfare in western Germany. Thus, central government played significant role in coordination of regional measurements. The central government realised intensively asymmetric vertical subventions in order to maintain principle of even life conditions.

System of fiscal federalism applied in Germany is known as “cooperative fiscal federalism” – specific function division – central decision making process and decentralised execution – horizontal approach in federative organisation. Central level is responsible mainly for legislative function, allocation of financial resources and formulation of main political goals. Lower government levels are responsible for implementation and administration of central government measurements. Executed functions are financed either through subventions or independently by lower level. Financial organisation is based on revenue division. Main taxes are shared taxes and tax legislation is united and centralised. Less important taxes are in the competencies of regional and local offices.

Quantification of fiscal decentralisation

Lessmann studied degree of fiscal decentralisation in 17 OECD countries during two periods from 1980 to 1985 and from 1995 to 2000 using traditional aggregates (expdec – expenditure decentralisation and revdec – revenue decentralisation) as well as adjusted aggregates (adrevdec – adjusted revenue decentralisation and taxdec – tax decentralisation). Data are in the following table.

Table 1. Degree of fiscal decentralisation of OECD countries

Country	expdec		revdec		adrevdec		taxdec	
	1980	1995	1980	1995	1980	1995	1980	1995
	1985	2000	1985	2000	1985	2000	1985	2000
Austria	41.4	43.2	42.7	42.9	14.1	14.8	3.5	3.5
Belgium	19.5	17.4	18.4	17.7	7.3	24.5	6.3	24.1
Canada	58.0	61.3	62.5	61.8	53.5	57.0	51.6	52.9
Denmark	47.7	48.1	48.7	46.2	30.6	31.7	29.0	31.7
Finland	44.3	40.8	44.5	42.4	31.5	31.9	26.2	26.0
France	27.6	29.7	25.3	30.2	16.0	23.2	13.2	19.3
Germany	64.9	64.0	61.9	60.9	22.0	20.8	7.5	7.3
Ireland	27.7	27.1	29.1	27.7	9.7	9.5	2.9	2.4
Italy	28.9	30.4	36.2	29.9	6.3	9.6	0.4	5.8
Netherlands	35.8	34.4	37.2	36.9	9.9	14.4	4.0	5.1
Norway	33.1	33.3	29.5	30.2	25.9	25.1	24.1	23.5
Portugal	9.1	12.4	11.6	12.6	4.1	6.0	0.3	3.1
Spain	28.5	48.2	29.3	45.2	13.3	19.2	9.4	9.2
Sweden	40.7	45.5	5.9	39.3	44.5	40.5	43.6	44.1
Switzerland	60.8	69.1	70.0	70.9	63.7	63.0	58.0	56.6
GB	28.8	25.4	29.4	28.5	18.6	9.4	13.4	4.8
USA	50.6	58.9	56.5	60.1	41.9	46.3	35.9	36.8
average	37.9	40.0	39.0	39.8	24.3	26.3	19.4	21.5

Source: [7]

According to this table it is obvious that the strongest decentralisation trend is in Germany, Switzerland, the USA, Canada and northern European countries, if we use classical indicators. Applying classical indicators we can conclude that the highest decentralisation is again in Switzerland, Canada, the USA and northern European countries.

Summary

Fiscal decentralisation has become a typical trend in different parts of the world since 1980'. European countries were involved in the process as well. Process of decentralisation was different, however many aims and problems are the same. One of the basic principles of fiscal decentralisation is a subordination principle that all above mentioned countries tried to apply. Solidarity principle is evident e.g. in Italy and Germany based on horizontal compensation among regions. Almost in all countries (except of Germany), the system of subventions from central government was substituted by higher competencies of lower levels in creation of budget revenues of self-governments in order to increase their financial autonomy. Despite the fact, Poland faced strong transfer dependency of lower levels from central level. New administrative division precedes fiscal decentralisation process in the SR, Poland, Hungary and in the CR. Fragmented residential structure, i.e. great amount of small municipalities that have insufficient fiscal capacity, was also typical for these countries. Division of revenue and expenditure decentralisation appeared in the SR, Poland and France. Exaggerated decentralisation of competencies appeared in Hungary and a certain recentralisation of chosen competencies appeared in France. The CR did not define objective criteria of shared taxes division as it was e.g. in the SR.

Fiscal decentralisation plays key role in decentralisation, reorganisation and restructuralisation of public sector. That should lead to transparent and effective financing. However, it is necessary to define clearly competencies and responsibilities in revenue creation and in decisions on expenditures in the respect to local specifications and preferences of inhabitants. Unfortunately, theory and practice do not go always in the same direction.

References

1. BELÍČKOVÁ, K. - NEUBAUEROVÁ, E. 2005. *Nástroje ekonomiky verejného sektora*, Merkury s.r.o, Bratislava, ISBN 80-89143-26-1
2. BIBBEE, A. 2007. *Making Federalism Work in Italy*, Economics Department Working Paper No.590, [online] [cited 11.6.2008] available on [http://www.oilis.oecd.org/olisú2007doc.nfs/LinkTO/NT00005A02\\$FILE\\$/JT03238364.PDF](http://www.oilis.oecd.org/olisú2007doc.nfs/LinkTO/NT00005A02$FILE$/JT03238364.PDF)
3. CREUSOT, S. – BENJAMIN, O. 2007. *Le financement des nouvelles compétences des collectivités locales*, Librairie Générale de Droit et de Jurisprudence, Paris, ISBN 978-2-275-03076-0
4. *Fiscal Design Across Levels of Government, Year 2000 Surveys, country Report: Czech Republic, 2001*, [online] [cited 12.6.2008], available on <http://www.oecd.org/dataoecd/33/8/1907041.pdf>
5. *Fiscal Design Across Levels of Government, Year 2000 Surveys, country Report: Hungary, 2001*, [online] [cited 12.6.2008], available on <http://www.oecd.org/dataoecd/33/12/1907077.pdf>
6. *Fiscal Design Across Levels of Government, Year 2000 Surveys, country Report: Poland, 2001*, [online] [cited 12.6.2008], available on <http://www.oecd.org/dataoecd/33/35/1907147.pdf>
7. LESSMANN, CH. 2006. *Fiscal Decentralization and Regional Disparity: A Panel Data Approach for OECD Countries*, Ifo Working Paper No.25, [online] [cited 26.1.2008] available on www.repec.org
8. ORSONI, G. 2007. *Les finances publiques en Europe*, Economica, Paris, p. 167 - 200 , ISBN 978-2-7178-5408-4
9. ORSONI, G. – VIessant, C. 2005. *Éléments de finances publiques*, Economica, Paris, p. 75- 87, ISBN 2-7178-5068-6
10. PEKOVÁ, J. 2004. *Hospodaření a finance územní samosprávy*, Management Press, Praha, ISBN 80-7261-086-4

11. SLOBODA, D. - ČAVOJEC, J. 2007. Fiškálna decentralizácia a obce, [online] [cited 24.5.2007], available on http://www.konzervativizmus.sk/upload/pdf/fisk_dec.pdf
12. SPAHN, P. 1991. Financování federální vlády a vlád zemských – Volby vlastních daní, delených daní a dotací při financování zemských vlád – zkušenosti z Německa, Finance a úveř, ročník 41/8

Possibilities of Implementing “Flexicurity” Concept in Western Balkans Countries

Maja Jandrić¹

ABSTRACT – *Employment protection legislation (EPL), active labour market policies (ALMP) and unemployment benefit (UB) system play the key role in achieving optimal balance between flexibility and security in the labour market. However, there is no universal model which would fit every country and lead to best labour market outcome. The specific macroeconomic, political and institutional characteristics should be taken into account when formulating policy mix, as well as interactions and mutual influences between separate labour market policies and institutions designs. Increased labour market flexibility in Western Balkans countries should be accompanied with providing broader access to active labour market policies. However, there are numerous obstacles for this group of countries to achieve satisfying combination of flexibility and security in the labour market.*

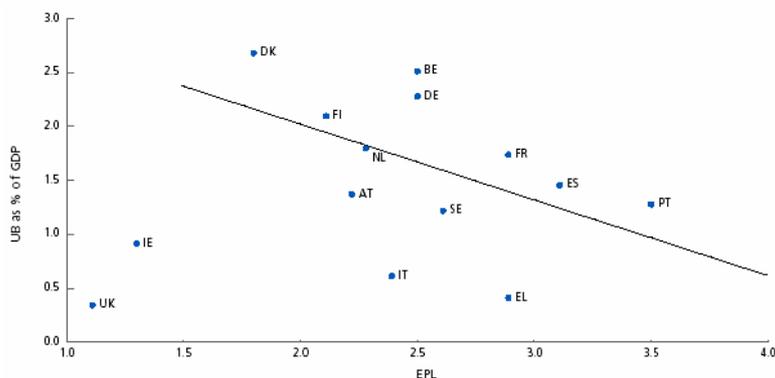
KEY WORDS: *labour market policies, 'flexicurity', unemployment*

Flexicurity and relationship between employment protection legislation, unemployment benefits system and active labour market policies

Labour markets are not only essential for economic performance, but also one of the main components of European social model. There are great cross country differences between EU members. The most common model divides all EU countries in 4 groups according to their social policy models (Boeri 2002): Nordics, Anglo-Saxon, Continental and Mediterranean. According to Sapir (2005) the Mediterranean model has generally strict employment protection legislation (at least for permanent workers) and a rather low coverage of unemployment benefits. Nordic model generally provides unemployment benefits that are generous and comprehensive, but the strictness of their EPL is lower. The Continental model also provides generous unemployment benefits, but its EPL is stricter. Finally, the Anglo-Saxon model has comparatively less employment protection legislation with some aspects of unemployment insurance as the Continental and Nordic models (lower net replacement rates, but comparatively long duration of UB mandatory by law)². The usual method for distinguishing countries regarding their labour market policy is their UB-EPL trade-off, since UB and EPL seem to be alternative tools to insure labour market risks. The presence of this trade-off is well documented (e.g. Boeri et al. (2003)). Employment in Europe Study (2006) emphasizes the relationship between EPL and total spending (as a percentage of GDP) on unemployment benefits. This trade-off was implicitly acknowledged in the EU Integrated Guidelines, which calls for adequate balancing between flexibility and employment security requirements on the labour market.

¹ Maja Jandric, MSc, Faculty of Economics, Belgrade.

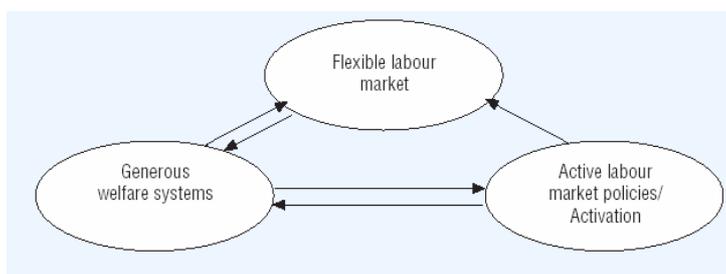
² Zhou Jianping, (2007), “Danish for All? Balancing Flexibility with Security: The Flexicurity Model”, IMF Working paper, WP\07\36., p.8.

Chart 1. UB-EPL trade-off (data for 2003)

Source: European Commission, (2006) Employment in Europe, p. 156.

This model stems from the proposition that protection from labour market risk can be provided either by imposing legal restriction against firing, either by providing UB. The insiders will typically prefer ELP, which protects them and does not impose tax burden, while UB generally provide insurance to population at large and are financed generally by a tax on those who are employed. Some authors, on the other hand (Rovelli et al. (2008)) suggest that the EPL-UB trade-off no longer provides a useful tool to summarize the different attitudes of EU members toward labour market policies and suggest the characterization of these differences in terms of policy generosity (the size of LMP³ expenditures relative to GDP).⁴

ELP, ALMP and UB system play the key role in achieving flexibility and security. OECD study (2004) showed that that generous unemployment benefits are correlated positively with workers' perceptions of employment security while stricter EPL is correlated negatively with them⁵. Higher expenditure on ALMP tends to increase workers' perceptions of employment security⁶. Danish flexicurity model is characterized by a very flexible labor market measured by the restrictiveness of employment protection legislation (flexibility) on the one side, and, on the other, generous system of unemployment benefits and high level of spending on active labor market programmes (security). The chart presented below describes the Danish flexicurity model in the form of the „golden triangle“.

Chart 2. „The Golden triangle of flexicurity“

Source: OECD (2004), Employment Outlook, p. 97.

The arrows indicate flows of persons between different positions within work, welfare and active labour market programmes. The two arrows linking the flexible labour market and the generous welfare

³ LMP- Labour market programmes.

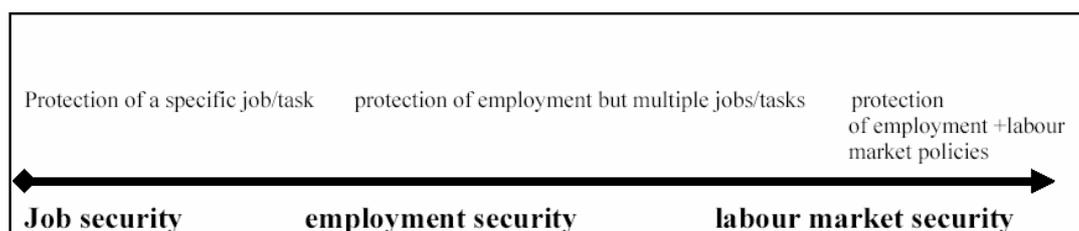
⁴ For details see Rovelli Ricardo, Randolph Bruno, (2008), "Labor Market Policies, Institutions and Employment Rates in EU-27", IZA Discussion Paper No 3502.

⁵ OECD (2004), Employment Outlook, Paris, p. 92.

⁶ Ibid, p. 95.

system indicate that large numbers of workers can be affected by unemployment every year, but that most of them return to employment after a short spell of unemployment. Those who do not quickly go back to employment are assisted by ALMP, before re-entering employment. Madsen (2002) points out, the Danish “flexicurity” system is the result of a long series of reforms, started in 1994, and has required considerable fine-tuning to reach its present successful format. The system in its present format is rather costly: government expenditure on labour market programmes (on both active and passive measures) totals over 4% of Danish GDP in 2004. Security could be observed in a broader way, as illustrated in the picture below.

Chart 3. Shift from job to labour market security



Source: Auer Peter (2006), “Labour Market Flexibility and Labour Market Security: Complementarity or trade-off?”, discussion paper, Employment in Europe, ILO, Geneva, p.4.

Employment protection legislation strictness and unemployment insurance schemes

Stringent EPL is often blamed for inflexibility of labour market and unfavorable labour market performance in Europe. However, there is no consensus in literature about its influence on unemployment rates. It seems that impact of EPL on aggregate labour market variables (employment and unemployment rates) is weak and with ambiguous sign, with different effects for various labour market groups, but on the other hand, labour market transitions, especially between employment and unemployment are affected considerably. However, job turnover rates seem to be similar across countries, despite significant differences in their EPL systems.⁷ There are also arguments that more protected employees tend to be more motivated to gain specific skills, which can lead to productivity growth. (Deregulierungskommission, (1991), Franz, (1994.)).

Influence of EPL on unemployment rates in transition countries is not empirically proved, but a number of authors (Arandarenko (2004), Micevska (2004)) state that there is no firm evidence to support the assumption that more flexible labour market regimes lead to better economic results. Micevska (2004) finds that the analysis conducted for SEE countries strengthens the conclusion of prior studies that the EPL index has little or no effect on overall unemployment. Also, some analyses suggest negative effect of stricter EPL on employment and participation rates in OECD countries, while this impact is positive in transition countries⁸. Impact of EPL on labour market in transition economies is represented mainly through influence on speed of flows between unemployment, employment and inactivity⁹. According to OECD index which measures strictness of EPL¹⁰, South European countries and Turkey have the greatest protection of employees, and on the opposite side of spectrum are English speaking countries (UK, USA). Including transition countries into analysis shows that the average EPL level in Central and Eastern European transition countries does not differ much from the EU average,

⁷ European Commission, (2006), Employment in Europe, p. 154.

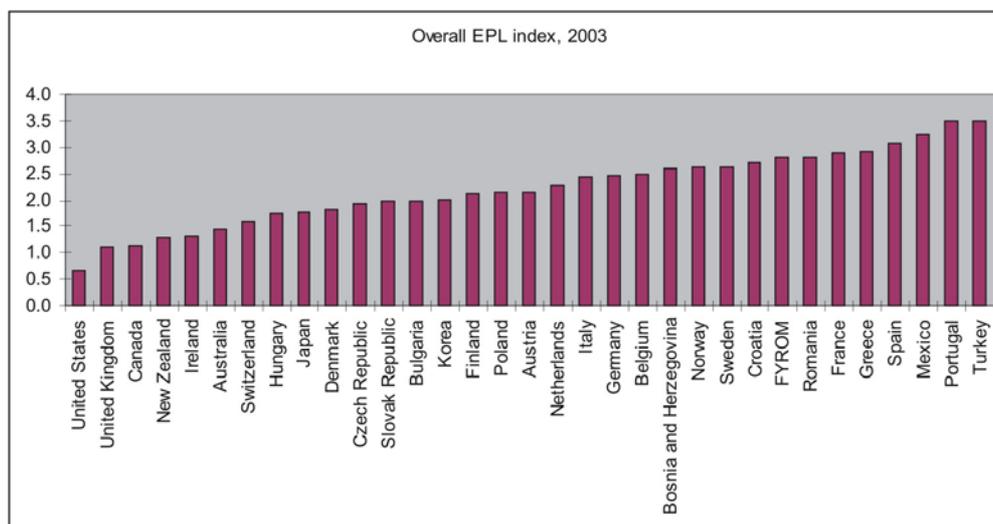
⁸ Cazes Sandrine, (2002), “Do Labour Market Institutions matter in Transition Economies? An Analysis of Labour Market Flexibility in the Late Nineties”, DP/140/2002, ILO, p. 22.

⁹ Nesporova Alena, (2002), “Unemployment in the Transition Economies”, ILO, www.unece.org/ead/sem/sem2002/papers/Nesporova.pdf, p. 15.

¹⁰ Higher value of index means stricter EPL.

although there are large differences between these countries as well. This means that transition countries labour market regulation is on average not more restrictive than other OECD or EU countries.

Chart 4. Overall EPL indices in 2003



Data sources: for B&H, Croatia, FYROM, Bulgaria and Romania: Nesporova, A., Cazes, S. (2006); for other countries: OECD (2004), Employment Outlook.

Regarding Western Balkans¹¹, this group of countries has on average more rigid EPL than the other observed groups of countries (EU 15, OECD, and several new member states which were taken into analysis: Czech Republic, Poland, Hungary, Slovakia), but these differences are rather minor on average. The closer view to the three main components of the EPL index shows that countries of Western Balkans remain more restrictive regarding the regulation of temporary contracts. Namely, according to Nesporova, A., Cazes, S. (2006), Western Balkans average for Index of Temporary Contracts is 3.0, while EU 15 and OECD average for the late 1990s were 2.0 and 1.8, respectively. Other two indices (Index for contracts without limit of time and Index for collective dismissals) are more or less in line with EU average, but higher than OECD average.

This group of countries was during the 1990s characterized by profound amendments to national labor legislation leading to a substantial decrease of workers' protection and a reduction in the EPL indices to levels comparable to those prevailing in developed market economies (i.e. Croatia has in less than a decade moved from the highest to relatively low levels on the rigidity scale). For all countries with available data on EPL indices in the early 2000s, the summary index values range from 2.6 to 2.9, which is slightly above the CEE and EU averages. This rigidity mainly stems from their legislation on temporary employment, while their legislation on regular employment is rather flexible. Micevska (2004) emphasizes that in general, this group of countries operate with less generous unemployment insurance systems than the EU and OECD countries. For example, in 2003 in Serbia, 0.72% of GDP was spent on UB, up from 0.21% in 2000.¹² For Croatia, on the other hand, the total amount of funding of the unemployment benefits in 2003 was 0.4% of GDP, which was very low in comparison with the number of the new EU countries.¹³ These values would put these two countries on the Chart 1 in the lower right part of the graph, near position of Greece.

¹¹ Serbia, Bosnia and Herzegovina, Croatia, Former Yugoslav Republic of Macedonia, Montenegro and Albania. Bulgaria and Romania are also included in analysis.

¹² Employment Policy Review-Serbia, (2006), ILO and the Council of Europe, p. 25.

¹³ Employment Policy Review-Croatia, (2004), ILO and the Council of Europe, p. 33.

Table 1. EPL indices for Western Balkans countries

	Year	EPL-summary index
Albania	1995	2.6
Bosnia and Herzegovina	1999	3.2
	2003	2.6
Croatia	1996	3.6
	2003	2.7
FYROM	1995	3.4
	2003	2.8
Serbia and Montenegro	2001	2.9
Bulgaria	1996	2.9
	2003	2*
Romania	2003	2.8
	Late '90s**	3.1
WB average	Early '00s***	2.7
EU15 average	late '90s	2.4
OECD average	late '90s	2

* according to Micevska (2004) index is 2.7

**Does not include figures for Romania and Serbia and Montenegro, since data are not available for the late 1990s.

***Includes the 1995 figures for Albania.

Sources: Nesporova, A., Cazes, S., (2006) and Micevska, M., (2004).

Policy mix between UB and EPL is extremely important for balancing between flexibility and employment security on the labour market. However, moving along this curve is proved to be very difficult, since the actual policy mix largely depends on the initial choices due to socio-politic barriers. It is important to emphasize that unemployment benefit system is multidimensional and it is very hard to capture its generosity with one indicator. Level of payments, the duration over which they are paid, the eligibility conditions and the strictness of administration should all be taken into account in order to see the full picture of unemployment benefit system. Its interaction with other labour market policies and institutions call for careful consideration in estimating potential impacts of unemployment benefit system on labour market outcomes. Concerning influence of unemployment benefits on unemployment, there are two main channels: (1) impact on duration of unemployment (unlimited or very long duration of UB may cause incidence of long term unemployment, which is one of the possible causes of hysteresis) and (2) impact on wages (through collective bargaining system and also by decreasing influence of unemployment on wages). On the other side, there are arguments (Dreger (2004)) that unemployment benefit system could raise motivation to invest in human capital as well as the probability of finding a suitable job. Calmfors and Holmlund (2000) also state that rise of unemployment benefits could positively influence participation rates. Table 2. shows a brief comparison of unemployment benefits systems in Western Balkans group of countries (covering several aspects of the system).

Table 2. Comparison of UB systems between Western Balkans countries:

	Rate of benefits (1)	Benefits-Duration of payment (2)	UB as % of average wage, 2003 (3)	Share of registered unemployed receiv- ing benefits, 2003 (4)
B&H	Federation BH-Benefits are not linked to earnings, and present of 40 % of the average monthly net salary in Federation over the previous 3 months. Rep. Srpska-rate of benefit depends upon insurance record and is paid as percentage of individual's average earnings, 20% or 35%, depending on insurance period. Limited amount of cash benefits.	Federation BH Depending on insurance record- from 3 months to 24 months. Rep. Srpska and District Brcko: 3 months to 12 months depending on the insurance record.	F.BH 40 RS 26	Fed. BH 1.7 RS 2
Croatia	Benefit paid in 100% of previous earnings, but limited by the amount of maximum and minimum benefit.	Subject to previous period of employment completed with duration of benefit from 78 to 390 days (except for recipients who have completed 35 years (men) or 30 years (women) of employment who are entitled until engagement in new employment or entitlement to pension).	25	22
Serbia	60% of the bases (average wage earned in a 6 months period before granted unemployment status) paid for the first 3 months. This is reduced to 50% for the remaining duration of the benefit.	Between 3 to 24 months scale dependant on age and contribution period.	60	9.6
Albania	Flat-rate benefit equal to 4360 leks per month.	Paid for 12 months if unemployment is continuous, payable over 2 years if unemployment is interrupted by periods of work.	18	7
FYROM	Paid as a percentage of reference earnings (average monthly net salary paid to the worker over the last 24 months of employment); 50% or 40% depending on duration of entitlement to benefits.*	1 month to 12 months, depending on contribution and employment period. Unlimited for persons with 15 years in employment and at the most 5 years short to qualify for an old age pension.	50	12
Bulgaria	60% of reference income (average monthly contributory income for the last 9 months during which the person has been subject to compulsory insurance for all insured social risks).	4 to 12 months, depending on insurance period.	33	20

Sources: Nesporova, A., Cazes, S. (2006) for columns 3 and 4; Mutual Information System on Social Protection of the Council of Europe (MISSCEO), comparative tables, 15th edition and Mutual Information System on Social Protection in the European Union (MISSOC) for columns 1 and 2.

*For more details, see MISSCEO, comparative tables.

Conclusion

As can be observed in Table 2, there are significant differences between Western Balkans countries regarding parameters of unemployment benefit schemes. Unemployment insurance schemes are not particularly generous (regarding unemployment benefit as a percentage of average wage and share of registered unemployed receiving benefits), which, together with the fact that passive labour market policies absorb most of available resources and leave a little room for ALMP spending, leads to conclusion that decreasing EPL indices in the last 15 years (therefore, increasing labour market flexibility) have not been compensated by stronger protection of workers through providing broader access to ALMPs or decent income support in unemployment.

As Nesporova et Cazes (2006) argue, generally weak protection may have a negative impact on labour reallocation and productivity through increasing workers' perception of insecurity. The countries should use active labour market programmes more extensively. However, effectiveness of these programmes in terms of improving employability and promoting employment of jobseekers depends largely on good design, targeting and interactions of measures with other policies and given economic environment. On the other side, there are several problems in this region which could be obstacles to implementing flexicurity policy: large informal sectors, insufficient funds for ALMP, underdeveloped tradition of social dialogue and rather weak state institutions.

Interaction of institutions and policies must also be taken into account in order to achieve optimal level of security and flexibility. According to the OECD (2006)¹⁴, there are two different policy packages which have been successful in obtaining similar outcomes in terms of high employment and low unemployment rates. The first consists of: 1) a limited role for collective agreements; 2) strong product market competition; 3) low levels of welfare benefits and active policies, as well as limited taxation to fund labour market policies; and 4) a light labour market regulatory environment. The second policy package comprises: 1) strong emphasis on collective bargaining and social dialogue; 2) significant product market competition; 3) generous welfare benefits and active policies, while imposing and enforcing strict job search conditions for receipt of benefit in order to activate job seekers; and 4) more restrictive labour market regulations than in the first successful policy package. The first package is associated with relatively high in-work poverty and low budgetary costs for LMPs and, the second with relatively low in-work poverty, albeit achieved at a relatively high budgetary cost. This suggests that there is no unique best solution which would fit every country and that the specific macroeconomic, political and institutional characteristics should be taken into account when formulating policy mix.

References

- 95th Session of the International Labour Conference, (2006), "Combining Labour Market Flexibility and Security in the West Balkan", Public information.
- Arandarenko Mihail, (2004), "International Advice and Labour Market Institutions in South-East Europe.", *Global Social Policy* 4,1, pages 27-53.
- Auer Peter, (2006), "Labour Market Flexibility and Labour Market Security: Complementarity or trade-off?", discussion paper, *Employment in Europe*, ILO, Geneva, pages 1-4.
- Cazes Sandrine, (2002), "Do Labour Market Institutions matter in Transition Economies? An Analysis of Labour Market Flexibility in the Late Nineties", DP/140/2002, ILO, p. 22.
- Calmfors Lars, Holmlund Bertil, (2000), "Unemployment and Economic Growth: A Partial Survey", *Swedish Economic Policy Review* 7, pages 107-153.
- Deregulierungskommission, (1991), "Marktöffnung und Wettbewerb", C.E. Poeschel, Stuttgart.
- Dreger Christian, (2004), "The Impact of Institutions on the Employment Record in European Labour Markets", 1979-2001.
- Employment Policy Review-Croatia, (2004), ILO and the Council of Europe, Strasbourg, pages 18-35.

¹⁴European Commission, (2006), *Employment in Europe*, p. 153.

- Employment Policy Review-Serbia, (2006), ILO and the Council of Europe, Strasbourg, pages 17-25.
- European Commission, (2006), "Employment in Europe", pages 119-163.
- Eurostat (<http://epp.eurostat.ec.europa.eu>)
- Franz Wolfgang, (1994), "Chancen und Risiken einer Flexibilisierung des Arbeitsrechts aus ökonomischer Sicht", Zeitschrift für Arbeitsrecht 25, p.439 – 462.
- Micevska Maja, (2004), "Unemployment and Labour Market Rigidities in Southeast Europe", Vienna: The Vienna Institute for International Economic Studies., pages 4-11.
- Mutual Information System on Social Protection in the European Union, (MISSOC), http://ec.europa.eu/employment_social/spsi/missoc_tables_en.htm
- Mutual Information System on Social Protection of the Council of Europe (MISSCEO), Comparative tables, 15th edition.
- Nesporova Alena, Cazes Sandrine, (2006), "Combining Flexibility and Security for Employment and Decent Work in the western Balkan", SEER, issue: 02\2006, pages 7-23.
- Nesporova Alena, (2002), "Unemployment in the Transition Economies", ILO, p. 15.
- OECD (2004), Employment Outlook, Paris, pages 61-122.
- OECD (2006), Employment Outlook, Paris, p. 60.
- OECD (2007), Employment Outlook, Paris, pages 245-276.
- Rovelli Ricardo, Randolph Bruno, (2008), "Labor Market Policies, Institutions and Employment Rates in EU-27", IZA Discussion Paper No 3502, pages 1-23.
- Sapir Andre, (2005), "Globalization and the Reform of European Social Models", Bruegel Policy Brief, issue 2005\01, pages 2-4.
- Zhou Jianping, (2007), "Danish for All? Balancing Flexibility with Security: The Flexicurity Model", IMF Working paper, WP\07\36, pages 6-11.

Gravity Model and International Trade: the Case of OECD Countries

Mislav Jošić¹

ABSTRACT – This paper investigates relationship between trade variables such as exports and country's macro variables which is fully explained using gravity model of trade. Moreover, theoretical background of gravity model on international trade is explained in respect to change in transport costs. Gravity model approach is used in analysing trade pattern of the OECD countries in gravity equation ranging from 1990 to 2008. Empirical evidence of this work proves the expected signs of variables in gravity equation (GDP and Distance) mainly focusing on the role of transport costs in explaining variable Distance.

KEY WORDS: Gravity model, international trade, trade pattern, OECD, transport costs, GDP, distance

Introduction

The purpose of this work is to assess the degree of impact of macro variables on the exports of OECD countries using gravity model of international trade. In the past fifteen years European countries have experienced substantial trade integration followed by the constitution of the European Union (Maastricht Treaty, 1993) and various PTA and RTA arrangements². The existence of world trade policy incorporated in the GATT rules and the development of World Trade Organisation provided solid ground for trade liberalisation.

Due to the availability of data, set of analysed countries is narrowed to European OECD member countries³. European OECD member countries have increased their exports with the rest of the World from 137,4 billions \$US in 1990 to 468,4 billions \$US in 2007⁴ (Table 1) which is mainly result of organic growth (new members) and lowering tariff rates among the members in the European Union. Organic growth also boosted OECD's total economic strength measured by GDP (PPP) which increased from 8343,1 billions \$US in 1990 to 12203,9 billions \$US in 2007⁵ (Table 2). This relationship between exports and gross domestic product is analysed thoroughly in empirical part of the study as well as other variable(s) in the model (e. g. Distance).

Bilateral trade flow between European OECD member countries and the rest of the World is analysed on a set of data from 1990 to 2008⁶ at a yearly basis. Trade flow in this context is associated with exports of goods FOB. Exports serves as a dependent function in a modeling gravity equation using economic size of a country and particular distance between trade partners.

Theoretical framework

In order to determine the pattern of international trade it is wise to remember contribution of theories that preceded the development of gravity model. Classical theory of comparative advantages defined

¹ Mislav Jošić, univ. spec. oec. Currently working as a Teaching and Research Assistant at Faculty of Economics and Business (International Economics Department), University of Zagreb, Croatia.

² Such as CEFTA

³ As of October 2008, OECD consists of 30 members in total (23 from Europe), mostly high income countries (see OECD brochure)

⁴ Extracted from OECD Stats database (International Trade MEI)

⁵ Extracted from OECD Stats database (GDP)

⁶ Annually data not available for the year 2008 at the time of writing

by David Ricardo (1817) was a milestone in researching how trade can be mutually beneficial for all trade partners due to the labour costs and difference in labour productivity. Introduction of Heckscher-Ohlin trade theory (1919) based on relative factor abundance and difference in relative factor prices has opened long-lasting academic debate about all causes and effects of trade. Refined version of Heckscher-Ohlin theory was made with FPE theorem (Samuelson, 1948, 1949), Heckscher-Ohlin-Vanek theorem and some empirical testing that were mostly rejecting idea of real existence of HO theory, notably Leontief for USA (1954) and Horvat (1968) for Yugoslav countries. Conclusions that arise from Heckscher-Ohlin theory of international trade will remain very important in the analysis of changes in output prices due to changes in transport costs.

The first formulation of gravity model based on Newton's Law of universal gravitation was made by Tinbergen (1962). Analogy with physics served perfectly as a logical explanation of trade flow between countries. Other authors like Armington (1969), Anderson (1979), Bergstrand (1985), Helpman and Krugman (1985) and Brun et. al. (2005) also gave their contribution to the extension of the model which will be discussed later on. Significant findings in the same area but for South-East Europe were presented by Vujčić and Šošić (2004) with special stress on trade potential of Croatia.

There are two major variables explaining bilateral trade flow between trade partners: economic strength of a country (variable GDP), and geographical proximity (variable Distance).

The functional form of the gravity model is given in Equation 1:

$$E_{ij} = A \cdot GDP_i^{\beta_1} \cdot GDP_j^{\beta_2} \cdot D_{ij}^{\beta_3} \quad (1)$$

where

E = exports from country i to country j

A = constant

GDP = gross domestic product

D = distance

Better understanding of the gravity equation in terms of elasticity is achieved using log-linear structure (logarithmic values⁷ of all variables) in Equation 2:

$$\log E_{ij} = \alpha_{ij} + \beta_1 \log GDP_i + \beta_2 \log GDP_j + \beta_3 \log D_{ij} \quad (2)$$

Where β_1, β_2 and β_3 parameters are interpreted as coefficients of elasticity of exports in respect to changes in independent variables (GDP and distance). This change of dependent variable is not in absolute terms, it is rather relative change due to interpretation of log structure and percentage changes that persist in β_i coefficients.

Most often trade flow is calculated as arithmetic mean of exports and imports, but in this work dependent variable will be solely exports in order to emphasize the role of exports for analysed countries.

Equation 2 can also be extended using other variables that could possibly measure economic strength of a country better, such as Population (POP), *GDP per capita* (GDP/POP) or combination of all mentioned. Furthermore, the extended gravity equation can also be written in the following form:

$$\begin{aligned} \log E_{ij} = & \alpha_{ij} + \beta_1 \log GDP_i + \beta_2 \log GDP_j + \beta_3 \log POP_i + \beta_4 \log POP_j + \\ & + \beta_5 \log \left(\frac{GDP_i}{POP_i} \right) + \beta_6 \log \left(\frac{GDP_j}{POP_j} \right) + \beta_7 \log D_{ij} \end{aligned} \quad (3)$$

⁷ Natural logarithm used for the log values

The idea of this paper is to test expected signs of β_1 and β_2 coefficients on GDP variables from Equation 2 using regression analysis which should comply with the signs from Table 3:

Table 3. Expected signs of β_i coefficients

β_i	Expected sign of β_i
β_1	+
β_2	+

Positive signs in Table 3 arise from the positive impact of higher income on imports of country's trade partner under constant marginal propensity to import. Greatest breakthrough in explaining GDP variable in gravity model was made by Armington (1968) and later on Bergstrand (1985). Their contribution involves introduction of price changes in form of GDP deflator and real exchange rates. Some recent findings by Bussière, Fidrmuc and Schnatz (2008) include FDI flows as an additional variable in the analysis. Results have shown positive sign for FDI but with lower elasticity (see Bussière et. al., 2005).

An impact of geographical proximity on trade is negative, and suggests that distance affects trade in

the opposite way ($\frac{\partial E_{ij}}{\partial D_{ij}} < 0$) due to transport costs. Hence, the expected sign of parameter β_3 for variable Distance is negative ($\beta_3 < 0$).

How to measure distance is a key question in setting gravity model properly. One way is to use great circle⁸ distance between capital cities of trade partners (country i and country j). The other way is to use auxiliary variables that represent changes in prices that occur in process of trade between countries i and j . These can be measured either using real exchange rate or the price of oil. The latter is chosen as a suitable representative of transport costs in empirical part of the study. Due to the mentioned transport costs⁹ it is impossible to hold Heckscher-Ohlin's assumption that international trade will equalize prices of all tradeable goods in countries that participate in trade. Transport costs inhibit trade and discriminate prices in both trade partners as well.

Parameter α_{ij} accounts for all other unobservable variables that are not explained directly through gravity equation and includes cultural, historical, political and language differences among countries.

Empirical results

The goal of empirical part of this paper is to implement linear regression analysis on a set of data for 23 European OECD countries in a time period between year 1990 and 2007. Dependent variable (response variable) in a model is „Exports“ for OECD countries (EOECD) and independent variables (explanatory variables) are as follows: „GDP OECD“ (GDPOECD), „GDP World“ (GDPW) and variable „Distance“ (D). Data for GDPs of trade partners are given in Appendix (see Table 2 and 4). Variable Distance uses OECD's crude oil import prices, CIF (US\$ per barrel) – see Appendix (Table 5). All data are available annually, except for year 2008 which is excluded from an analysis.

Regression equation¹⁰ with three predictors in log-linear form is given in Equation 4:

⁸ Using haversine formula from spherical trigonometry

⁹ Also known as *border effects*

¹⁰ Single country gravity model used

$$\log EOECD = \alpha_{OECD,W} + \beta_1 \log GDPOECD + \beta_2 \log GDPW + \beta_3 \log D_{OECD,W} \quad (4)$$

Logarithmic values of all (dependent and independent) variables with 5 decimal points precision are given in Table 6 and serve as input for computer support in regression calculation:

Table 6. Log values of all variables in regression analysis

t	LGEOECD	LGGDPOECD	LGGDPW	LGD
1990	4,92304	9,02919	9,99320	3,10433
1991	4,92122	9,04707	10,04170	2,95954
1992	4,97632	9,06111	10,10780	2,91497
1993	4,91456	9,06281	10,12288	2,79728
1994	5,05099	9,08627	10,19333	2,74962
1995	5,25282	9,11368	10,29780	2,84501
1996	5,30164	9,13435	10,31869	3,02071
1997	5,29110	9,16398	10,31539	2,95047
1998	5,32554	9,19298	10,30737	2,53244
1999	5,32706	9,21850	10,34257	2,84912
2000	5,37509	9,25807	10,37190	3,33200
2001	5,38477	9,27321	10,36470	3,15966
2002	5,44708	9,28734	10,40326	3,18335
2003	5,62362	9,30080	10,51930	3,34648
2004	5,79610	9,32856	10,63903	3,59315
2005	5,87788	9,35059	10,71561	3,92461
2006	6,00341	9,38175	10,79193	4,12319
2007	6,14931	9,40951	10,90315	4,23715

Source: World Bank, OECD Stats Database, author's calculation

Link between response variable and explanatory variables is shown in Table 7 using coefficients of linear correlation:

Table 7. Correlation matrix

	LGEOECD	LGGDPOECD	LGGDPW	LGD
LGEOECD	1,000000	0,958464	0,993864	0,866439
LGGDPOECD	0,958464	1,000000	0,951261	0,801894
LGGDPW	0,993864	0,951261	1,000000	0,856881
LGD	0,866439	0,801894	0,856881	1,000000

Source: Author's calculation

From Table 7 it is clear there is a high positive linear correlation between World's GDP and OECD's exports of goods ($\rho_{LGGDPW, LGEOECD} = 0,993864$). Demand for OECD's export products is almost perfectly correlated with the changes in World's GDP which arises from the similarity of trade structures of both trading partners according to Linder's (1967) hypothesis of international trade.

Results of regression analysis based on Equation 4 is presented in Table 8:

Table 8. Regression analysis on LGEOECD variable

Dependent Variable: LGEOECD				
Method: Least Squares				
Sample: 1990 2007				
Included observations: 18				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-11.14337	1.278928	-8.713061	0.0000
LGGDPOECD	0.444644	0.256987	1.730223	0.1056
LGGDPW	1.183458	0.144348	8.198642	0.0000
LGD	0.049191	0.039375	1.249307	0.2320
R-squared	0.990601	Mean dependent var		5.385642
Adjusted R-squared	0.988588	S.D. dependent var		0.376355
S.E. of regression	0.040206	Akaike info criterion		-3.396487
Sum squared resid	0.022631	Schwarz criterion		-3.198626
Log likelihood	34.56838	F-statistic		491.8663
Durbin-Watson stat	1.169291	Prob(F-statistic)		0.000000

Source: Author's calculation

Popularity of gravity model in explaining trade pattern is justified due to high R-squared (0,990601) which expresses goodness of fit between observed and predicted values.

Test statistics shows that only variable LGGDPW is significant in explaining variable LGEOECD under 5% significance level (N=18) on individual basis¹¹. The same result can be shown using p-values. This is consistent with the fact that World's demand (measured by GDP) for OECD's goods is

$$\frac{\partial E_{OECD}}{\partial GDP_W} > 0$$

positively correlated, i.e.

Group test (F statistics) shows the following results: with k=3 and N=18 critical value for F test with $\alpha = 0,05$ equals F(3,14)=3,34. Empirical value from Table 8 (F-statistics=491,8663) is higher than critical value (491,8663>3,34) which leads to conclusion that at least one variable is significant in explaining dependent variable LGEOECD in the model under $\alpha = 0,05$ significance level.

All expected signs from Table 3 (β_1 and β_2) are proven in regression output and, once again, it can be said that a rise in economic strength measured by GDP increases trade¹² between countries that participate in it.

Interpretation of β_i coefficients in log-linear form is in terms of elasticity due to log values used. Variable „Distance“ doesn't conform with gravity model expectations and parameter's negative sign.

This can be explained using real variables, in this case oil prices, instead of physical distance. β_3 coefficient interpreted as percentage change of OECD's exports in respect to changes in distance is closer to zero and doesn't affect trade significantly.

Conclusion

An importance of gravity model is undisputed in every serious analysis of international trade flows. The goal of this paper was to seek and find relationship between country's exports and economic power of its trading partners as well as distance. For this purpose dependent variable was presented

¹¹ Critical value in t-test is $t_{0,025} = 2,101$

¹² Defined as exports of one country to another

through OECD's exports in time period between 1990 and 2007. Predicted variables for economic strength were presented with GDP (PPP) and distance was analysed through the changes in import prices of oil in OECD countries.

Expected parameters defined in theoretical gravity model assumed positive correlation between economic strength and exports of trading partners. This assumption was empirically tested and proven using t-test and F-test with positive signs of regression parameters assigned to GDP variables. Demand for OECD's export products is almost perfectly correlated with the changes in World's GDP which arises from the similarity of trade structures of both trading partners according to Linder's hypothesis of international trade. Low inelasticity of exports in respect to changes in transport costs (oil prices) was achieved according to regression output. Variable „Distance“ didn't give expected parameter's value (negative) although its regression coefficient was close to zero.

Results of an empirical test conducted on a set of data for European OECD countries show that gravity model serves as a good explanation for trade flows and patterns of international trade.

Appendix

Table 1. OECD Europe - Total Trade (in billions of \$US), 1990 - 2007

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
OECD Europe Exports in goods	137,4	137,2	144,9	136,3	156,2	191,1	200,7	198,6	205,5	205,8	216,0	218,1	232,1	276,9	329,0	357,1	404,8	468,4
Imports in goods	142,1	144,5	150,7	134,7	152,0	184,3	193,3	191,8	202,2	203,8	218,7	214,2	223,4	270,0	324,4	357,1	408,0	474,5

Source: OECD Stats Database (2008) International Trade MEI [online].

Available at: <http://stats.oecd.org/wbos/index.aspx> [October, 21, 2008]

Table 2. OECD Europe – GDP (expenditure approach, in billions of \$US), constant prices, constant PPPs, OECD base year, 1990 - 2007

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
OECD Europe	8.343,1	8.493,6	8.613,7	8.628,3	8.833,2	9.078,6	9.268,3	9.546,9	9.827,9	10.081,9	10.488,9	10.648,9	10.800,4	10.946,8	11.254,9	11.505,6	11.869,8	12.203,9

Source: OECD Stats Database (2008) GDP (expenditure approach) [online].

Available at: <http://stats.oecd.org/wbos/index.aspx> [October, 21, 2008]

Table 3. GDP World (current US\$, in billions), 1990 - 2007

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
World GDP (current US\$)	21.877,3	22.964,3	24.533,6	24.906,4	26.724,2	29.667,2	30.293,5	30.193,7	29.952,6	31.025,8	31.949,2	31.720,0	32.967,0	37.023,2	41.732,4	45.053,9	48.626,7	54.347,0

Source: World Bank (2008) World Development Indicators database (World GDP, current US\$) [online].

Available at: <http://ddp-ext.worldbank.org/ext/DDPQQ/report.do?method=showReport> [November, 3, 2008]

Table 5. OECD crude oil import price, CIF, US\$ per barrel, 1990 - 2007

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
OECD crude oil import price, CIF, USD per barrel	22,3	19,3	18,4	16,4	15,6	17,2	20,5	19,1	12,6	17,3	28,0	23,6	24,1	28,4	36,3	50,6	61,8	69,2

Source: OECD Stats Database (2008) OECD crude oil import price, CIF, US\$ per barrel [online].

Available at: <http://stats.oecd.org/wbos/index.aspx> [October, 21, 2008]

References

- Anderson, J. E. (1979) *A Theoretical Foundation for the Gravity Equation*, American Economic Review 63, pp. 881-892.
- Armington, P. (1969) *A Theory of Demand for Products Distinguished by Place of Production*. IMF Staff Papers 16 (3): pp. 159-176.
- Bergstrand, J. H. (1985) *The Gravity Equation in International Trade: Some Microeconomic Foundations and Empirical Evidence*. Review of Economics and Statistics 67 (3): pp. 474-481.
- Brun, J., Carrère, C., Guillaumont, P. and Melo, J. (2005) *Has Distance Died? Evidence from a Panel Gravity Model*. World Bank Economic Review 19 (1): pp. 99-120.
- Bussière, M., Fidrmuc, J. and Schnatz, B. (2008) *EU Enlargement and Trade Integration: Lessons from a Gravity Model*, Review of Development Economics, 12 (3), pp. 562-576
- Heckscher, E. (1919) *The Effect of Foreign Trade on the Distribution of Income*, Ekonomisk Tidskrift, pp. 497-512
- Helpman, E. (1987) *Imperfect Competition and International Trade: Evidence from Fourteen Industrial Countries*. Journal of Japanese and International Economies 1 (1): pp. 62-81.
- Horvat, B. (1968) *An Integrated System of Social Accounts for an Economy of the Yugoslav Type*, Yugoslav Institute of Economic Research [online]. Available at: <http://www.roiw.org/1968/19.pdf> [October, 22, 2008]
- Leontief, W. (1954) *Domestic Production and Foreign Trade: The American Capital Position Reexamined*, *Economia Internazionale* 7, (February), pp. 3-32
- Linder S. B. (1967) *Trade and Trade Policy for Development*. New York Preager.
- OECD brochure (2008) [online]. Available at: <http://www.oecd.org/dataoecd/15/33/34011915.pdf> [October, 21, 2008]
- OECD Stats Database (2008) *GDP (expenditure approach)* [online]. Available at: <http://stats.oecd.org/wbos/index.aspx> [October, 21, 2008]
- OECD Stats Database (2008) *International Trade MEI* [online]. Available at: <http://stats.oecd.org/wbos/index.aspx> [October, 21, 2008]
- OECD Stats Database (2008) *OECD crude oil import price, CIF, US\$ per barrel* [online]. Available at: <http://stats.oecd.org/wbos/index.aspx> [October, 21, 2008]
- Ricardo, D. (1817) *On the Principles of Political Economy and Taxation*, London: John Murray [online]. Available at: <http://www.econlib.org/library/Ricardo/ricP.html> [October, 22, 2008]
- Samuelson, P. A. (1948) *International Trade and the Equalisation of Factor Prices*, *Economic Journal* 58, (June), pp. 163-184
- Samuelson, P. A. (1949) *International Factor-Price Equalisation Once Again*, *Economic Journal* 59, (June), pp. 181-197
- Tinbergen, J. (1962) *Shaping the World Economy: Suggestions for an International Economic Policy*. New York: The Twentieth Century Fund.
- Vujčić, B. and Šošić, V. (2004) *Trade Integration in South-East Europe and the Trade Potential of Croatia*, mimeo, National Bank of Croatia, Belgrade [online]. Available at: <http://www.wiiw.ac.at/balkan/files/Vujcic+Sosic.pdf> [October, 22, 2008]
- World Bank (2008) *World Development Indicators database (World GDP, current US\$)* [online]. Available at: <http://ddp-ext.worldbank.org/ext/DDPQQ/report.do?method=showReport> [November, 3, 2008]

Fair Industry and Participant Satisfaction

Miodrag Koprivica¹

ABSTRACT – Fair exhibition is an economic but also tourist event. In the countries with highly developed economy these events are carefully planned and prepared, latest technologies are used for organization and monitoring of these events, not only by fair organizers but also from the aspect of the exhibitors and visitors. Main goal of this project is to grade success of fair exhibitions as an economic and tourist events. This will be achieved through questioning a satisfactory rate of all involved parties. Feeling of satisfaction is a truly complex category since there is not a single index that could describe it in detail. In order to explore this category certain types of questions are used. All involved parties were asked these questions and their correlation is later examined. Eight different international fair events held in Belgrade and Novi Sad have been surveyed. Results from simultaneous and parallel surveys, done on all three parties related to every fair exhibition, are being analyzed. These parties are exhibitors, visitors and managing team in charge of fair organization.

KEY WORDS: fair exhibition, event, satisfaction, exhibitors, visitors

Introduction

In countries with developed market economy, fairs are organized thoroughly and they represent an important economic event. Only the advanced technology is used, both for preparation and for monitoring of the fair events.

The main goal of this project is to grade success of fair exhibitions as an economic events by questioning a rate of satisfaction of fair event participants. Sense of satisfaction is a complex matter and could not be described with a unique empirical identifier. In order for that quality category to become visible, we have used a specific type of questions which were presented to all participants of a fair event and correlation was done afterwards.

Basic features of the fair business

Ever since they were established as economic events fairs have maintained the main idea which persevered despite of all external influences and environments in which those were happening. A fair is always an assembly of people and goods, which is held at a specific place and has a detailed time-frame.

Basically, the reason why fairs and exhibitions exist is directly connected to a long term issue that manufacturers and buyers have to meet and that such meeting has to happen in an economically viable way. Existence of the organized exhibitions provided sellers with the additional benefits. They were able to meet a large number of buyers and simultaneously exhibitions provided buyers with the comfort of having high levels of supply of various goods at a single place. This archetype of sales exhibition (called "fortress exhibition" by F. Friedman²) is a closed business system of organizers and exhibitors. Closed loop contains: information, exhibitors, products, visitors, contacts, sales, return on investment (ROI).

¹ Dr Miodrag Koprivica, A.D. "Novosadski Sajam", Novi Sad, Serbia; Fakultet za pravne i poslovne studije, Novi Sad
² Friedman, F.J, White Paper on Trends of Trade Show Industry, Time&Place Strategies, Inc., New York, 2003, page 2

In order to avoid methodological confusion, defining basic terms is essential³.

The fair is a congregation of people and goods, all known in advance, defined by the time and place with a sole purpose of sales and sale facilitation through fair services. Fair is a venue of the exhibition and involves the existence of exhibition space, whether open air or closed, exhibition equipment and infrastructure. Fair exhibition is the product.

Fair enterprise is a system established and registered for the organization of the Fair exhibitions.

The main goal of the marketing department of the fair organization today is to attract and retain both exhibitors and visitors. A high satisfaction level of exhibitors and visitors is the main source of retention of the current customers and a safe way of attracting new ones. It is one of the most important tasks which face the fair organization today.

Exhibitors and visitors are a key natural resource for the fair organization, its most valuable asset and a prerequisite for the existence of business itself. Customer satisfaction is a key element in the process of acquiring and improving their loyalty. In addition, established feedback control with exhibitors and visitors is a key element in measuring and managing their satisfaction.

Customer satisfaction is legal, consumer and managerial question. Fair organizations have implicit and explicit obligations. An attempt of the organization to meet the needs of consumers would be insufficient, if contractual obligations are not met as well. From this aspect, satisfaction is perceived as meeting certain standard levels of products or services, like pricing, delivery, reliability and quality. From the consumers' point of view, the core consumer satisfaction is the satisfaction which met or exceeded consumers' expectations. The highest level of satisfaction is "customer delight", where consumers are exalted. Satisfaction of the fair exhibitors and visitors is a continuous process, which does not start or end with a fair exhibition itself, but includes all activities from the choice of a particular event, to its performance and to aftermarket fair services. Here we have three clearly defined stages:

- a stage prior to the exhibition - consumer expectations are developed with the help of advertising and other forms of information,
- sales stage - visitors and exhibitors experience exhibition events as the place of delivery of services and
- a stage after the event – where visitors and exhibitors are assessing the benefits of all provided services.

Customer satisfaction has a huge impact on the retention and attraction of new customers. Costs arising from lost consumers usually exceed the costs of efforts of improving their satisfaction. The permanent exhibition visitors and exhibitors are representing the most profitable group of customers. Their satisfaction is achieved through relatively small marketing efforts, which allows high profitability. The organizers of the fair events are forced to use sophisticated marketing approach to all segments of the market. Recognition of great value for visitors, non-visitors, exhibitors and non-exhibitors is of high importance. Equally important is the ability to create strategies that will relate to new markets of exhibitors and visitors, which would enable potential growth. Developing tactics which would provide long-term event development is also crucial. It is obvious that along with the classical and traditional methods of market segmentation and positioning the methods and techniques of the so-called vertical marketing, the organizers of the fair exhibition must also abandon traditional marketing thinking, and introduce a series of innovations and use lateral marketing techniques as stated by F. Kotler⁴.

Research and comment

The subjects of this research were eight fair events taking place in our country, in the two largest exhibition centers - Belgrade and Novi Sad.

3 Svorcan, M, Sajmovi, IŠRO privredno finansijakim vodič, Beograd 1979, page 15

4 Kotler, F.J , Lateralni marketing, Adizes, Novi Sad, 2005, page 36

This research is based on the comparative questionnaire given to groups which are relevant for each exhibition event. These are the exhibitors and visitors of the fair events.

The aim of this research is to grade performance of the fair events by examining the sense of satisfaction of all participants in the fair event.

The sense of satisfaction is a complex category, and it cannot be described by a single empirical indicator. In order for the qualitative categories to be showed, especially in the context of performance of exhibition events, this study used a specific type of questions that are presented equally to with small differences to participants of exhibition event, and then, the correlation was examined.

The research was based on a questionnaire performed on exhibition events separately, while the events were happening.

Exhibition visitors sample was formed by a random choice of the interviewers, the number of people surveyed was determined by the size of the fair event. In total, 980 visitors were given a questionnaire and 205 exhibitors were also canvassed.

Table 1. Visitors – cumulative table rating services and equipment during exhibition events⁵

The number of sanitary facilities and their organization	285	232	331	103	29
The ventilation quality	506	228	181	94	9
Hall lighting	245	211	304	146	74
Seeing all that interests me in one place	459	197	142	132	50
Being able to buy goods or services at reasonable prices	149	238	378	158	67
Having fun	129	302	329	126	84
The number of places for refreshment and (food, drink) and their organization	242	141	254	204	129
The number of places for relaxation (benches, etc.) and their organization	371	264	176	99	60
Visibility of the exhibition space	189	170	269	208	154
Information regarding exhibitors	420	293	187	63	12
Hall signage	205	263	326	128	58
Parking	487	284	181	28	–
Ticket prices	461	270	191	41	17
Hygiene maintenance	216	223	326	146	59
Fair staff kindness	159	230	298	197	65
Tickets controllers kindness	467	273	169	47	10
Personal safety during a fair event	139	191	314	199	107

In this paper, we'll respond to two sets of questions.

I - How would you grade the following services, equipment and services on the event (grades range from 1 to 5 where 1 is the lowest rating and 5 the highest rating)?

Display of cumulative tables for:

- a) Visitors;
- b) Exhibitors;

Cumulative tables are the basis for the application of analysis of variance.

⁵ Koprivica, M, The Development of strategic concept of organiyacion in the Fair Industry, Fakulty of management, Novi Sad, 2006.

Table 2. Exhibitors – cumulative table rating services and equipment during exhibition events

	1	2	3	4	5
The number of sanitary facilities and their organization	56	84	46	14	5
The ventilation quality	125	49	24	6	1
Hall lighting	40	50	55	42	18
Seeing all that interests me in one place	135	32	27	7	4
Being able to buy goods or services at reasonable prices	60	28	46	42	15
Having fun	5	53	82	53	12
The number of places for refreshment and (food, drink) and their organization	83	50	52	17	3
The number of places for relaxation (benches, etc.) and their organization	117	47	22	11	6
Visibility of the exhibition space	66	27	47	33	32
Information regarding exhibitors	115	55	28	19	7
Hall signage	6	15	117	40	27
Parking	100	38	41	18	8
Ticket prices	123	48	30	3	1
Hygiene maintenance	102	54	30	20	1
Fair staff kindness	29	41	69	49	17
Tickets controllers kindness	118	43	35	9	-
Personal safety during a fair event	153	33	18	-	-

One-way analysis of variance is used to process the data. F test is important as there are significant differences between groups of respondents (visitors and exhibitors) in the assessment of each individual service provided by a fair event.

In the visitors group, respondents singled out the parking space (18%), helpfulness and kindness of exhibitors, interior appearance (15%), and information on all exhibitors (14%) as important contributors to a well-organized exhibition event. The following chart shows a pictorial view of the visitors summarized answers.

Table 3. In your opinion, which elements should be included in a well-organized exhibition event? (You should choose five most important elements among those given and circle them)

	s1	%	s2	%	s3	%	s4	%	s5	%	s6	%	s7	%	s8	%	Tot.	%
Parking	190	17	120	18	100	13	65	16	140	23	145	19	45	15	50	25	855	18
Safety	120	10	60	8	25	3	0	0	30	5	25	3	0	0	5	3	265	6
Availability of promotional material	70	6	40	6	50	6	15	4	35	6	50	7	40	13	15	8	315	7
Kindness and helpfulness of the fair staff	40	3	75	10	10	1	0	0	10	2	15	2	0	0	0	0	150	3
Kindness and helpfulness of the exhibitors	160	14	95	13	185	24	55	14	65	11	90	12	50	17	25	12	725	15
Information on all exhibitors	225	19	115	17	115	14	60	15	25	4	125	17	90	30	45	22	685	14
Hygiene	60	5	40	6	90	11	65	16	55	9	65	9	0	0	10	5	385	8
Interior appearance	110	9	65	9	100	13	90	22	105	17	150	20	65	22	35	17	720	15
Responsiveness of the fair staff in cases of complaints	80	7	35	5	15	2	5	1	0	0	10	1	0	0	0	0	145	3
Speed of entering the fair venue	45	3	35	5	60	8	30	8	65	11	50	7	10	3	15	8	260	6
Arrangement of movements through the fair venue	50	4	20	3	50	6	15	4	70	12	25	3	0	0	0	0	230	5
Total	1150	100	700	100	800	100	400	100	600	100	750	100	300	100	200	100	4735	100

In the exhibitors group, respondents singled out helpfulness and kindness of fair staff (16%), parking and interior appearance (12%), interior appearance (15%), and responsiveness of fair staff in cases of complaints (11%) as important contributors to a well-organized exhibition event. The following chart shows a pictorial view of the exhibitors summarized answers.

Table 4. Exhibitors

	s1	%	s2	%	s3	%	s4	%	s5	%	s6	%	s7	%	s8	%	Tot.	%
Parking	35	10	15	15	30	20	10	20	15	20	15	14	0	0	5	5	125	12
Safety	40	11	10	10	5	3	0	0	10	13	5	5	10	10	20	20	100	10
Availability of promotional material	15	4	0	0	10	7	10	20	0	0	15	14	5	5	15	15	70	7
Kindness and helpfulness of the fair staff	55	16	20	20	30	20	15	30	10	13	20	19	15	16	0	0	165	16
Kindness and helpfulness of the exhibitors	45	13	10	10	15	10	5	10	0	0	10	10	15	16	0	0	100	10
Information on all exhibitors	25	7	5	5	10	7	0	0	10	13	0	0	5	5	15	15	70	7
Hygiene	30	9	10	10	10	7	0	0	0	0	20	19	10	10	0	0	80	8
Interior appearance	45	13	15	15	20	13	0	0	0	0	10	10	15	16	20	20	125	12
Responsiveness of the fair staff in cases of complaints	25	7	5	5	15	10	10	20	20	28	5	5	20	21	10	10	115	11
Arrangement of movements through the fair venue	35	10	5	5	5	3	0	0	10	13	5	5	0	0	15	15	75	7
Total	350	100	100	100	150	100	50	100	75	100	105	100	95	100	100	100	1025	100

Conclusion

On the basis of a comparative chart of all tested services of fair visitors and exhibitors, significant differences were noted in all 17 tested services. Their perception of services is different to that extent that they have significantly different experience and perception of satisfaction regarding fair events. It is virtually impossible to create a common sense of joint success at the exhibition. It is obvious that the exhibitors' sense of achievement at the fair events is not achieved as a product of quality management strategy of the organizers of fair events. Fair promotional activities, fair organization and exhibitors promotional activities have not provided sufficient number of visitors, or their quality was not at the expected level. Therefore, the effects of the fair exhibition did not reach levels exhibitors hoped to achieve by preparing and investing in their own exhibition.

Comparative analysis of obtained results from exhibitors and visitors is showing a significant difference in the attitudes towards all six questioned elements. Differences in attitudes are getting significantly smaller in relation to the management of the fair. It became quite obvious that when dissatisfied visitors found themselves at the fair venue, they have decided to rationalize and modify their own presence. Exhibitors are satisfied only with the visitors who were ensured by their own promotional activities, and obviously they were not satisfied with general visitors of the exhibition event, whose quality did not meet their business aspirations.

Expressed dissatisfaction with the organization of fair events is reflected in the rating given to promotional activities, to equipment and to fair services, to the efficiency of staff, to the speed in which the staff was responding to complaints, and especially to the cost of exhibition space. It is obvious that, in a series of the fair events, quantity and quality levels of visitors were not reached in a manner which would satisfy exhibitors and their expectations related to their trade show appearance.

References

1. Cox, S., Growing Your Event in a Rapidly Changing Business Environment, Exhibit Surveys, Inc, 2005.
2. Friedman, F.J, White Paper on Trends of Trade Show Industry, Time&Place Strategies, Inc., New York 2003.
3. Koprivica, M., Razvoj strateškog koncepta organizacija u sajamskoj industriji, Fakultet za menadžment, Novi Sad, 2006.
4. Kotler, F.J., Lateralni marketing, Adižes, Novi Sad, 2005
5. Svorcan, M., Sajmovi, IŠRO privredno finansijski vodič, Beograd 1979.

Infrastructure and Service Providing Companies Business Activities*

Dušan Kostić, Božo Drašković, Zoran Rajković¹

ABSTRACT – In general, the end of the 20th and the beginning of the 21 century is marked by the growing role of services and service organizations. The new technology development and changes in life style increase the importance of services and service organizations dependence on infrastructure development level. The impact of infrastructure is becoming more and more important for service companies development. The infrastructure-growing role is especially emphasized in service sector, because it has a great influence on scope and quality of entrance (spent factors) and exit in service making process and service organizations business activities. The research results, presented in this paper, indicate that various intensity of infrastructure impact service organizations productivity. The infrastructure impact intensity on service organizations productivity depends on many factors such as: main characteristics of services, local and regional characteristics, technical progress level, economic structure, prevailing demand etc. The modern technologies development enlarges the services dependence on infrastructure.

KEY WORDS: infrastructure, services, organization, productivity, progress, management, entrepreneurs, reforms

The significance of infrastructure

The modern economics, based on knowledge and information, created a new view of infrastructure and its impact on economic activities development. Recording, data processing, information transmission and distribution, explicit and codified knowledge development, as well as unexpressed and experienced knowledge are the main tasks of information and communication technologies and educational system. The information and communication technologies and educational institutions make an important part of current soft infrastructure. The new technologies development, globalization and ever-growing “porous” national borders increase the infrastructure importance for business activities of a modern enterprise that certainly affects the perceiving and content of quality indicators of business activities.

The infrastructure defines the ground, a basic need for performing certain activity. The infrastructure is a general term for materialized development conditions, technical systems elements for business operations promotion, and/or economic development dynamism, and a number of objects, which construction affects the space organization and living standards improvement. The infrastructure is an essential element for primary, secondary and other business activities performance including the decent life of people. At first, the infrastructure marked a number of objects that accelerated the economic development of undeveloped areas, along with railway and road lines, electric power stations, and irrigation systems. The above view of infrastructure was incomplete, so with economic activities development the integration of new elements of technical systems was carried out. The infrastructure elements are: transport (traffic network- railway tracks, roads, canals, ports etc.), energy (renewable

* This paper is a part of researching project no. 159004, financed by the Ministry of Science and Technological Development of Republic of Serbia, named: "The Integration of Serbian Economy into the EU - Planning and Financing of Regional and Rural Development and Enterprise Development Policy"

¹ Dušan Kostić, PhD, Božo Drašković, PhD, Zoran Rajković, MA, Institute of Economic Sciences, Belgrade

and un-renewable energy resources), necessary objects for public necessities (squares, public lighting, hospitals, schools etc.), telecommunications, communal infrastructure etc.

The infrastructure also encompasses the sophisticated elements of business activities, first, research and development, computer and personnel base. In relation to the country or a region, the infrastructure presents a resource such as personnel, buildings, equipment. With economic development, the term infrastructure got universal meaning for basic needs, so the economic activities for making products and/or services could be performed successfully in a specific area and at specific time. The infrastructure is connected to systems- organization, as its fundamental ground, territory- local, regional, and then military needs- this term means permanent installation.

The infrastructure separating and gradation are based on logical order of some factors impact on intensity of economic activities growth and development and priorities order in forming the urban areas, settlements, towns and regions. In theory and practice, there are different types of infrastructure: heavy and light, basic and additional; physical and commercial; enterprises and villages infrastructure, local and regional, national and international infrastructure, etc.

The difference is also, present among the infrastructure of enterprises, villages and towns, zones, regions as well as between national and international infrastructure. In literature are used terms like specific national and international infrastructure that comprise the fundamental necessities of one industrial activity indispensable for successful performance of certain industrial activities in manufacturing goods and services.

IN USA the criteria for infrastructure dividing is the importance of certain business factors, so partition is made on critical and other kind of infrastructure. The critical one is the infrastructure indispensable for business performance like: electric and energetic system, gas and petrol, telecommunications, transport, water supply system, governmental system, emergency case system, banks and finance. The critical infrastructure is of great importance and its physical distraction would stopped the country functioning. The main request, therefore is, economic and physical safety concerning energetic, communication and computer technology infrastructure. Other factors, likewise essential for successful performance, but not critical, are classified among other infrastructure.

In European Union countries the usual classification is also the one getting off from various levels, making the difference between an enterprise infrastructure, and local and regional ones. An enterprise infrastructure comprises: sole preparation, industrial zone arranging and construction of most necessary buildings, assured energy, water and sewerage network, together with transport and communication network creation. The local infrastructure is composed of human resources, cultural objects construction, social and health facilities, houses for living etc. The regional infrastructure includes the following elements: transport communication network, scientific and educational institutes organizing and decentralization from bigger cities. Passing the time, the elements of necessary infrastructure were extended on all levels, from enterprise to region, owing to new technologies requirements.

In the second half of 20th century, on ex-Yugoslavia region and other socialistic economies, the infrastructure was often divided on basic (or industrial) and social (or additional). The industrial or basic infrastructure comprised the set of technical system elements like: railway and road network with accompanying elements; ports and port facilities; airports and its facilities; electrical energy transmitting and transforming plants, gas lines, communications, melioration and technical systems. The generally accepted industrialization concept changed the mentioned elements by adding new ones that improve the life quality in rural villages and urban zones like: living spaces; water and sewage systems, health facilities and equipment, educational, cultural, entertainment, sport and recreation facilities.

The World Bank distinguishes light and heavy infrastructure. The heavy infrastructure comprises roads, transport services, industrial and potable water, waste disposal, telecommunication systems. The light infrastructure includes the elements in function of business improvement like, for example, education, researches and development, legislation reforming, business networking, consulting, access to capital and financial sources guidelines. Taking all these in account the importance of the World Bank in infrastructure global development has the practical advantages regarding other classifications.

Infrastructure influence on service enterprises productivity

It is obvious that the infrastructure designs the ambient quality wherein service organizations act. The analysis of infrastructure influence on service companies' productivity is a complex issue. Aiming to determine the correlation between infrastructure developments of determined area and service firms productivity some researches has been made on territory of the Republic of Serbia (Kosovo and Metohia excluded). The managers and entrepreneurs were questioned in 225 organizations comprising a number of service activities². Table review (Table 1) presents the way how managers and entrepreneurs evaluate the influence of a number of infrastructure selected factors on service firms' productivity.

- Managers and entrepreneurs add the greatest productivity contribution to human resources; marking them between strong and very strong influence (4.5). The qualification of labour force and disposition for further specialization are the most significant factor in service firms performance and successful survival on competitive market. The new technologies and constant modifications of the life way and style present the complex challenges in adjusting their services to new requirements.

- Telecommunications are the second ranged factor that managers and entrepreneurs assessed by very high mark – 4.33. The modern telecommunication infrastructure and constant massive application of computer technologies in the process of data classifying and transmitting present big evolutionary changes in service firms' performance. The initiated process requires the implantation of new methods and technologies which results the new challenges and possibilities in service creating, production and delivery. The electronic connections and communications facilitate constant activities carrying on higher efficiency, lower cost and smaller faults and mistakes.

- Correct and stable electric supply is prerequisite of modern society functioning; therefore, the managers highly appreciated its productivity contribution (mark 4.27). The electric energy currently is so widely used, with great varieties in the way of using and with high efficiency, that its lack or, ultimately, reduction in supply, would have significant negative economic effects. It has a great influence on our life style, on everyday human activities, illumination, heating, goods and services production... It very hard to imagine any human activity where in lower or higher extend, directly or indirectly, it is not included the consumption of electric energy. The service industries are labour intensive and separately are no massive consumers of electricity, but their dependence of electric energy is impressively high. A gear number of services could not be provided efficiently and to expected quality level in conditions of interrupted electric energy supply. The electric energy considerably affects on service industry firms productivity and the quality of their products.

- Managers and entrepreneurs evaluate that stable and quality technical and potable water supply is very important, that is it affects to great extend the performance of their firms and the average mark amount 3.87. Greatest importance to this factor give service industries in everyday process of providing services by water utilization (car-wash, shampoo, catering and tourism...) in relation to industries where the water use is not so represented (consulting, accounting, financial services, advertising...)

- Traffic infrastructure contribution to productivity is assessed on different ways and covers the range from low to high influence. The managers in average, the low contribution (from marks low to important influence) record in air traffic (2.71) and railway infrastructure (2.81). The road network is highly appreciated – the assessment is between important to very important. The highest marks are reserved to local and urban road network (3.95), then, to main road and regional road network (3.59) while the lower importance is dedicated to highways and highways accesses (2.96), indicating that great percentage of service firms is orientated to local markets.

- On average, the managers evaluate that port and river traffic (mark 2.12) and river and its banks area infrastructure (mark 2.20) influence poorly on their firms' productivity. The mentioned marks indicate that natural potentials are not exploit enough, regarding river traffic development. Nevertheless, it is evident a poor assessment of river and mountain brooks as non recovering natural resources, which

² Kostić D., (2008), Service Organizations Reginal Infrastructure and Productivity, Institute of Economic Sciences and Belgrade Banking Academy – Faculty of Banking, Insurance and Finance, Belgrade, pgg. 307-312.

could have far-reaching consequences. The practice of massive and uncontrolled waste disposal into river flows reaches serious measures.

Table 1. Evaluation of selected infrastructure factors influence on service firms productivity

R/b	Factors	Mark
1	Human Resources – Labour force qualification and disponibility to improve the skills necessary for work	4,50
2	Correct and stable electric energy supply	4,27
3	Correct and quality technical and potable water supply	3,87
4	Railway infrastructure – access to railway network, goods and passengers transport	2,65
5	Highways and their access	2,96
6	Main and regional roads	3,59
7	Road network – local and urban	3,93
8	Telecommunications – stable and mobile telephone network (network quality, connection possibilities, prices and territory coverage)	4,33
9	Gas pipe lines – infrastructure network, connection possibilities, gas use benefits, cost effects	2,83
10	Airports and air traffic – regular flights, moderate prices, goods and passengerstransport	2,49
11	Ports and river traffic – goods and passengers transport, touristic travelling	2,12
12	River and river area infrastructure – organization, accessibility	2,20
13	Utility infrastructure on site where the service is provided	3,67
14	Infrastructure cultural, recreational and sport facilities – in region and/or on site where the service is provided	3,27

Note: 1 – very low influence; 2 – low influence; 3 – significant influence; 4 - high influence; 5 – very high influence.

- Factor – urban infrastructure in the circumstances where service firms perform their activities – is highly appreciated, between important and very important (mark 3.67). The prices of utility services in Serbia are not harmonized with expenses and it is real to expect reforms in utility services infrastructure what will have influence on service industry inputs.

Macroeconomic factors

Macroeconomic factors established by government and local community affect the ambient forming wherein the service firm executes its activities. Without particular analyses the research results indicating how the managers evaluate certain macro factor are presented as follows:

Out of group of selected factors, the macroeconomic factors in Serbia have great priority – inflation, exchange rate (mark 4.26). Such a high mark partly is the result of negative experiences from the passed sanction period of economic isolation and monetary instability.

Entrepreneurs and managers highly rank fiscal policy influence and assess that tax relief in first years of activities (mark 3.98) would strongly stimulate service firm performing. The local administration – license and other documents and certificate issuing, support in business give the important support to the firms (mark 3.71).

“Greenfield investments” could positively affect the more dynamic service industry development in Serbia. The managers appraise that infrastructural and arranged site (accessing roads, railway roads, water pipe and sewage network, electricity connection, telecommunication infrastructure...) present a great support to service industry development (mark 3.31) Greenfield invest-

ments are very attractive for service companies occupying with warehousing, motorcar and agricultural mechanization servicing, sport and recreation, etc.

Competitive conditions and grey economy participation on local and regional market is also highly evaluated. It is estimated that competitiveness strongly (mark 3.70) affects productivity. General opinion is that underground economy is not restrained and its negative effects, still considerably (mark 3.11) influence on service companies business in Serbia.

Ecology factor – Environment protection, European standards respect is more and more present in businessman conscience in Serbia. It could be concluded that evaluation of ecology (marks 3.02) is highly appreciated and affects the productivity, indicating the idea of environment protection needs and necessity to respect international guidelines referring to this field.

Table 2. Evaluation of selected macroeconomic factors influence on service firms productivity

R/b	Factors	Mark
1	International position of Serbia	3,42
2	Political stability in Serbia – sanctions and embargo; population goods and services traffic restrictions; benefits for Serbian goods and services export	3,86
3	Macroeconomic stability in Serbia – inflation, foreign currency exchange rate	4,26
4	Fiscal policy – certain business stimulation, tax liberation in first years of activities	3,98
5	Local administration – license obtaining, documents and certificates issuing, bussiness support	3,71
6	„Greenfield investments“ – importance for your business, construction possibilities on site infrastructural arranged (accessing roads, electricity, water, telecommunications...)	3,31
7	Gray market	3,11
8	Competitiveness	3,70
9	Ecology – environment proteccion, European standards respecting	3,02

Note: 1 = very low influence; 5 = very high influence

All analyses suggest that macroeconomic factors are of great importance for improvement of service industries. Macroeconomic policy and infrastructure advancement direct the service performance development, and consequently, accelerate the total economic development. Furthermore, the infrastructure and services determine the quality of life in region and significantly affect the population migration processes.

Infrastructure reforms

The model of organization and regulation, and certainly, the ownership has been addressing the significance of infrastructure for economic and general development. In majority countries, the government, under the control of infrastructure network – electricity, railway, water supply, telecommunications, natural gas – tried to protect the public interest and to provide the certain level of social equality in accordance with proclaimed policy.

Till the end of 20th century the infrastructure was the sector where, by the rule, governed public companies, through which the government was trying to realize control and influence directly on key development factors. After the nineties, in developed economies, and later in transition countries, the process of infrastructure network privatization has been opened.

During the major part of twentieth century the prevailing was the concept of infrastructure network integrated vertically and horizontally and controlled by government. The classic was based on thesis that infrastructure had dominant (critical) influence on general development, and that state industry

monopolies, providing necessary service, would enable the more dynamic and steady economic development, moreover, that the control over those services could not be conceded to free market regulations. The following argument of the classical model proponents was the necessity to ensure the better infrastructure coverage of the less developed regions. Infrastructure investments were dedicated to solve and/or mitigate the problems of non - harmonized regional development. One of the most current macroeconomic policy topics of the 20th century are the problems of non - harmonized regional development.

The results of infrastructure development in government monopoly ownership alter from one to another country. Observing in general, infrastructure results are better in industry developed countries in relation to developing and transition economies. However, in industry developed countries the model of government ownership and monopoly did not manifest the same results and challenges in different sectors. The development of new technologies, knowledge and growing environment requirements, the business conditions are changed (strengthen). The employment surplus problems, low productivity and slow modernization were manifested with different intensity in electro energetic sector, railway industry, and telecommunications. High investments in construction and unequal maintenance expenses together with price level created the problems in energetic sector. State railway system did not succeed to record profitable results, demonstrating low productivity concerning the technological potential and decreasing its share in passenger and goods transportation. The state telecommunication sector was orientated towards non-economic behaviour like filling state budget, employment and decelerated modernization. The infrastructure system productivity decrease in state ownership had wider negative consequences on product and service industry, in general. In developed countries service sector indicates intensive development; therefore the delay in infrastructure development has become the top issue that started to slow down the service, as leading sector, development.

In developing and transition economies the results of infrastructure state owned monopoly concept noticed a number of problems and inconsistency. Taking in general, state owned infrastructure, monopoly organized and acting showed great deficiency like: low productivity, poor service quality, inappropriate investment, constant income lack, low level of managers' motivation, etc. The infrastructural network coverage in developing countries is in general, or by the rule, weak and unequal, while in the transition countries it is high and relatively harmonized. The transition countries in passed period developed their economies on the state socialism concept, based on intensive infrastructure development, as a form of proclaimed industrialization goals and general social equality support. Non economic criteria in its fundamental terms realized different price and cost ratio of certain infrastructure services. The characteristic example are, from one side, water and electric power prices which are, by the rule, depreciated and lower than the cost of production, while, in the other side, the telecommunication service prices are typically high, ensuring extra profit.

The infrastructure in Serbia covers a number of irrationalities and challenges. Service firms in Serbia meet the acting of two factor groups that directly impact on productivity. The first one is the consequence of unequal territorial infrastructure development, while the other one is the result of non economic infrastructure service prices. Territorial unequally developed infrastructure together with utilization prices in disharmony with real cost give incorrect cost calculation and productivity inputs of Serbian service companies. The positive experience of transition economies in infrastructure reform could contribute to faster and more efficient process of ownership, organizational and business transformation of infrastructure network in Serbia. Effective, developed and well organized infrastructure impacts considerably to service firms' productivity growth.

Current tendencies and infrastructure reforms present the important element in future trends analysis. As it was emphasized before, the infrastructure has the great impact on productivity and efficiency of service companies' performance. The companies related to service sector on long term can not rely on existing, more or less, deformed infrastructure service cost/price ratio in Serbia. The service companies in business plans elaboration, particularly investment planning, should count on economically real indicators.

Reform and privatization processes in Serbia are developing very slowly in the infrastructure sector. After the years of transition (year 2008.) the general assessment is as follows: financial sector privati-

zation is over, the greatest part of real sector is privatized, but the privatization of public sector yet has to come. The infrastructure network in Serbia keeps on being state owned and its acting is conferred to public companies. Infrastructure reforms and privatization of public companies is complex and long lasting process concerning the other countries experience.

The privatization of public companies, as integral systems related to infrastructure is particularly complex issue, because when the system is disintegrating in relatively independent parts exposed to privatization, two main critical groups is emerging. The first one is, that in privatization process enters only the profitable part, because the private capital is not interested to invest in lost creating programs. The question of other less profitable parts emerges. The other issues are more complex, owing to the fact that the activities of the company, as business system, depends more on how the subsystems influence one to another, than on how they function independently. Two essential company's, as business system, characteristics are a) every system has substantial properties which have no one of its subsystems, and b) every subsystem has the properties to loose if separated of the system.

The global atmosphere is familiar with the experiences in public companies reforming and privatization. Privatization to be successful and to provide expected results requires adequate shareholders and experienced management. The investors are receiving high yield only when the added value is in form of leadership and systematic work, experience and governing. The reforms are not completed by ownership transition, on contrary, they are very beginning, and in many cases the turning point strategy is necessary. New customers, new suppliers and subcontractors, even investors are required. New capital, access to new markets and technologies, together with new management techniques implementation appear to be good form of restructuring. Therefore, it is necessary the adequate organization structure, corporative culture and human resources as prerequisites for privatization process success. A great number of factors impact on business productivity of the companies dealing with infrastructure service providing.

The management of service firms is interested in performance of the public companies dealing with infrastructure governing and providing infrastructure services. The quality and infrastructure accessibility, besides the service public companies price to great extend impact on service firms productivity.

Instead of a conclusion

The concept and importance of infrastructure changed as time was going by. The development of new materials and technologies, particularly information, considerably modified the importance of determined infrastructure elements ranking. However, the intensification of environment preservation and protection conscious, impacts on infrastructure development. Increasing the issue and investment into infrastructure, is increasing its participation in companies business costs requirement. Infrastructure building and maintenance considerably influence on business performing efficiency and are core productivity factor of service providing enterprises. The developed countries experience focuses that service firms in Serbia in the future should pay more attention to suitability, and more over costs of infrastructure use, that is, its influence on labour productivity and business profitability.

The management of service companies faces the complex task, in dynamic changes atmosphere, to achieve constant productivity growth, and to perform successfully on competitive market. The productivity as economic principle comprises requirements and/or management ambitions to realize the determined scope of provided services and products, using lesser production factor elements. A number of factors impact on productivity, among them, the infrastructure covers the great part. Infrastructure is achieving increasing service sector business importance, including the specific necessities comprehension, consumer's requirements, which emphasizes the wide market knowledge. Therefore, the management in modern companies, defining its development strategies and policies, apply both, the *top-down*, and *bottom/up* access types.

References

- Bayliss, K., Hall D., and Lobina E., (2001), *Has Liberation Gone Too Far? A Review of the Issues in Water and Energy*, University of Greenwich, Public Service International Research Unit, London.
- Group of Authors, (2002), *Economic Development Strategy in Serbia to 2010, Vol. 1. and 2*, Ministry of Science, Technology and Development Republic of Serbia, Belgrade.
- Kostić D., (2008), *Regional Infrastructure and Service Firms Productivity*, Institute of Economic Sciences and Belgrade Banking Academy – Faculty for Banking, Insurance and Finance, Belgrade.
- Kostić D., (2006), *Service Sector Role in Serbian Economic Development*, Collection of Papers: Position and Perspectives of Serbian Economy, Belgrade Bankig Academy and Institute of Economic Sciences, Belgrade.
- Lovelock Ch., Wright L., (2001), *Principles of Service Marketing and Management*, 2. edition, Prentice Hall, New Jersey.

The Use of Factor and Cluster Analysis to Support Regional Development Policy and Adoption of Nuts Classification in Bosnia and Herzegovina

Jasmina Osmanković¹, Rabija Somun², Emina Resić³, Muamer Halilbašić⁴

ABSTRACT – *The aim of this paper is to present a new methodology for the classification of spatial-economic entities in order to support a regional development policy and the application of NUTS classification in Bosnia and Herzegovina. Such a classification may be obtained through the use of multivariate statistical methods – factor and cluster analysis, and is based on eight available economic and social indicators on the municipalities level. Factor analysis allowed us identification of a small number of socio-economic dimensions that summarise adequately the information contained in the original set of variables. Cluster analysis is then used to look for groups of towns and municipalities with similar levels of socio-economic development.*

KEY WORDS: *factor and cluster analysis, regional development policy, Bosnia and Herzegovina*

Introduction

Assessment of the regional development level ensures crucial input information for regional planning and development policy and a key criterion for allocation of various structural funds and national subsidies. In order to classify its regions into net-receivers and net-payers European Union uses a simple approach based on GDP per capita PPS (purchasing power standards) data to classify European regions into net-receivers and net-payers (NUTS-2 classification). The major weakness related to this single-criteria approach is too small emphases placed on the socio-economic distinctions and the lack of deeper analysis that takes into account smaller geographical units and a broader spectrum of indicators than merely GDP per capita (Soares et al., 2003). This approach is further challenged in last several years with the expansion of the Union and inclusion of the new members states whose NUTS regions are mostly classified as net-receivers.

There are several different approaches to regional development assessment. Most of them use some form of classification and data reduction (see Czira'ky et al., 2002 and 2003 for a review). An interesting approach has been proposed by Soares et al. (2003). This is a kind of multivariate methodological framework based on multiple indicators of regional development. A combination of exploratory factor analysis and cluster analysis is then used to identify a smaller number of development factors and to subsequently classify the Portuguese municipalities according to their regional development level.

In 2007 Bosnia and Herzegovina has signed Stabilization and Association Agreement with EU. According to this agreement BiH is obliged to adopt NUTS classification in the next five years. Unfortunately, a serious discussion related to this issue in BiH hasn't begun yet. Intention of this paper is to

¹ Jasmina Osmankovic, professor, School of Economics and Business, University of Sarajevo, e-mail address: jasmina.osmankovic@efsa.unsa.ba

² Rabija Somun, professor, School of Economics and Business, University of Sarajevo, e-mail address: rabija.somun@efsa.unsa.ba

³ Emina Resic, assistant professor, School of Economics and Business, University of Sarajevo, e-mail address: emina.resic@efsa.unsa.ba

⁴ Muamer Halilbasic, teaching assistant, School of Economics and Business, University of Sarajevo, e-mail address: muamer.halilbasic@efsa.unsa.ba

give a contribution for further discussion related to implementing NUTS classification criteria in BiH with special focus on economic homogeneity criteria of potential NUTS regions.

The paper is organized as follows. In the first section we describe the data and give necessary descriptive statistics. The statistical methodology and the results of factor and cluster analysis are presented in the second section. In the last section we derive some conclusions and recommendations for further analysis.

Data used in the analysis – indicators of socio-economic development

In order to group towns and municipalities into homogenous groups (clusters) we used eight variables – indicators of socioeconomic development available at local government units in Bosnia and Herzegovina as input variables for factor analysis. These are: gross domestic product (GDP) per capita, employment as percentage of total population, employment in agriculture and fisheries as percentage of total employment; persons employed in manufacturing as percentage of total employment; persons employed in tertiary sector as a percentage of total employment, vitality coefficient, number of tourist, number of nights. All data refer to 2007.

Since in official statistics, information on gross domestic product is available only at national level, the value of this indicators at the level of towns and municipalities we needed to estimate on the basis of data on employment structure and added value in different industries while assuming a constant labour productivity. Persons in employment as percentage of total population is the indicator that was calculated using the data on the proportion of persons in employment in total population of the observed town/municipality. As indicators of the economic structure of observed local government units we used three variables. First variable, employment in agriculture, hunting and fisheries indicates the share of primary sector in the economic structure. The variable persons employed in manufacturing as percentage of total employment indicates the importance of secondary sector in the economic structure. Third variable measures importance of tertiary sector employment. Number of tourist and tourist nights are the two indicators show the importance of tourism sector in total economy. Vitality coefficient is the variable that indicate demographic structure of population, and is calculated as the proportion of persons aged 15 or younger in total population.

Descriptive statistics for all input variables – indicators of socio-economic development of local government units – are given in the Table 1.

Table 1. Descriptive Statistics of Input Variables

	N	Minimum	Maximum	Mean	Std. Deviation
GDP per capita	126	961,00	13626,00	4147,9048	1984,34168
Employment rate	127	,0301	,3331	,142480	,0586597
Employment rate – primarily sector	130	,0000	,4540	,061819	,0828676
Employment rate – secondary sector	130	,0370	,6770	,340386	,1410709
Employment rate – tertiary sector	130	,2784	,9630	,597792	,1485190
Number of tourists	129	0	95644	3825,85	11713,322
Number of nights	130	0	187202	9524,06	29102,604
Vitality coefficient	121	,0163	,2740	,155267	,0484139
Valid N (listwise)	120				

Source: CBS data, author's calculations

The results of factor and cluster analysis

Before conducting factor analysis first it was necessary to check if the manifest variables are significantly correlated. That is necessary precondition for identifying the factors as hypothetical components of non-correlated variable, and sufficient for expressing the manifest variables. According to Kinner and Gray (2004), to include a variable in a factor analysis at least one of its correlation coefficients with other variables has to be 0.3 or higher.

Manifest variables correlation matrix we included in the analysis is given in the Table 2. As one can notice, each of the variables has at least on correlation coefficient with absolute value of 0.3 or higher. This means that all of them can be included in the further analysis.

Table 2. Correlation matrix for the manifesting variables

	GDP per capita	Employment rate	Employment rate – primarily sector	Employment rate – secondary sector	Employment rate – tertiary sector	Number of tourists	Number of nights	Vitality coefficient
GDP per capita	1,000	,669(**)	-,145	,163(*)	-,088	,506(**)	,416(**)	,000
Employment rate	,669(**)	1,000	-,121	,356(**)	-,287(**)	,458(**)	,435(**)	,232(**)
Employment rate – primarily sector	-,145	-,121	1,000	-,185(*)	-,303(**)	-,171(*)	-,169(*)	-,204(**)
Employment rate - secondary sector	,163(*)	,356(**)	-,185(*)	1,000	-,880(**)	-,136	-,146	,315(**)
Employment rate – tertiary sector	-,088	-,287(**)	-,303(**)	-,880(**)	1,000	,214(**)	,223(**)	-,207(**)
Number of tourists	,506(**)	,458(**)	-,171(*)	-,136	,214(**)	1,000	,923(**)	,022
Number of nights	,416(**)	,435(**)	-,169(*)	-,146	,223(**)	,923(**)	1,000	-,024
Vitality coefficient	,000	,232(**)	-,204(**)	,315(**)	-,207(**)	,022	-,024	1,000

(*) Significance at 5%; (**) Significance at 1%

We used principal components analysis as a method of factor analysis. This method allowed us to determine factor scores directly. To determine the number of factors we used eigenvalue criteria according to which amount of variability explained by each factor has to be higher than 1 (Table 3).

Table 3. Total variance explained

Factors	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	2,790	34,870	34,870
2	2,282	28,528	63,398
3	1,193	14,914	78,313
4	,776	9,703	88,016
5	,613	7,659	95,675
6	,279	3,482	99,157
7	,067	,843	100,000
8	,000	,000	100,000

Extraction Method: Principal Component Analysis.

Unrotated factors obtained by analyzing the principal components of 8 variables in 120 municipalities and towns in the three observed counties are shown in Table 4.

Table 4. Component matrix(a)

	Factor		
	1	2	3
GDP per capita	,769	,124	,191
Employment rate	,783	,366	,105
Employment rate – primarily sector	-,311	,058	,832
Employment rate – secondary sector	,152	,925	-,096
Employment rate – tertiary sector	,002	-,925	-,309
Number of tourists	,866	-,325	,079
Number of nights	,830	-,351	,085
Vitality coefficient	,163	,434	-,579

Extraction Method: Principal Component Analysis
3 components extracted

In the unrotated factor solution, factors are extracted according to their significance. The first factor is general and almost every variable has a high loading on this factor, with each following factor accounting for an ever smaller proportion of variance. In this solution, the first factor accounts for 34.87 percent of variable variance, the second factor accounts for 28.53 percent, and the third factor for 14.91 percent of variance. It is therefore desirable to perform factor rotation, because it allows the variance to be redistributed from the factors that are first in order to those that come later. This results in a structure that is simpler and easier to interpret without changing the total variance. In addition, in cases when factor analysis solutions are used in further analyses, the theory recommends *varimax* rotation (Johnson and Wichern, 1992). The factor loading matrix obtained through *varimax* rotation is shown in Table 5.

Table 5. Factor loadings matrix – rotated factor loadings (a)

	Component		
	1	2	3
GDP per capita	,772	,218	,007
Employment rate	,739	,442	,131
Employment rate – primarily sector	-,137	,179	,861
Employment rate – secondary sector	,019	,903	,271
Employment rate – tertiary sector	,047	-,962	,153
Number of tourists	,896	-,235	,067
Number of nights	,865	-,262	,049
Vitality coefficient	-,012	,336	-,661
Accounted variance	2,715	2,251	1,299
Proportion of accounted variance	33,933	28,140	16,240

Extraction Method: Principal Component Analysis
Rotation Method: Varimax with Kaiser Normalization
a Rotation converged in 4 iterations

For the solution to be accepted, it is necessary to examine the significance of obtained factors that represent dimensions of socio-economic development of the local government units. In our analysis three factors meet the eigenvalue criterion. They also meet the variance proportion criterion. In social

sciences, the lowest limit of acceptability is 60 percent of variance accounted by obtained factors (Johnson and Wichern, 1992). This solution accounts for 78 percent of total variance.

The first factor has a high positive loading on, and is positively correlated with GDP per capita and employment rate. This factor has also high positive factor loading on two variables related to the tourism development. This factor is therefore called “economically strong units with developed tourism”. The second factor has a high positive factor loading on manufacturing employment, and a negative factor loading on the proportion of persons employed in tertiary sector. This factor is labelled “manufacturing based”. Finally, third factor has a high positive loading on agriculture, and negative loading on vitality coefficient. This factor is labelled “rural units with relatively old population”.

For classifying local government units into groups characterized by similar features of socio-economic development non-hierarchical clustering method, the “k-means” method was used. Input variables were the the factor scores. Since the factor analysis resulted in three factors, for each local government unit three factor scores were calculated. The factor score indicates the extent to which each town/municipality has a high score on a group of characteristics that have a high loading on a relevant factor.

Manifestne varijable za klaster analizu su faktorski bodovi. Faktorski bod ukazuje na stepen u kojem svaka općina ima visoki bod na grupi obilježja koja imaju visoko opterećenje na nekom faktoru. Znači da svaka općina koja ima visoki bod na varijablama koje imaju visoka opterećenja na nekom od tri izvučena faktora, ima i visok faktorski bod na tom faktoru. Dakle, faktorski bod mjeri stepen u kojem općina posjeduje obilježja koja posmatrani faktor posjeduje. Kako je faktorska analiza rezultirala kroz tri faktora, izračunat će se tri faktorska boda. Decision about the number of cluster is made based on variance analysis (ANOVA). Number of cluster is set upfront and than significance of the model is tested.

We first started with the model with two clusters. The results of the ANOVA test for this model are presented in the Table 6.

Table 6. ANOVA test of variance (two clusters)

	Cluster		Error		F	Sig.
	Mean Square	df	Mean Square	df		
Factor 1	70,126	1	,414	118	169,308	,000
Factor 2	6,192	1	,956	118	6,477	,012
Factor 3	,457	1	1,005	118	,455	,501

Since the p-value for the third factor is higher than 0.05, we can conclude that the means between the groups (clusters) do not differ significantly different and that we can not accept the model that groups the municipalities into two clusters.

We than tested the model with three clusters. The results of ANOVA test for this model are given in the Table 7.

Table 7. ANOVA test of variance (three clusters)

	Cluster		Error		F	Sig.
	Mean Square	Df	Mean Square	df		
Factor 1	34,114	2	,434	117	78,613	,000
Factor 2	3,677	2	,954	117	3,853	,024
Factor 3	38,226	2	,364	117	105,116	,000

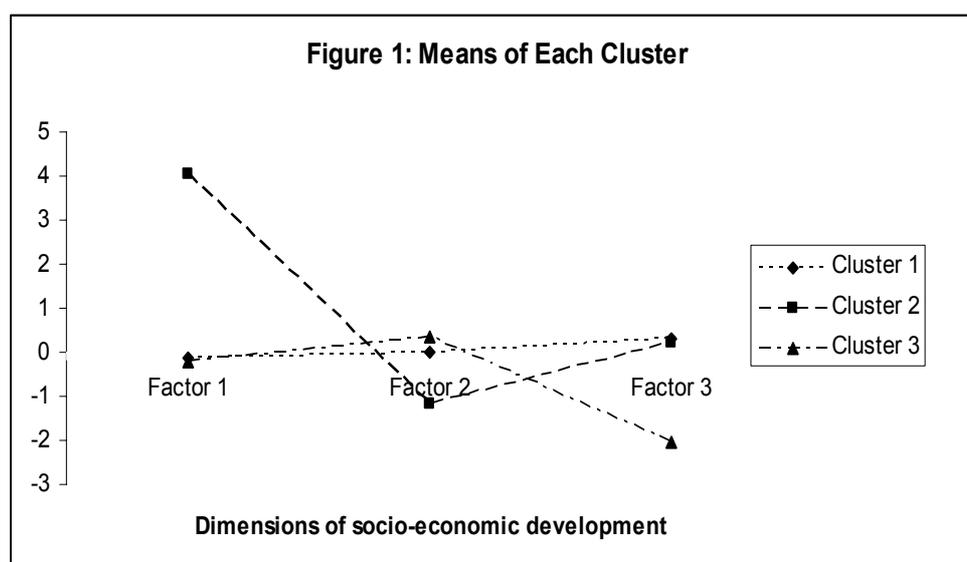
As you can notice from the table, in the case of model with three clusters empirical p-value is for all three factors lower than 0.05. This means that the means between the three proposed clusters differ significantly and that the model with three clusters is statistically justified.

Figure 1 illustrates the differences between clusters. Cluster one differs from the cluster two in relation to features of socio-economic development presented by factor 1, and from the cluster three in relation to features presented by factor 3. Cluster two and cluster three differ according to features presented by all three factors.

Cluster 1 is characterized by negative relationship to factor score 1, which presents high employment level, high per capita GDP, and tourism development. Also, there is a positive relationship to factor 3, which indicates a large share of primary sector employment and a predominance of older population. Dominant is the influence of factor 3. This group comprises as many as 73 local government units.

Cluster 2 comprises of 39 local government units. The predominant feature in this group of local government units is the one presented by factor 1 which presents high employment level, high per capita GDP, and tourism development.

The predominant feature of local government units from cluster 3 is the one presented by factor 3. The relation here is negative. Relation is also negative to factor 1. Relation to factor 2, which indicates a large share of manufacturing employment, is positive. This cluster comprises of only 8 local government units.



Conclusion

Regional development policy will produce desired and equal effects in a specific region only if it is implemented in homogenous territorial entities in regard to their social and economic development. The aim of this paper was to present a new methodology for spatial-economic entities' classification that enables a much more useful characterisation of the territory for policy-making purposes. Its major advantage is that it relies on different economic and social indicators. First, factor analysis is used to identify smaller number of socio-economic dimensions that summarise adequately the information contained in the original set of variables. After deriving factors, cluster analysis is then used to find group of towns and municipalities with similar levels of socio-economic development.

The results of our analysis can be of special importance while in the process of adopting of NUTS classification in Bosnia and Herzegovina, as a one of the obligation from the Stabilization and Association Agreement with European Union. Namely, the criteria of economic homogeneity of regions should be used in line with the other criteria such as demographic, administrative and political criteria. That is

necessary in order to adopt the best possible model of statistic regionalization on NUTS 2 and 3 level as an important foundation for future regional development strategy.

Finally, we need to stress some limitations in applying this kind of analysis in a country such as Bosnia and Herzegovina. Maybe the biggest problem is the one related to relatively small number of statistical data available on municipalities level as well as its accuracy. This is especially related to the GDP assessment on municipalities level. In the future analysis maybe it would be useful also to include some other data such as municipality's own revenue, population migration, etc.

References

- Cziraky, D., Sambt, J., Rován, J., Puljiz, P., Malekovic, S., Polić, M., (2003): Regional development assessment using parametric and non-parametric methods: A comparative analysis of Slovenia and Croatia. In: Proceedings from the 43rd European Regional Science Association (ERSA) Congress, Jyväskylä : ERSA (R-session papers).
- Cziraky, D., Puljiz, J., Jurlin, K., Malekovic, S., Polić, M., (2002): „A multivariate methodology for modelling regional development in Croatia“, *Croatian International Relations Review* 8 (25), 35–52.
- Cziracky, D., Sambt, J., Rován, J., Puljiz, J. (2005): „Regional development assessment: A structural equation approach“, *European Journal of Operational Research*, March, p. 38-55.
- Johnson, A. R. and W. D. Wichern, 1992, *Applied Multivariate Statistical Analysis*, 3rd Ed., New York, Upper Saddle River: Prentice Hall.
- Kinnear, P. and Gray, C.D. (2004): *SPSS Made Simple: Release 12.0*, Psychology Press Ltd: New York.
- Soares, O. J., M.M.L. Marques, and C.M.F. Monteiro, (2003): “A Multivariate Methodology to Uncover Regional Disparities: A Contributions to Improve EU and Governmental Decisions”, *European Journal of Operational Research*, 145, p. 121-135.
- Rašić, I. (2005): Primjena faktorske i cluster analize u grupiranju jedinica lokalne samouprave odabranih županija na temelju društveno-gospodarskih pokazatelja, magistarski rad, Zagreb.

Farm Level Income Impact of Using GM Technology

Tatjana Papić¹

ABSTRACT – Genetically modified (GM) crops are planting on significant areas since 1996. This article considers the distribution of global farm income benefits realized through growing of the first generation of GM crops. Economic research starts with proofs that GM plants can generate the gain on the farm level if the serious production problems are solving through and farmers have access to the new technologies. Independently of the differences in evaluation of values and distribution of economic benefit one third of global gain in average (37%) belonged to the innovators (gen creators and seed distributors) while two thirds (63%) belonged to farmers and (small part) consumers.

KEY WORDS: GM crops, biotechnology, TNCs, farm income, global gain

Introduction

The Green revolution, campaign which in one decade (1965 to 1975) has surrounded over 40 millions hectares, mainly of food grains (as rice and wheat) in undeveloped countries of tropic and subtropic region has changed the rate in between the vegetative and generative plant parts, by lowering crop stalk in contribution of generative parts, significantly increasing the yield of the main agricultural plants. This campaign has helped to change the agriculture into the agribusiness; higher demands for fertilizers, pesticides and mechanization can satisfy transnational corporations (TNCs) only. Intensified agricultural production induced numerous problems due to growth in monocultures and narrow genetic variability of sorts and hybrids. Genetic Engineering (GE) and placing of GM plants into the markets have chosen problem solving direction.

Although the first commercial GM crops were planted in 1994 (tomatoes), 1996 was the first year in which a significant area of crops were planted containing GM traits. The global planted area in last twelve years is approximately 690 millions hectares (Table 1). The amount of 114.3 millions of hectares, reported for the last year represents huge increase of 67 times over the modest 1.7 millions of hectares in the beginning in 1996 and express that the Gene Revolution certainly represents the quickest adopted biotechnology in the modern history of mankind.

Table 1. Global GM crops planting, 1996-2007

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Hectare (millions)	1.7	11.0	27.8	39.9	44.2	52.6	58.7	67.7	81.0	90.0	102.0	114.3

Source: James, C., 2007

In the second year the growing area under the GM food increased almost 5.5 times over the first year. In the third year the annual increase has been 150% higher compared to the second year, in the fourth year the growth was 40% higher over the third one. In the fifth, crucial year (2000) the modest growth of 10% only has been recorded, what was induced by EU moratorium on import of transgenetic plants and thus has reflected on USA farmers and their seeding plans. Afterwards, in few next years the slight increase has been recorded as rising trend of 19%, 11%, 15%, 20%, 13% and 12% in 2007, compared with 2006.

¹ Tatjana Papić, PhD of Economy, The Ministry of Economy and Regional Development, Belgrade

Yet the GMO diffusion is impressive it is very uneven because only eight countries in the World (USA, Argentina, Brazil, Canada, China, Paraguay, India and SAR), four crops (soyabean, followed by maize, cotton and canola) and only two characteristics (herbicide-tolerant and insect-resistant) account for 99% of global planting. Although the one half of all GMO areas are situated within the USA territory and 89% of global GM crops areas are laying in both Americas, the tendency of transgenic plants widening is remarkable. The growing of GMO is noticeable in India, China and SAR. Soyabean is the leading GM crop from the very beginning (51% of total GM area) and herbicide tolerance is the most important GM trait (63%).

TNCs and GMO

Transnational agrochemical companies have been transformed through buying of seed companies, (at the beginning in industrial countries and, afterwards, through buying in developing countries) into leading edge “life science” companies like Du Pont, Syngenta, Aventis (nowadays known as Bayer CropScience), Monsanto and Dow.

The Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS) was negotiated at the end of the Uruguay Round of the General Agreement on Tariffs and Trade (GATT) in 1994. The TRIPS obligated all World Trade Organization (WTO) members to protect patents of biotech discoveries (products and processes) and plant varieties and for the first time assumes legal measures in protection of intellectual property giving strong stimulus to private sector investments into the biotechnology. The result: five TNCs are in possession of 71% agricultural biotechnological patents worldwide. Monsanto is the major owner of GM soya bean, GM cotton and canola gen which is resistant to glifosat herbicide, Bayer CropScience possesses patent over all GM plants which have Bt toxin insecticide and Syngenta has the exclusive license on Golden Rice. Monsanto is the most important biotech company which created almost all crops placed into the market resistant to glifosat herbicide with Roundup Ready trade mark and the majority of insect-resistant crops (New Leaf, Bollgard, Yieldgard). Companies protect their own property binding farmers by contract on an annual level for all and each seed supply, in reference they forbid them to keep the seed and lead each contract breaker right into the court.

Economic impacts of GMO

Transgenic crops as any other technological innovation in agriculture have economic impacts to farmers, consumers and society in general. The overall economic impacts of transgenic crops will depend on a wide range of factors including, among others, the impact of the technology on agronomic practices and yields, consumers' willingness to buy foods and other products derived from transgenic crops, and regulatory requirements and associated costs. In the longer term, other factors such as industry concentration in the production and marketing of transgenic crop technology may also influence the level and distribution of economic benefits.

Those farmers who accepted the new technology at the very beginning can make the benefit due lower production cost and/or due to higher productivity while all others might be in delay, in dependence on consumers and legislative frames and measures. Otherwise, in the case that the resistance of consumers will rise up, those farmers who did not adopted new technology will be in competitive advantage. To simplify, in the case that consumers will accept GM food in general and if legal requests will not be so hard those farmers who adopted the new technology will gain the profit and vice versa. In general the consumers make economic benefit by technological innovations in agriculture due to lower prices and/or higher quality of products. In the GM crops case situation is much more complicated, for two reasons. The first, the legislative frame influence: like the potential increase of production costs and disposal of GM food costs might rise up due to obvious signing of markets and market segregation. The second, those consumers who are exclusive opponents of such technologies might suffer the severe losses in the sense of well-being if they would be forced to consume GMO or suffer the economic

losses if they would pay higher organic food just to be sure not to consume transgenetic crops and products. Thus the influence of transgenetic crops on the society is complex and dynamic concept which is hard to measure.

GM crops will be widely accepted only if they bring the economic benefit to farmers. Profitability of GM crops on the farm level, especially in the developing countries, is under the influence of numerous economic and institutional factors and different agricultural characteristics as well. Economic researches starts to express that GM crops might generate gain on the farm level if they solve the serious production problems and if the farmers might approach to new technology. These conditions are fulfilled just in few countries up to now, which took advantage of innovations in private sector from the North and which have well-developed national agricultural research systems, biosafety regulatory procedures, intellectual property rights regimes and local input markets. Countries lacking these prerequisites may be excluded from the Gene Revolution.

The existing literature on influence of transgenetic crops on economy in developing countries is very limited simply because these plants are growing just for several years in several countries in the world. The data which would cover the time longer of two, three years are hardly accessible and the majority of studies included small number of farmers. The small stratum supplied with additional factors, like the weather influence, seed quality and quality of pesticides, the pest influence and farmers' skills make the judgment of efficiency and value of economic benefit and economic consequences induced by GM plants very difficult. It might be necessary that farmers would spent several years to gather positive experience in new technology implementation (e.g. with GM cotton, insect-resistant), to use it successfully; those farmers who adopted new technology earlier might profit more than those who would be late in implementation; the increase in number of farmers those who accepted new technology might induced further decrease in cost production and decrease in market prices, although it would mean that the farmers' profit would be reduced and the consumers benefit would rise up, too. The special danger lies in fact that the majority of GM crops are controlled by several great companies. Although these companies do not appear to be extracting monopoly profits from the sales of their products, in the absence of competition and effective regulation, there is no guarantee that they will not do so in the future (FAO, 2004).

The next are the most important factors in ensuring that farmers have access to transgenic crops on favourable economic terms and under appropriate regulatory oversight include:

- sufficient national research capacity to evaluate and adapt innovations;
- active public and/or private input delivery systems;
- reliable, transparent biosafety procedures; and
- balanced intellectual property rights policies.

The main farm-level economic impacts of the transgenic crops currently being grown are the result of changes in input use and pest damage. For all herbicide-tolerant and insect-resistant crops is typical that farmers may save extra on applied chemicals and time spent for their application. Cutting the production costs it is possible to achieve higher net income on the farm level and through more effective pest and weeds control it is possible to achieve higher gains. Economic benefits in the farm depend on the new technology cost and possible income based on it, in comparison with the alternative and previous technologies. Wider analyze of economic results and distribution of GM varieties has to consider the possibility of production growth in the case that the new technology prices would go down, what, furthermore, would bring the benefit to consumers through price reduction. Purchasing of seeds and other inputs by farmers are changeable categories and consequently they change the prices especially in the case where suppliers of inputs keep the monopoly in the market. All these factors have common influence on the general economic benefit and its distribution among farmers, consumers and industry.

The GM cotton production and gain distribution

Having in mind that different kinds of farmers are involved into the GM cotton production in wide number of countries, who deal under different institutional and market conditions, analyze of this crop

production leads to certain approximations on potential gains and challenges who are in front of these countries which already plant or will plant GM crops.

Using the standard economic model Alston, J. M., Norton, G. W., Pardey, P. G., (1995), and Falck-Yepeda, J. B., Traxler, G., Nelson, R. G. (1999) concluded that the gain amount and distribution are varying through time. The study was based on economic research of GM cotton production influence to the farmers in USA, consumers, suppliers of germoplasm and foreign farmers in the period from 1996 to 1998. In the studied period American farmers increased their gain on annual level for 105 millions US\$ in average due to production cost reduction and increase in effective yield while all other foreign farmers have lost around 15 millions US\$ due to lower selling prices of the cotton in the market. Through the reduction in production cost (what led to further drop in selling cost of products) the consumers in the states and in other countries saved around 45 millions US\$ on the annual level, while the industry (mostly Monsanto and Delta&PineLand) gained approximately 80 millions US\$ by selling the technology. In the total average annual economic gains in the analyzed period (approximately 215 millions US\$) farmers from USA participated with 46%, industry with 35% and consumers with the rest of 19%. The total losses of foreign farmers have been smaller than 1% of total net gain in USA realized through growing of GM cotton.

Through production of GM cotton the higher gain has been achieved in five developing countries (Argentina, China, India, Mexico and South Africa) with lower usage of pesticide and bigger profit, in comparison to conventional production in spite of higher seed expenses (table 2).

Table 2. Performance differences between GM and conventional cotton in 5 developing countries

	Argentina	China	India	Mexico	South Africa
GAIN					
Kg/ha	531	523	699	165	237
%	33	19	80	11	65
Decrease of chemical treatment (no)	2.4		3.0	2.2	
Brutto income growth					
US\$/ha	121	262	248	59	
%	34	23		9	65
Reduction of pest control fees					
US\$/ha	18	230	30	106	26
%	47	67		77	58
Seed cost increase					
US\$/ha	87	32		58	14
%	530	95		165	89
Total expenses change					
US\$/ha	> 99	< 208		< 47	> 2
%	> 35	< 16		< 27	> 3
Profit increase					
US\$/ha	23	470		295	29965
%	31	340		12	299

Sources: Argentina (Quaim, M., Janvry, A., 2003), China (Pray, C., E., Huang, J., Hu, R., et al., 2002), India (Quaim, M., Yilberman, D., 2003), Mexico (Traxler, G., Godoy-Avila, S., Falck-Zapeda, J., et al., 2003), South Africa (Bennett, R., Morse, S., Ismael, Y., 2003)

According up-to-date transgenic cotton varieties are neutral in respect of the adaptation rate and gain per hectare, other words, the small farmers drew benefit greatly, more than great farms what is not unexpected fact, only having in mind simplification of their works. Quaim, M., Janvry, A., (2003) emphasized that the relative performance of Bt cotton is even better when it is produced within the small farms in developing countries where the pathogen infection rate is high and effective insecticides are not widely available. This conclusion is supported with fact that the greatest gain increase was in Argentina, China and India².

² Argentina (Quaim, M., Janvry, A., 2003), data based on research of 299 farmers through two major Provinces with average

Global benefit on the farm level

In the period between 1996 and 2004 GM farms increased the benefit for 19 billions US\$ in comparison to conventional (table 3) The greatest income increase within that period was done in soyabean production, 9.3 billions US\$ worth. On the second place there is the gain realized in cotton production, 6.5 billions US\$ worth, what is equal to amount of 12% cotton crops produced within these countries or equally to 5.8% of the global production of cotton. Significant increase is achieved in production of corn and canola. Combined production of two maize sorts, the first one insect-resistant and the second one herbicide-tolerant gave the gain increase of 2.5 billions US\$. The biggest income increase on the farm level has been achieved in the herbicide tolerant soya bean production in Argentina and pest resistant cotton in China and USA. Income increase has been noticed over farms in developing countries: South Africa, Paraguay, India and Mexico (table 4). Such growth was induced partially with the cutting of pest and weeds expenses (table 5).

Table 3. Global farm income benefits from growing GM crops 1996-2004: million US\$

Trait	Increase in farm income 2004	Increase in farm income 1996-2004	Farm income benefit in 2004 as % of total crop value in the countries where GM is adopted	Farm income benefit in 2004 as % of total crop value on the global level
HT *soya	2.440	9.300	5.6	4.0
HT maize	152	579	0.6	< 0.5
HT cotton	145	750	1.4	0.53
HT canola	135	713	8.3	1.34
IR** maize	415	1.913	1.4	0.8
IR cotton	1.472	5.726	10.5	5.3
Other	20	37	n/a	n/a
Total	4.779	19.018	5.3	3.1

HT * – herbicide tolerant plants

IR** – insect resistant plants

Source: Brookes, G., Barfoot, P., 2005

Table 4. Farm income benefits 1996 – 2004 selected countries: million US \$

	HT soya	HT maize	HT cotton	HT canola	IR maize	IR cotton	Total
USA	6.371	564	746	96	1.626	1.301	10.704
Argentina	9965	n/a	n/a	n/a	120	16	10.101
Brazil	829	n/a	n/a	n/a	n/a	n/a	829
Paraguay	80	n/a	n/a	n/a	n/a	n/a	80
Canada	55	16	n/a	n/a	617	119	807
SAR	0.8	0.2	0.01	n/a	44	11	56.01
China	n/a	n/a	n/a	n/a	n/a	4.160	4.160
India	n/a	n/a	n/a	n/a	n/a	124	124
Australia	n/a	n/a	n/a	n/a	n/a	70	70
Mexico	n/a	n/a	n/a	n/a	n/a	41	41

Source: Brooks, G., Barfoot, P., 2005

value aggregated in two vegetation periods – 1999/2000 and 2000/2001. China (Pray, C., E., Huang, J., Hu, R., et al., 2002) based on the analyze of all farm producer with GM cotton production, in three vegetation periods – 1999 to 2001. Analyze aggregated data derived from 337 parcels covered with GM cotton and 45 covered with traditional cotton, for the year 1999; 494 and 122 parcels in year 2000; 542 and 176 parcels in year 2001. India (Quaim, M., Yilberman, D., 2003) based upon experiments done in 7 Indian states in only one vegetation period – 2001. Analyze aggregated data derived from 157 parcels covered with GM cotton and 157 covered with traditional cotton. Mexico (Traxlaer, G., Godoy-Avila, S., Falck-Zapeda, J., et al., 2003) based on data gathered from two farms in Comarca Lagunera region in two vegetation periods – 1997 and 1998. SAR (Bennett, R., Morse, S., Ismael, Y., 2003) based on data gathered from several farms in Makhatini Flats region in three vegetation periods – 1998/99 to 1998/2000/01. Analyzed 1.283 farms in 1998/99, 441 farms in 1999/00 and 499 farms in 2000/1.

Table 5. Decrease of applied pesticides globally: 1996-2004

Trait	Decrease of applied active ingredient (millions kg)	Decrease of active ingredient, in %
HT soya	41.4	3.8
HT maize	18.0	2.5
HT cotton	24.7	14.5
HT canola	4.8	9.7
IR maize	6.3	3.7
IR cotton	77.3	14.7
Total	172.5	6.3

Source: Brooks, G., Barfoot, P., 2005

Independently of the differences in evaluation of values and distribution of economic benefit one third of global gain in average (37%) belonged to the innovators (gen creators and seed distributors) while two thirds (63%) belonged to farmers and (small part) consumers (table 6) (Demont, M., 2006). The most significant participation in total gain realized farmers who work in countries with weak legal mechanism of intellectual property protection (Argentina) and when country and provincial seed companies' monopoly on the sale of seeds prevents private and most other government enterprises from competing with them (China).

Table 6. Global gain distribution of the first generation of transgenic crops

Country	Crop	Year	Acceptance (%)	Gain (m US\$)	The gain distribution			
					Local farmers	Local innovators	Local consumers	The rest of the world
USA	IR cotton	1996	14	134	43%	47%	6%	4%
USA	IR cotton	1996	14	240	59%	26%	9%	6%
USA	IR cotton	1997	20	190	43%	44%	7%	6%
USA	IR cotton	1998	27	213	46%	43%	7%	6%
USA	IR cotton	1996-1998	20	151	22%	46%	14%	18%
USA	IR cotton	1997	20	213	29%	35%	14%	22%
USA	IR cotton	1997	20	301	39%	25%	17%	19%
USA	HT cotton	1997	11	232	45%	64%	57%	33%
USA	HT soya	1997	17	1.062	76%	10%	4^	9%
USA	HT soya	1997	17	437	29%	25%	17%	28%
USA	HT soya	1999	56	804	19%	45%	10%	26%
USA	HT soya	1997	17	308	20%	68%	5%	6%
Canada	HT canola	2000	54	209	19%	67%	14%	n/a
Argentina	HT soya	2001	90	1.230	25%	34%	0.3%	41%
Argentina	Bt cotton	2001	5	0.4	21%	79%	n/a	n/a
China	Bt cotton	1999	11	95	83	17	0	n/a
India	Bt cotton	2002	75	0.1	58	42	n/a	n/a
Mexico	Bt cotton	1998	15	2.8	84	16	n/a	n/a
S.Africa	Bt cotton	2000	75	0.1	58	42	n/a	n/a
S.Africa	Bt cotton	2001	80	1.2	67	33	0	n/a

Stated data are differ significantly because the author mentioned different studies.

Source: Demont, M., 2006

Concluding remarks

Forced development of biotechnology in current moment in noticeably manner influenced to range of other scientific and technologic processes of industrial and agricultural growth. Biotechnology becomes one of key determinative for global processes in economy, and factor of survival for human society and whole environment. At the same time it stimulates rising fear due to fact that economic motives and intention for monopoly position present basic diffusion generators of GM food (Papić, T., 2008). Evidence suggests that small farmers have had no more difficulty than larger farmers in adopting the new technologies. But, TNCs and big farmers mostly in developed countries took main economic benefit. Thus, it is more than necessary to modify current system of intellectual property protection and similar barriers of modern technology transfer for guarantee of regular benefits distribution; research and development efforts have to be directed towards developing countries and poor farmers.

References

- Alston, J.M., Norton, G.W., Pardey, P.G. (1995): Science under scarcity: principles and practice for agricultural research evaluation and priority setting. Ithaca, NY, USA, Cornell University Press.
<http://ideas.repec.org/a/eee/agecon/v15y1996i2p151-153.html>
- Bennett, R., Morse, S., Ismael, Y. (2003): The benefits of Bt cotton to small-scale producers in developing countries: the case of South Africa. Paper presented at the 7th ICABR International Conference on Public Goods and Public Policy for Agricultural Biotechnology, Ravello, Italy, 29 June to 3 July. <http://www.economia.uniroma2.it/conferenze/icabr2003/papers/papers.htm>
- Brookes, G., Barfoot, P. (2005): GM crops: the global socioeconomic and environmental impact – the first nine years 1996-2004. PG Economics Ltd, UK. pp. 8-11
<http://www.pgeconomics.co.uk/pdf/globalimpactstudyfinal.pdf>
- Demont, M. (2006): Economic impact of agriculture biotechnology in the European Union: transgenic sugar beet and maize. Dissertations de agricultura. Katholieke Universiteit Leuven. pp.22-23.
- Falck-Zepeda, J.B., Traxler, G., Nelson, R.G. (1999): Rent creation and distribution from the first three years of planting Bt cotton. ISAAA Briefs No. 14. Ithaca, USA, International Service for the Acquisition of Agri-biotech Applications.
<http://www.isaaa.org/resources/publications/briefs/14/default.html>
- FAO (2004): The State of Food Insecurity in the World 2004- monitoring progress towards the World Food Summit and Millennium Development Goals. Rome, Italy.
<ftp://ftp.fao.org/docrep/fao/007/y5650e/y5650e00.pdf> 41-56.
- James, C. (2007): Global Status of Commercialized Biotech/GM Crops, Ithaca, New York.
<http://www.isaaa.org/resources/publications/briefs/37/executivesummary/default.html>
- Papić, T (2008): Ekonomske i etičke implikacije difuzije genetski modifikovane hrane. Doktorska disertacija. Univerzitet u Novom Sadu. Ekonomski fakultet, Subotica
- Pray, C.E., Huang, J., Hu, R. i sar. (2002a): Five years of Bt cotton in China - the benefits continue. *The Plant Journal* 31(4): 423-430.
- Qaim, M., Janvry, A. (2003): Genetically modified crops, corporate pricing strategies, and farmers' adoption: the case of Bt cotton in Argentina. *American Journal of Agriculture Economics* 85(4): 814-828
- Qaim, M. Zilberman, D. (2003a): Yield effects of genetically modified crops in developing countries. *Science*, 299: 900-902.
- Traxler, G., Godoy-Avila, S., Falck-Zepeda, J. i sar. (2003): Transgenic cotton in Mexico: economic and environmental impacts.
<http://www.economia.uniroma2.it/conferenze/icabr01/nontechabsrtact2001/FalkZepeda-Traxler.htm>

The Causes of Limited Success and Mutual Differences in Post-communist Transition Among the Countries of South-Eastern Europe

Milenko Petrović¹

ABSTRACT – *Rejecting the often presented argument of the decisive importance of structural-institutional differences rooted in a long history of different geo-political and socio-economic developmental trends, this paper argues that the regional and national differences in the success of post-communist transition have been primarily caused by the different constellation of two correlated factors of a primarily political nature. The first is related to the (non)existence of a national consensus concerning the need for the change of communist political and socio-economic structures; the second concerns the (in)ability of the domestic political elite to secure the provision of necessary foreign financial and technical assistance for system change. In the latter regard, the establishment of close cooperation with the EU, especially through the association and accession processes, is of decisive importance.*

KEY WORDS: *South-Eastern Europe, success in post-communist transition, differences, causes, cooperation with the EU*

When the communist regimes started to collapse in the countries of Central and Eastern Europe during 1989, their peoples and new political leaders expressed different levels of desire to transform the inherited communist political and economic structure and become a part of West European political and economic integration. While five East Central European (ECE) and three Baltic states co-ordinated their transition from communist dictatorship to multi-party democracy and from a command economy to a market economy from the very beginning of their post-communist development to meet EU accession criteria, the first half of the 1990s in South-Eastern Europe (SEE) and non-Baltic successor states of the former Soviet Union was more a state of a permanent power struggle between partially reformed ex-communist parties and newly-formed centre to ultra-right (mainly nationalist) parties. In addition, the three largest successor states of the former Yugoslavia, as well as some post-Soviet states, were either directly exposed to or deeply involved in the horrors of civil and ethnic war.

Today, almost 20 years after the collapse of East European communism, eight East Central European and Baltic post-communist states have been recognised as countries which have successfully completed the basic tasks of their post-communist political and economic transition and hence have been awarded with European Union membership as of 1 May 2004. In spite of many gloomy predictions and expectations expressed throughout the 1990s, primarily concerning the negative consequences of the deep initial transitional economic crises, which routinely involved an enormous drop in people's living standards and a corresponding lack of support for reforms throughout Eastern Europe, these eight countries have more or less successfully completed all the major tasks of their post-communist socio-political and economic transformation. By contrast, the remaining post-communist European states still struggle in implementing transitional reforms and merely hope for a better future. However, over the last ten years and especially during the last three to four years a considerable distinction among the 'late transitionists' from South-Eastern Europe has become apparent. Bulgaria and Romania were admitted to the EU in 2007 and together with Croatia, the official candidate for EU membership

¹ Dr Milenko Petrović, Lecturer and Researcher, National Centre for Research on Europe, University of Canterbury, Christchurch, New Zealand

since 2004, they continue to speedily introduce market reforms with accompanied institutional-administrative regulations in accordance with the requirements and instructions received from the EU. On the other hand, the remaining countries of the so-called “Western Balkans” seem to show signs of serious delay by comparison. This delay is especially apparent with regards to each individual country’s progress in the process of its association with and accession to the EU.

Rejecting the argument for the decisive importance of inherited (different) socio-political and economic structures - according to which historically more developed Central European and Baltic states closely culturally linked to Western Europe have been ‘naturally’ predisposed to do better in post-communist transition than any other post-communist state (Huntington 1993, 1996, Prizel 1998, 1999) - this paper argues that the most important reasons behind the above mentioned regional and intra-regional differences in post-communist transition should be found in contrasting political choices made by people and political leaders in different regions of ex-communist Eastern Europe. The especially important choices were the ones made with regard to the necessity and conclusiveness of regime change (compare Bunce, 2000 and McFaul, 2002) and to the closely correlated decision for the establishment of close cooperation with the West in general and the EU and its member states in particular so as to receive advice and assistance for introducing and conducting post-communist reform.

Although they were to some extent grounded in already standardised yet overly generalised assumptions concerning the exaggerated importance of different levels of ethnic/national(ist) (in)tolerance and differences in economic and socio-cultural development dating back to pre-communist times, the reasons which led the peoples and their political leaders in different parts of post-communist Europe to make contrasting choices in the above regard were primarily related to the different impacts of the legacy of their more recent communist past (Petrovic, 2008). While in its first part this paper defines the necessity and decisive importance of foreign assistance for the successful post-communist reform, its second part sheds more light on the reasons for the lack of the consensus for regime change in all the countries of post-communist South-Eastern Europe in the early 1990s and their different levels of success in overcoming this lack and consequently developing closer relations with the EU.

The necessity and decisiveness of foreign support

The more than 40 year-long communist ideological and institutional “re-building” of east European societies, together with the use of an extremely inefficient non-market mechanism of economic coordination had significantly relativised pre-communist socio-cultural and economic (dis)advantages among them and similarly defined the “individual (in)capacity” of all East European countries to undergo post-communist political and economic transition (Petrovic, 2008). In the aftermath of the collapse of communist party rule during the period 1989-1991 all these countries were faced with a lack of local knowledge and more importantly a lack of resources for modelling and financing the construction of the necessary institutional frameworks for the introduction and operation of an intended multi-party democracy and market economy. Two partial exceptions - Yugoslavia and Hungary - had a better knowledge of institutions and concepts of democracy and market economy thanks to the early abandonment of the centrally-planned economy and more open relations with the Western countries but also relied on very inefficient command-type economic systems which were barely more efficient than any other communist/socialist economy and were therefore similarly unable to provide the material base for financing the costs of post-communist reform (Janos, 2001 and Petrovic, 2008; see also Table 1). The governments of all the newly democratised states were therefore forced from the very beginning of their transition attempts to rely on Western advice and even more on their financial support.

This advice and help has come more or less uniformly for all 'applicants' in the form of economic policy and structural change packages created in accordance with the neo-liberal spirit of the so-called ‘Washington consensus’, which also contained political requirements such as a basic insistence on political democratisation and respect for human and minority rights according to the desired patterns of more specific social relations and cultural priorities (Berend, 2001; Janos, 2001; Stiglitz, 1998, 2002) Although the importance of bilateral arrangements, particularly those made by the United States, should not be underestimated, the role of international organisations and financial institutions has been

crucial in defining these requirements. This becomes particularly relevant when examining the roles of the IMF, the World Bank, the EU and the European Bank for Reconstruction and Development (EBRD) – an institution which was founded with the express purpose of supporting economic transition in the post-communist countries.

Table 1. Gross Domestic Product or Income per capita in Central, South and South-Eastern Europe in 1937 and 1989 (in US dollars)

	1937 GDP (in 1990 Geary-Khamis \$)	1989 GNI (WB Atlas)
Germany	4685	20450
Austria	3156	17300
Italy	3319	15120
Greece	2769	5380
Portugal	1757	4250
Czechoslovakia	2882	3450
Hungary	2543	2620
Poland	1915	1890
Romania	1130	1730
Bulgaria	1567	2680
Yugoslavia	1273	2940

Sources: 1937 data: Maddison, 2003.

1989 data: World Bank, 1991.

Under these circumstances, transitional countries were anything but free to design and implement necessary reforms on their own terms. Therefore, the eventual choice of a ‘right or wrong’ transitional model could not have been the reason for attributing an advantage or disadvantage to any group of East European nations in completing the tasks of post-communist transition. As the basic political reforms were accomplished primarily according to Western European patterns and the individual pre-communist traditions in virtually all European ex-communist countries, including initially even those later affected by the eruption of civil/ethnic wars “with impressive ease and efficiency” (Crampton, 1997, p. 420),² the success of the “entire project” of post-communist transition has become primarily dependent on success in economic reform and the closely-related consolidation of newly founded democratic institutions.³ Apart from some differences in the ‘sequencing’ of speed and methods of conducting particular stages of reform among the individual countries (Roland, 2002), the questions of *whether and when* a country commenced substantial reforms of its economic system as a consequence of the *ability and willingness* of ruling governments to reform socio-political and economic systems in accordance with the requirements imposed by the Western ‘financiers of transition’ have in fact made the real difference among the transition states. A closer look at the economic reforms introduced throughout Eastern Europe shows that the “famous” distinction between “shock therapy” and “gradualism” seems to have been of minor importance in making a final account of a country's progress in post-communist transition. Although Hungary and Poland have respectively been used as examples for gradualism and shock therapy in implementing economic reforms, in practice each of the transitional countries have implemented some mixtures of both depending on the type or stage of reforms (Gros, Steinherr, 2004, Svejnar, 2002; Lavigne, 1999).

² These basic political reforms were primarily related to the establishment and initial functioning of the major institutions of the system of multi-party democracy: the adoption of the new democratic constitutions, constitutional acts and related laws regarding the respect of basic political freedoms, particularly the freedom of speech, press and media, the right for political associations and an equal treatment under the law of different political parties as well as the fair organisation of free multi-party elections.

³ For a more precise definition of the term of post-communist democratic ‘(institutional) consolidation’ see the introductory parts in Elster et al., 1998 and Dryzek, and Holmes, 2002. For a more detailed elaboration of the different aspects of consolidation of democratic institutions in post-communist Eastern Europe see Zielonka, J., 2001 and Pridham and Ágh, 2001.

Hence, from the very beginning the success in post-communist transition has been determined neither by a country's institutional or 'intellectual' capacity (inherited from the communist or pre-communist past) to introduce desirable reforms, nor from the 'chosen model' of (primarily economic) transition, but rather from the decisiveness of national political elite to undergo the process of reform and its ability to attract foreign support and assistance for introducing reforms. Those post-communist states who clearly and rapidly expressed their wish to join the European Union and who consequently succeeded in opening the process of accession to the EU had a particular advantage. This not only came about through the economic benefits of signing favourable trade agreements and the eligibility to obtain financial donations from a variety of EU created pre-accession and accession funds but was also due to the invaluable technical assistance and direct instructions that they received from the EU in building new institutions of democracy and a market economy on their institutional "*tabula rasa of 1989*" (Elster et al., 1998). The applicant's obligation to fully comply with the *aquis communautaire* criteria for accession, which have effectively defined the complete legal and institutional framework for necessary socio-political and economic reforms, were therefore not only of key importance for the EU in assessing a candidate's progress in the accession process but were also effectively the best possible assistance that the candidate societies, which suffered from both a lack of experience in using and knowledge in making the desired institutions, could have received for their institutional (re)building (Petrovic, 2008).⁴

The inconclusive regime change in South-Eastern Europe

In sharp contrast to the developments in the post-communist East Central European and Baltic states, the first post-communist multi-party elections held in the countries of South-Eastern Europe in the period 1990-1992 were won by non-liberal and non-reformist ex-communist or (in Croatia and Bosnia and Herzegovina) national-populist parties (Petrovic, 2008) who were not genuinely interested in the political democratisation and economic modernisation of their societies. The socio-political attitudes and preferences which led the majority of people in these countries to vote for political options quite the opposite of those chosen by their former communist counterparts in ECE and the Baltics and contrary to those preferred by their own parents and grandparents 40-50 years earlier⁵ were primarily created due to some specifics of the legacy of the 40-year long communist ideological and institutional re-building of SEE countries. The lower level of socio-economic development (or inherited ethnic tensions in the case of former Yugoslavia) could have impacted upon the creation of such a non-reformist socio-political ambience in these states at the time of the collapse of communist party rule in Eastern Europe only indirectly and exclusively in their close interrelation with the created institutional arrangements of communism.

Despite the fact that all the former communist countries in Eastern Europe founded their political and economic systems on the same ideological principles and the 'proven' Stalinist pattern developed in the USSR during the 1930s, there were also some important differences among them. These differences primarily related to the ability and strength of the ruling communist elite in each communist state to secure a political monopoly and more importantly to the readiness of the majority of people to accept and support that political monopoly. While the communist political monopoly in Poland, Hungary and Czechoslovakia had been seriously challenged and the communist system maintained on some occasions only by the use of foreign (i.e. Soviet) military intervention (Hungary 1956, Czechoslovakia 1968) or at least by a genuine threat of such intervention (Poland 1980), the communist leaders in four SEE states were able to firmly secure their rule by themselves throughout the whole period 1945(48)-1989. As a consequence, the post-1956 experience of party leadership change forced the communist leaders in the Central European countries to be more cautious and ready to compromise

⁴ For more details on the decisive importance of the cooperation with the EU, particularly the conditionality of EU accession opportunity in strengthening the abilities of the post-communist countries to cope with the transitional reforms see also Bideleux, 2001; Grabbe 2005; Pridham 2001 and 2005 and Vachudova, 2005).

⁵ None of the South-Eastern European states had democratically elected communists to power in the aftermath of the Second World War (for more specific details see Crampton, 1997).

with and between the potential domestic opposition and the “guardians of the communist orthodoxy” in Moscow, whereas the leaders of the SEE communist states had not been pressured to compromise with anyone and thus continued to “practise” the communist regimes of firm unchallenged personal dictatorships until the very end of East European communism.⁶ The lower pre-communist socio-economic base certainly played a role in helping the Balkan communist dictators to more easily persuade newly-urbanised industrial masses to be grateful only to them personally and to communism for their better living conditions as did the “anti-western” cultural-religious background of Eastern Orthodoxy (Ediger, 2005; Petrovic, 2008) in lessening the social potential for developing liberal-democratic alternatives to the communist ideological monopoly. However, neither of these structural factors would have been able to motivate people to so massively vote for non-reformist and effectively “pro-communist” political options on the first ‘post-communist’ elections in SEE countries, if their communist dictators had not been able to thoroughly and regularly cleanse any potential opposition outside and within the party by effectively using all the mechanisms of communist control of state power (Crampton, 1997), especially the round-the-clock work of secret police and all means of propaganda and censorship.

If the “lack of a transformative vanguard” (Elster et al., 1998) was the general characteristic of the transition in all ex-communist countries of Eastern Europe, then this lack was far more apparent in the countries of South-Eastern Europe rather than in Central Europe or the Baltic states. The Poles had Solidarity and the Catholic Church; the Hungarians had a reformist party leadership backed by a strong national anti-Russianism and memories of 1956; the Czechs and (to a lesser extent) Slovaks had their own memories of 1968, the dissident group Charter 77 and a strong democratic and economic record from the interwar Czechoslovak Republic. Similarly, the small nations of Slovenia and the three Baltic states - despite being parts of two larger multinational communist states with stable and politically more repressive communist regimes - had their own economic advantages and different religious backgrounds which enabled them to distance themselves from their poorer and more pro-communist compatriots and develop their own independent strategies of swift and decisive departure from communism. However, the peoples in the communist states of South-Eastern Europe had only a handful of academics, writers and artists who, when not preoccupied with the nationhood question like many others in the former Yugoslavia and its successor states, genuinely believed that the future of their countries was in the ‘western-style’ democratisation of their polities and marketisation of their economies. Later on, when anti-communist revolutions were “imported” into SEE from Central Europe, real system change was virtually stolen or “hijacked” by the suddenly ‘reformed’ and ‘democratised’ nomenklatura while protagonists of the genuine (liberal) democratisation still remained isolated and incapable of convincing the majority of the population of the need for post communist political and socio-economic transition. Furthermore the communist party leadership in the significantly divided Yugoslav constitutive republics (already by Tito’s Constitution of 1974) started to play the ‘national card’ and together with the non-communist nationalist opposition launched ethnic wars in Croatia and Bosnia and Herzegovina for “post-Yugoslav succession”.

Under these circumstances, the formal abandonment of the communist party monopoly and the introduction of multipartism did not contribute to further consolidation of initiated democratisation, the acceleration of market economic reforms or to an increased level of cooperation with the EU in any of the South-Eastern European or the Balkan states (Petrovic, 2008). The Balkan states were able to start progress on both of these “two fronts” only after real reformers and “pro-Europeans” replaced their illiberal post-communist political leaders, starting with Romania in 1996 and following with Bulgaria and Albania in 1997. However, the fact is that once started rapid progress was made in all the Balkan states (compare the improvement in EBRD and FH indicators from 1999 to 2007 given in Table 2).

⁶ The death of Yugoslav dictator Tito in 1980 did not open much more ‘free space’ for the anti-communist liberal-democratic opposition, since it had been already thoroughly subdued over 35 years of his absolute rule and therefore was either extremely marginalised or ‘absorbed’ by communist-led nationalist programmes of pseudo-democratisation and constitutional/national ‘redefinition’ at the level of Yugoslav constituent republics and Serbian provinces (see e.g. Pavkovic, 1995).

Almost simultaneously with the democratic changes of governments in the above three “non-Yugoslav” SEE states, the European Union - whose (in)action had contributed as an additional factor to the escalation of hostilities between Yugoslav ethnic groups, particularly in Bosnia in the period 1991-1995 (Cohen, 1995; Woodward, 1995) – had offered a new and ‘coherent strategy’ of ‘conditionality and gradual approach’ in offering EU assistance for the reestablishment of peaceful mutual cooperation and progress in economic reform and democratisation in the five successor states of former Yugoslavia and Albania as states of the “Western Balkans” (Petrovic, 2004; Pippin, 2004). This new ‘strategy’, which by 1999 was formulated as the so-called “Stabilisation and Association Process”, boosted post-communist reform in the countries in question (Table 2), especially after the two largest countries in the region - Croatia and Serbia (then with Montenegro) – almost simultaneously replaced their authoritarian governments of the 1990s by new pro-reformist and pro-European governments in January and October 2000.

After it had openly declared the “EU future” and potential membership perspective for all the countries of the Western Balkans on several occasions in the early 2000s (Petrovic, 2004, Pippin 2004), in June 2003 the EU adopted the “Thessaloniki Agendas”, which introduced the “European Partnership for the SAP countries” and clearly concluded that the “ultimate membership [of these countries] into the Union” was a high priority for the EU (EU Council, 2003). The positive results of these developments were obvious despite some serious internal weaknesses and challenges the (then) five Western Balkan states have had to overcome in the first half of the first decade of the new millennium.⁷ With only the partial exception of Macedonia in regard to its political stability, all the countries in the region succeeded in significantly accelerating post-communist reform processes in both political democratisation and economic marketisation.

Table 2. Political and Economic Transition in post-communist Europe

	Democracy 1999*	Democracy 2007*	Economic Transition* 1999	Economic* Trans 2007
EU-8(2004)	2.12	2.13	3.4	3.7
Romania	3.54	3.29	2.8	3.4
Bulgaria	3.58	2.89	2.8	3.5
Croatia	4.46	3.75	3.0	3.5
Macedonia FYR	3.83	3.82	2.7	3.1
Albania	4.75	3.82	2.6	3.0
Bosnia-Herz	5.42	4.04	2.0	2.7
Montenegro	5.50	3.93	1.6	2.8
Serbia	5.50	3.68	1.4	2.7
Ex-USSR 4**	4.92	5.44	2.3	2.7

* Freedom House Nations in Transit “Democracy score” (1 being the highest; 7 being the lowest), and the simple average of EBRD transition indicators (4+ or 4.3 denotes a standard and performance comparable to advanced industrial economies; 1 denotes little or no change from a “rigid centrally planned economy”).

** Belarus, Moldova, Russia and Ukraine.

Sources: Freedom House *Nations in Transit*, various years; EBRD Transition Report 1999 and 2007.

Nevertheless, the process of association with and accession to the EU has continued to progress at a significantly slower pace than was the case with ECE and the Baltic states during the 1990s. While the latter have signed their association treaties with the EU, so-called Euro Agreements just two (Poland, Hungary and Czechoslovakia) to 5-6 years (the Baltic states and Slovenia) after the start of their post-

⁷ The armed rebellion of Albanian separatists in Macedonia, the (insufficient) cooperation of Serbian and Croatian state authorities with the ICTY (International Criminal Tribunal for the Former Yugoslavia) in the Hague, the statehood status of the two (con)federations of Serbia and Montenegro and Bosnia and Herzegovina and the consequences of the assassination of the first democratic Serbian Prime Minister since the Second World War, Zoran Djindjic, in March 2003 being the most serious of them (Petrovic, 2004).

communist transition (Lavigne 1999, Mayhew, 1998), the Western Balkan states - apart from Croatia and Macedonia, which signed their Stabilisation and Association Treaties already in 2001 - did so much later.⁸ The current prospects for getting the official candidate status and opening of accession negotiations are even gloomier for them.

Problems in obtaining foreign assistance despite democratisation and “assured” EU future

The slow progress in developing contractual relations with the EU of all the Western Balkan states except Croatia⁹ during this decade means that none of the political leaderships of these countries have been successful in securing proper foreign support and assistance for reforms, despite their strong pro-reformist orientation and desire to establish closer relations with and eventual membership in the European Union. Taking into consideration that the “latest EU newcomers” Bulgaria and Romania had a similarly low level of progress in political and especially economic transition on the eve of the opening of their accession negotiations in 2000 like most of the Western Balkan states today (Table 2), it becomes clear that the main reasons for the latter’s delay in establishing closer relations with the EU is again mostly the matter of a political choice. However, the role of domestic and international factors in determining the level of cooperation between the EU and the Western Balkan states has been changed since the early 1990s. While the lack of this cooperation in the 1990s was dominantly caused by the chosen non-reformist paths of domestic political leaderships (even in times when they were not involved in fighting national/ethnic wars) in all the countries in the region, the responsibility of external factors for the slower progress in the association process and an obvious delay with the beginning of accession negotiations for most countries in the region¹⁰ is much higher today, especially after 2005.

Without denying the responsibility of national governments to do their best in meeting the EU Copenhagen accession and especially the SAP criteria regarding the regional cooperation and cooperation with the ICTY – where the contrasting examples of Croatia (positive) and Serbia (negative) were most obvious in the first half of the 2000s (Massari, 2005) – the Western Balkan states face nowadays two new obstacles on their way towards EU accession which the post-communist countries of the 2004/07 Enlargement did not have to overcome. These two obstacles, which are objectively beyond the capacity of an individual country’s government have become apparent especially during the last two to three years and are related to the declining public support in the ‘old’ EU member states for new EU enlargements and the increased political instability in the Western Balkans due to the problems and disputes in defining the statehood status of the multinational states in the region. While the first issue has appeared as a consequence of “enlargement fatigue” after the inclusion of 12 new and less-developed entrants in the EU in only three years and has resulted in the increased toughness of EU accession criteria for new applicants (Phinomenon, 2006; Emerson, 2006), the second issue has significantly lessened the ability of most governments in the region to meet these criteria by refocusing their interest and engagement away from structural reforms towards solving core national-statehood issues.

The increased toughness of the accession criteria, so far only applied to Turkey and Croatia, includes the increased number of *aquis* from 31 to 35, the introduction of the clause of the ‘open ended’ character of negotiations and the reactivation of the EU’s *absorption capacity*¹¹ criterion with a “new” tougher “tool” for negotiating the adoption and implementation of *aquis* chapters (EU Commission, 2006); it constitutes a significant additional burden on the EU ambitions of candidates. However, a

⁸ 2006 (Albania), 2007 (Montenegro) and 2008 (Serbia and Bosnia-Herzegovina).

⁹ Which has started from a considerably higher economic level, much stronger national commitment for accession into Euro-Atlantic political and economic integrations and which has also managed to secure strong EU sponsors (Massari, 2005).

¹⁰ Even for the official candidate FYR Macedonia, which has been waiting since it got membership candidate status in December 2005.

¹¹ Although it was included in the original Copenhagen accession criteria, this criterion did not play any significant role in timing the 2004/07 enlargement process.

second obstacle may appear as a much more serious problem on the way towards the ‘assured’ EU future¹² of most Western Balkan states: the prolonged internal political (in)stabilities regarding the statehood status of these states simply “do not allow” their governments to take into consideration let alone meet most of the required accession criteria. While the fragility of the ethnic peace established between the Slavic majority and Albanian minority in Macedonia by the Ohrid Agreement (Brunnbauer, 2002; Petrovic, 2004; Vankovska, 2007) and that country’s everyday political tensions are clearly reflected its inability to improve its “democracy score” over the last seven years (Table 2), the political tensions in Bosnia and Herzegovina regarding its constitutional status (Hayden, 2004; Knaus and Cox, 2004) and in Serbia regarding the status of Kosovo are even more threatening.

The final solution of the status of Kosovo (within or outside of Serbia) is particularly sensitive because of its potential impact on the internal (in)stability in the other two multiethnic countries in the region (Bardos, 2004; Eyal, 2008). The sharp differences and disputes which exist between the current democratic and pro-European Serbian political leadership and the political leaders of the EU, especially its founder member states, can therefore obstruct not only Serbia’s EU membership ambitions but can negatively impact the EU future of the other countries in the region. The sooner both sides realise that these differences and mutual misunderstandings have been primarily caused by the disastrous foreign and domestic policy of Milosevic’s regime during the 1990s (Petrovic, 2003)¹³ and are not a “logical consequence” of a “long tradition” of mutual suspicion and non-understanding, the easier and smoother will be the integration not only of Serbia but of all its Balkan neighbours into the EU. Furthermore, only then will stability and peace in the region and on the continent as a whole be fully secured.

Conclusions

Accommodated to living in a politically more repressive type of communist regime and having ‘learned’ both to be grateful to communism for the significant increase in their living standards and improvement of their ethnic status as well as adopting a stance of suspicion towards Western political and economic “anarchy”, the majority of people in the post-communist states of South-Eastern Europe were simply not convinced that liberal-democratic ‘pro-Western’ political options would have been the best choice for them in the wake of the collapse of East European communism. Instead, similarly to their counterparts in non-Baltic successor states of the USSR and in sharp contrast to those in East Central Europe and the Baltics, they elected essentially non-reformist governments. Mostly recruited from only formally reformed ex-communists and national populists, these governments were neither interested in genuine post-communist reform nor were they especially motivated to improve their countries’ relations with the West: particularly regarding the imposed criteria for receiving technical and financial assistance for political and economic transition.

Only after pro-reformist governments strongly committed to accession into the EU had finally been elected to power and after the EU had simultaneously adopted a ‘comprehensive strategy’ and Stabilisation and Association Process for the Western Balkans did enlargement leverage start to produce positive impacts in this part of post-communist Europe. However, while significantly contributing to the speeding up of economic reforms and the initial consolidation of democratic institutions in all of the countries in the region, the “comprehensive strategy” and the SAP conditional approach have not been able to eliminate political instability in the multi-national states in the region. This remains the main reason why these states stayed behind the three other late “transitionists” from the region with a firmly

¹² “The European Council reaffirms its full support for the European perspective of the Western Balkans... Recalling its conclusions of December 2006, the European Council stresses that by making solid progress in economic and political reform and by fulfilling the necessary conditions and requirements, the remaining potential candidates in the Western Balkans should achieve candidate status, according to their own merits, with EU membership as the ultimate goal.” (European Council, 2008)

¹³ Which was not legitimised or supported by the democratically expressed will of the Serbian people, particularly not in the late 1990s and the emergence of the (latest) Kosovo crisis, when this regime became extremely authoritarian and brutal.

defined statehood status (Bulgaria, Romania and Croatia) and remains major obstacle for them to overcome in the months and years to come.

In addition to the need of a full commitment and flexibility of all ethnic/national parties in the Balkans to finding a compromise solution, EU leverage is necessary in finding a longstanding solution for open statehood questions in the Balkans as much as it was necessary for helping countries in this region and in post-communist Europe as a whole to successfully cope with the challenges of their post-communist political democratisation and economic marketisation. EU enlargement leverage can overcome the challenges of instability of the weak ethnically-divided states in the Western Balkans only after adoption of a new EU 'comprehensive strategy' which would include sound proposals and rules for the solution of the statehood status of the instable multinational/ethnic states that would be unanimously adopted by all EU member states after extensive and broad discussion.

References

- Bardos, Gordon, 2004. "Containing Kosovo", *Connections*, 3 (4), 21-35.
- Berend Ivan, T., 2001. "The 'Crisis Zone' Revisited: Central and Eastern Europe in the 1990s" *East European Politics and Societies*, 15 (2), 250-268.
- Bideleux, Robert, 2001. "Europeisation and the limits to democratisation in East Central Europe" in Pridham, Geoffrey and Ágh, Attila (eds), *Prospects for democratic consolidation in East-Central Europe*, Manchester University Press, Manchester and New York
- Brunnbauer, Ulf, 2002. 'The Implementation of the Ohrid Agreement: Ethnic Macedonian Resentments', *Journal on Ethnopolitics and Minority Issues in Europe*, 2002 (1), 1-23 (available from <http://www.ecmi.de/jemie/indexauthor.html>).
- Bunce, Valerie, 2000. "Comparative Democratization: Big and Bounded Generalization", *Comparative Political Studies*, 33 (6/7), 703-734.
- Cohen, Lenard J., 1995 (2nd ed.), *Broken Bonds: Yugoslavia's Disintegration and Balkan Politics in Transition*, Westview Press, Boulder.
- Crampton, Richard. J., 1997. *Eastern Europe in the Twentieth Century and After*, Routledge, London and New York.
- Dryzek, John S. and Leslie Holmes, T., 2002. *Post-communist democratisation: political discourses across thirteen countries*, Cambridge University Press, Cambridge.
- EBRD Transition report*, London, European Bank for Reconstruction and Development, various years.
- Ediger, M., 2005. "History of an Institution as a Factor for Predicting Church Institutional behaviour: The Cases of the Catholic Church in Poland, the Orthodox Church in Romania, and the Protestant Churches in East Germany" *East European Quarterly*, 39 (3), 299-324.
- Elster Jon, Claus Offe and Ulrich Preuss, *Institutional Design in Post-communist Societies: rebuilding the ship at sea*, Cambridge, Cambridge University Press, 1998.
- Emerson, M, S. Aydin, J. De Clerck-Sachsse, G. Noutcheva, 2006. "Just what is this 'absorption capacity'", *CEPS Policy Brief*, No. 113, Centre for European Policy Studies, Brussels.
- European Commission, 2006. *Enlargement Strategy and Main Challenges 2006-2007. Including annexed special report on the EU's capacity to integrate new members* COM(2006) 649 final, Brussels, 8. 11. 2006
- EU General Affairs and External Relations Council, 2003. *The Thessaloniki agenda for the Western Balkans: Moving towards European Integration*, Council conclusions of 16 June 2003.
- European Council, 2008. *Presidency Conclusions*, Brussels, 19-20 June.
- Eyal, Jonathan, 2008. "Kosovo's Independence. Re-Writing the Balkans, the Wrong Way Around", *RUSI Journal*, Feb. 2008, 153 (1), 22-29.
- Fish, Steven, M., 1999. "The Determinants of Economic Reform in the Post-Communist World", *East European Politics and Societies*, 12 (2), 31-78.
- Freedom House, *Nations in Transit*, various years (available from: <http://www.freedomhouse.org>)
- Grabbe, Heather, 2005. *The EU's transformative power: Europeanization through conditionality in Central and Eastern Europe*, Palgrave Macmillan, New York.

- Gros, Daniel, Alfred Steinherr, 2004. *Economic Transition in Central and Eastern Europe*, (2nd, upd. Ed) Cambridge University Press, New York.
- Hayden, Robert, M., 2005. "‘Democracy’ without a Demos? The Bosnian Constitutional Experiment and the International Construction of Nonfunctioning States", *East European Politics and Societies*, 19 (2), 567-594.
- Huntington, Samuel P., 1996. *The Clash of Civilizations and the Remaking of World Order*, Simon & Schuster, New York.
- Huntington, Samuel P., 1993. "The clash of Civilizations", *Foreign Affairs*, 72 (3), 22-49.
- Hyde-Price, Adrian G. V., 1994. "Democratization in Eastern Europe. The external dimension" in G. Pridham and Tatu Vanhanen (ed.) *Democratization in Eastern Europe. Domestic and international perspectives*, Routledge, London and New York.
- Janos, Andrew, C., 2001. "From Eastern Empire to Western Hegemony: East Central Europe under two International Regimes", *East European Politics and Societies*, 15 (2), 221—249.
- Knaus, Gerald and Marcus Cox. 2004 "Bosnia and Herzegovina: Europeanisation by decree", in 'The Western Balkans: moving on', *Chaillot Paper*, No. 70, 55-68.
- Lavigne, Marie, 1999. *The Economics of Transition: From Socialist Economy to Market Economy*, St. Martin's Press, New York; 2nd ed. (first ed. 1995).
- Massari, Maurizio, 2005. "Do All Roads Lead to Brussels? Analysis of the Different Trajectories of Croatia, Serbia-Montenegro and Bosnia-Herzegovina", *Cambridge Review of International Affairs*, 18 (2), 259-273.
- Mayhew, Alan, 1998. *Recreating Europe. The European Union's Policy towards Central and Eastern Europe*, Cambridge University Press, Cambridge.
- Maddison, Angus, 2003. *The World Economy. Historical Statistics*, OECD, Paris.
- McFaul, Michael, 2002. "The Fourth Wave of Democracy and Dictatorship. Noncooperative Transitions in the Postcommunist World", *World Politics*, 54 (2), 212-244.
- Pavkovic, Aleksandar, 1995. "Intellectual Dissidence and the Serb National Question" in Aleksandar Pavković, Halyna Koscharsky, Adam Czarnota (Eds.), *Nationalism and Postcommunism: a collection of essays*, VT : Dartmouth Pub. Co, Brookfield, 121-140.
- Phinnemore, David, 2006. "Beyond 25—the changing face of EU enlargement: commitment, conditionality and the Constitutional Treaty", *Journal of Southern Europe and the Balkans*, 8 (1), 7-26.
- Petrovic, Milenko, 2003. "The European Union and the Difficult Transition in South-Eastern Europe" in Lilly, I. and Bosselman, K. (ed) *Repositioning Europe, Perspectives from New Zealand*, National Centre for Research on Europe, University of Canterbury, Christchurch, 111-133.
- Petrovic, Milenko, 2004. "How far and soon to the East? The prospects for future EU Enlargement", *Asia-Pacific Journal of EU Studies*, 2 (2), 121-136.
- Petrovic, Milenko, 2008. "The role of geography and history in determining the slower progress of post-communist transition in the Balkans", *Communist and Post-Communist Studies*, 41 (2), 123-145.
- Pridham, Geoffrey, 2005. *Designing Democracy. EU Enlargement and Regime Change in Post-Communist Europe*, Palgrave Macmillan, New York.
- Pippan, Christian, 2004. "The Rocky Road to Europe: The EU's Stabilisation and Association Process for the Western Balkans and the Principle of Conditionality", *European Foreign Affairs Review*, 9, 219-245.
- Pridham, Geoffrey, 2001. "Rethinking regime change theory and international dimension of democratisation: ten years after in East-Central Europe" in Pridham and Ágh (eds) *Prospects for democratic consolidation in East-Central Europe*, Manchester University Press, Manchester and New York.
- Pridham, Geoffrey and Ágh, Attila (Eds), 2001. *Prospects for democratic consolidation in East-Central Europe*, Manchester University Press, Manchester and New York.
- Prizel, Ilya, 1998. *National Identity and Foreign Policy Leadership in Poland, Russia and Ukraine*, Cambridge University Press, Cambridge, UK ; New York, NY .
- Prizel, Ilya, 1999. "The First Decade after the Collapse of Communism: Why Did Some Nations Succeed in their Political and Economic Transformations While Others Failed?" *SAIS Review*, 19 (2), 1-15 (available from: http://muse.jhu.edu/journals/sais_review/v019/19.2prizel.html).

- Roland, Gerard, 2002. "The Political economy of transition", *The Journal of Economic Perspectives*, 16 (1), 29-50.
- Stiglitz, J., *Globalization and its discontents* (London : Penguin, 2002).
- Stiglitz, J., *More Instruments and Broader Goals: Moving Toward the Post-Washington Consensus*, WIDER Annual Lecture, Helsinki, 1998
(available from <http://www.ucm.es/info/eid/pb/Stiglitz98wider.pdf>).
- Svejnar Jan, 2002. "Transition economies: Performance and challenges", *The Journal of Economic Perspectives*, 16 (1), 3-28.
- Vankovska Biljana, 2007. "The Role of the Ohrid Framework Agreement and the Peace Process in Macedonia", in *Regional Cooperation, Peace Enforcement, and the Role of the Treaties in the Balkans*, Stefano Bianchini, Joseph Marko, Craig Nation and Milica Uvalic (Eds.) A. Longo Editore, Ravenna.
- Vachudova, Milada Anna, 2005. *Europe Undivided. Democracy, Leverage, and Integration After Communism*, Oxford University Press, Oxford, New York.
- Woodward, Susan, L., 1995. *Balkan Tragedy. Chaos and Dissolution after the Cold War*, The Brookings Institution, Washington.
- World Bank, 1991. *World Bank Atlas of Per Capita Product and Population*, World Bank, Washington
- Zielonka, J. (Ed.), 2001. *Democratic Consolidation in Eastern Europe*. Volume 1 and 2, Oxford University Press, New York

Transitional Pains of the Serbian Industry

Ljubodrag Savić¹

ABSTRACT – *In a year's time, two decades will have passed since the start of transition of the European socialist countries. Some of them got on well, and some are still wandering through transitional labyrinths. The most successful countries joined the European Union, while the other ones are in a real danger of being perpetually suspended in a state of transitionism, in which false or inadequately efficient remedies are regularly, but belatedly applied to the country's economic condition, similarly to supplying a patient having fever with medicine.*

Although Serbia was one of the first to enter the transitional process, judging by the current situation, it seems that it will be among the last ones to overcome this painful and traumatic process. There is no doubt that significant results have been achieved in the last seven years, but if we compare transitional effects to the level of development in 1989 and to the results of some other countries in transition, conclusions can be completely different.

The industrial production of Serbia in 2007 has reached not even 50 percent of production in 1989. At the same time, in the most successful transitional countries, China and Ireland, industry takes the leading position in total economic development. The key question to be considered in this paper is whether the Serbian transition could have been (had to be) a lot more successful. Isn't the disaster of Serbian industrialization one of the reasons why our transition is not nearly as successful as the Czech Republic's for instance?

KEY WORDS: *tranzition, reindustrialization, development, industry*

Introduction

Next year, two decades will have passed since the start of transition of the former east-European socialist countries. Some of them got on well, and some are still wandering through transitional labyrinths unable to contrive adequate path due to effective overcoming the tranzitional problems. In 2004, the most successful countries within tranzition, joined the European Union, while the others are in a danger to be suspended in a tranzitionism², i.e. economy disease in which medicine is regularly but belatedly and insufficiently effective, given to the patient.

Although Serbia was one of the first to enter transitional process, judging by the current situation, it seems that she will be among the last ones to prevail this painful and traumatic process. There is no doubt that significant results have been achieved for the last seven years, first of all within GDP growth and reducing almost three digits of inflation rate to one digit and bringing inflation under control. But if we compare tranzitional effects to the level of development in 1989, and to the results of some other countries in tranzition, conclusions can be completely different. GDP in 2007, was lower for 32% than GDP in 1989 while at the same time GDP of countries within tranzitional process was bigger for 13%, 11% for countries of south-east Europe, even 51% for central European and Baltic countries regarding effected GDP in 1989.

The industrial production level of Serbia in 2007 have reached not even 50 percent of production as in 1989. At China and Ireland, industry took the leading position in total economic development. Isn't the disaster of Serbian industrialization one of the main reasons why the tranzition in our country is not nearly as successful as in the Czech Republic, where industry participation in creating of GDP is

¹ Dr Ljubodrag Savić, Faculty of Economics, University of Belgrade, Serbia

² D.Đuricin, Tranzitional way out, Business economics, 1-2/2008

higher than during the period of socialism. Does the decay of Serbian industry was consequence of chosen model of tranzition (privatization)? The key question is whether the Serbian tranzition could have been (had to be) successful in a great deal? Are the estimated transitional goals achieved after events in October and were the enormous expectations of Serbian nation accomplished?

Effects of the Serbian tranzition

It is very hard to estimate effects of the Serbian tranzition for the last seven years. Each wellmeant should admit that we all live much better than in 2001. But the question is, what is the price of effectuated results, could it be better and what does they symbolize as presumption of development in the future? Among economists, politics and citizens as well, there are some variations in evaluation. Some of them are quite contented by the accomplished results³, having in mind various devaluation of the Serbian economy and society during last decade of XX century as well as a great number of problems overtaken after transformation in October. The other one⁴, accomplished tranzitional effects estimates as very modest, emphasizes the fact that we will have to pay for errors (problems with paying back external debt). International institutions in the annual reports emphasizes that solid results were achieved (MMF)⁵, but the problem is that Serbia disburses much more than she is producing, while World bank mostly talk up positively about implemented reforms in Serbia. Official public institutions⁶, through indicating at some problems, seven year period of development, qualify as prosperous ever so.

Politician evaluates are different: if they are they in power or acts as opposing party. Opposition, underestimate accomplished tranzitional results, but it is inconceivable that some of heading politicians already being in power, expresses dissatisfaction as they didn't contributed to those results. Authorities nowadays often and slightly for all tranzitional faults accuses adjacent past. Severe past has significant influence, but the other tranzitional countries also had difficult past!? Whether there is meaning to allude on events happened in nineties?

Society estimations were also layered. By previous tranzition were satisfied, new businessman, politicians in power and part of intellectual and other elite who has experienced emancipation in a new tranzitional period (tranzitional winners). By the tranzition are deeply dissatisfied everyone who lost a job, position and public influence (tranzitional losers). Among those two categories there are common people whose feelings are mixed up. They have expected a lot, got a little, can go back and future is completely uncertain. Apparently they comprehended the tranzition little bit different. There are rules that everyone must respect, along with responsible politicians who should works in the name of nation, with capitalists having Balkan soul and with enough jobs for everyone who wants to work,... Everyone expected more help by the developed world, faster entering into Europe, drastic rupture to a recent past... Expectations were sold out, because the Europe is further than ever, the rules are not the same for everyone, corruption is scattered everywhere, and in power once again are the people who were deposed of authority in October 2000. Instead of social responsible state with equal rights for all, Serbia turns up within whirl of predator capitalism whereat rules are determined by owners of suspiciously gained equities. Nation is confused. They would like to believe that path to better life is through Europe, but by each day it is more than obvious that it is not modern highway, but however twisty and dangerous Balkans by road.

During October events, regime was disrupted and entered Serbia into sanctions, runaway inflations, wars, bombing... At the beginning of second, belated wave of tranzition, Serbia was within rank of minimally developed countries in Europe. Few days ago it was eight years since fifth October 2000. It seems that it is a quite long period and that we can objectively compound a balance of achieved results up to now. Unfortunately, there is no indicator who would be adequately reliable and representative

³ B.Begovic and others, (2005), Four years of tranzition in Serbia, CLSD, Belgrade

⁴ M.Kovacevic, Feasible Argentina's scenario of the financial break in Serbia, www.blic.rs

⁵ Republic of Serbia: Country Report No. 08/55, February 05, 2008. www.imf.org

⁶ RDB, Development report at Serbia in 2007, www.razvoj.gov.sr.yu

and who could objectively and explicitly measure achieved results. In default of unique indicators, satisfactory response could be obtained through analyzing several key indicators. Where is Serbia today?

Economy growth rate speed in Serbia, measured by the average growth rate of real GDP – for the period 2001-2007 was slightly below average growth of GDP at the countries in transition, observed as whole. Growth of our GDP was somewhat faster than growth of GDP at countries in south-east Europe, and considerably faster than GDP in central-European and Baltic countries in transition. It is logical and expectable, considering the fact that those countries overcome transitional crises in the mid of the last decade and began already thereupon to effectuate very high rates of GDP. That confirms data of comparative amount of GDP- at 2007. comparing to year 1989, that year is known as last year of pre-transitional period. Beside relatively high growing rates, Serbia still didn't attained rate of GDP as in year 1989. At the same time, rate of GDP in transitional countries group in year 2007 was higher for 13% than achieved level in year 1989. GDP in the countries of south-east Europe, where Serbia belongs also, was higher for 11%, while GDP at central European and Baltic countries in transition was higher for 51%⁷.

The most dynamic relative growth of GDP for period of eighteen years had Poland, although the other countries which were the most successful in transition had rapid and prosperous growth. Situation is partially changing if we observe last seven years. Against expectations nor at this shorter period, average growth rate of Serbian GDP wasn't the biggest. That position was reserved for very dynamic economy in Slovakia. And, the most important was, that growth rate of GDP per annum at five most successful countries in transition (except Hungary) almost had growth tendency, while GDP in Serbia has got extremely unstable growth.

The key question-does the growth of GDP could have been (had to be) higher regarding the fact that in Serbia for the last seven years under different basis (export, new indebtedness, remittance from diaspora, foreign direct investments, donations, privatization incomes), entered almost 105 billions of dollars. What will happen with growth of economy in Serbia, when some of these sources falls behind or if their generosity reduces? Due to current financial and economic crisis, offer of foreign equities will be significantly decremented while the price of its exploitation will be far more. At the countries like ours, which have been relying to foreign capital during its development, it is certain that contractions of economy activities must took place and that growth rate of GDP and employment will substantially be slow down. If this scenario occur, we could ascertain that Serbia to easily wasted the opportunity to materialize much higher growth rate of GDP, even with two digits through different choice of development strategy (industry focused on export) and through effective exploitation of available funds.

Although, statistic unemployment rate in Serbia is reducing, joblessness is still a question to be solved. According to data of National employment service⁸, by the end of August, 2008, it was 796 thousands who were looking for employment and 734 thousands were registered as unemployed. According to estimations of the Ministry of economy, nowadays there is 400 thousands in Serbia really unemployed, while others are treated as so-called unemployed. They are turning in, for record keeping due to exercising of some other rights. Those unjustified and unfounded statements are generating doubt into their credibility.

Unemployment rate, measured by methodologists of MOR amounted in 2007. year 18,4 percent, while data of the Republic development institute render unemployment rate of 29,8 %⁹. Unemployment poll rate treats every shape of working engagement as an employment, even a provisional, consisting in a few days while the polling administers. Within methodology of Republic development bureau, unemployment is measured as a percent of total number of employed and unemployed persons. Actual unemployment rate in Serbia probably is between those two values, it is a few times higher than rate of unemployment in EU, as comparing to three most successful countries in transition, where the unemployment rate is considerably under 10 percent.

⁷ EBRD Transition Report 2008

⁸ National Employment Service, Monthly statistic bulletin, 8/2008, www.nsz.sr.gov.yu

⁹ www.nsz.sr.gov.yu

Inflation rate in Serbia was fundamentally reduced for the last 7 years, but we can't ascertain that danger of exaggerated growth of a price is past. Level of inflations for the last and current year also confirms the above mentioned, and he will be for two years in a row, over 10 percent. As for the employment, in case of inflation also, choice of methodology of its measuring defines inflation rate. Notwithstanding used methodology, we have to perceive that statistic rate of inflation is quit lower than actual price growth.

Even if we accept the fact that inflation rate was adequately defined, average inflation rate in Serbia, in terms of 2001-2007 was 24,1 %¹⁰, that is a few times higher than adequate inflation rate of an average of all countries in tranzition, amounting to 6,2% for the same period. Comparing to Serbia, five the most successful countries in tranzition have the inflation rate below 10 percent.

Export volume and its movement are very good indicators of development, competitiveness level as well as level of incorporation of the country into international exchange flow of goods and services. Long-term observed, export is real source of income of foreign means of payment. Hereupon, the countries in the world guides active and supported policy and promotion of the national exportation.

Howsoever, growth rates per annum of our export are very high, total export amounting to 6,4 billions dollars in year¹¹ 2006, could be evaluated as very low. The export is for sum of 600 millions dollars higher than accomplished export in far 1990. That year, export of Czech was at approximate level, as in Serbia. In 2006, comparing to 1990, Czech export was bigger for almost 16 times, attained amount of 95 billions dollars while the Serbian export, for 16 years slightly grew up. The data of export volume per capita, purporting the fact-that performances of Serbian export are very slack. Among the countries in tranzition in 2006 the most successful was Slovenia, having 10.699 dollars exportation per capita. At the same time Serbia exported only 867 dollars per capita that is 12,3 times lower than Slovenia.

Due to double-quick liberalization of our foreign trade, reducing of tariff rate, over-valued rate of dinar, slow recovering of domestic industry, Serbian importing is growing very fast. Because of insufficient coverage of import trough effected export, deficit of external trade balance became permanent characteristic of our trade exchange with a world. In 2006, only Poland (positive amounts) has slightly bigger trade deficit than Serbia compared to the five the most successful countries in tranzition. At the same time, Czech noting significant external trade surplus, two years at a time. External trade deficit in 2006, comparing to 2001 in Serbia was increased 2,7 times and in Slovenia 2,4 times.

Czech and Hungary has significantly reduced deficit, Poland reduced slightly, while Slovakia only enlarged deficit for 20 percent. Although rate of covering imports by exports in Serbia since 2001 grows, in 2006 it was still below 50%. Coverage imports by exports was considerably lower than in 1989, (82,9%), as comparing to the five the most successful countries in tranzition (Czech 103,2%, Hungary 99,3%, Poland 94,3%, Slovakia 94,2% and Slovenia 92,3%).

Deficit of the current account of Serbia in 2001, made 2,7% of GDP, while in 2006 reached alarming 13,8 %¹². At 2006, according to data of EBRD, deficit participation of the current account into GDP of Poland was only 2,7 percent, Czech 3,2 %, Slovenia 3,6%, while in Hungary (6,5%) and Slovakia (7%) deficit of the current account was slightly expressed.

External indebtedness of Serbia, particularly for the last few years has expressive tendency of growth. At the end of 2000, amounted to 10,8 billions dollars. By concluding an agreement with creditors of Parisian and London club, our external indebtedness was reduced for 4,7 billions dollars. At the end of 2006 total external debt of Serbia reached 19,6 billions dollars, which means that Serbia from the beginning of 2001 till the end of 2006 enlarged the debt with new 13,5 billions dollars. Total debit entry of Serbia since 31 July 2008, amounted 29,8 billions dollars, and till the end of 2008 year, will probably exceed 30 billions dollars¹³, which means that Serbia was additionally indebted for almost 24 billion dollars, for eight years. Positive circumstance in otherwise unacceptable fast growth of an external

¹⁰ EBRD, Tranzition Report 2008

¹¹ Serbian export 2007, amounted to 8,8 billion dollars

¹² Current account deficit in 2007 reached 17,5 %, GDP, Public financial bulletin, 6/2008.

¹³ www.nbs.rs

indebtedness is that over 9/10 refers to the long-term debt, and that participation of public into total debt is reducing (32%).

In observed period extremely grow debt of enterprises (almost 12 times), with 1,3 billions dollars for 2001, onto 15,3 billions dollars in July 2008. External debt of Serbian banks at the same period, grow reasonable in a great deal (6,6 times), and increased off 747 millions dollars in 2001 onto 4,9 billion dollars in July 2008. Quite oddly are some explanations of Serbian officials that they are not worried by the external debt because only rapid growth is noticed within enterprises and banks. For them state is not guarantor while debt of public sector grows very slow. Particularly today, when the whole world is in a very hard financial and economic crises, after what nothing will be the same¹⁴. Plumes of liberalism overtake the efforts, for what they didn't believed to use not so ever. United States of America earmarked resources they have set aside (so far) 700 billions dollars intended for buying equities of notable banks in order to stabilize American stock exchange and regain trust into American financial and economic system. At the same time EU planned over 2 thousand billions dollars as financial aid to European banks and economy. Most of the countries decided to warrant (partially or in whole) savings deposit to citizens, dreaded of massive withdrawing money from a bank, which additionally jeopardize and impeded operating of theirs stumbled financial systems.

During 2006, Serbian external debt was 68,8% of GDP¹⁵, which is significant reduction comparing to 2001. Thereupon Serbian external debt was bigger than annual GDP (105%). Beside reduction of external debt, Serbia was considered as mid-indebted country according to those criterions. Regarding to external debt into GDP in 2006, Czech (40,9%), Poland (49,6%) and Slovakia (57,5%) were within group of reasonably indebted countries. Slovenia was at the limit (78,9%) and Hungary (92,2) in a group of high indebted countries.

External indebtedness of Serbia per capita in 2006 was 2.614 dollars, while Slovenia debited per capita 15.742 dollars, Hungary 10.337, Slovakia 5.971 and Czech 5.687. Comparative indebtedness level is observed through ratio of total external debt and annual export value. This important indicator gives an information about real potential of a country regarding servicing of interest and to regularly settling up due installments of an external debt. Considering also this indicator, relative indebtedness of Serbia declined (457% in 2001, 224% in 2006). With regard to fact that indebtedness limit amounts to 220%, Serbia according to those criteria belongs to the group of indebted countries. In five the most successful countries comparing to Serbia, coverage of the external debt by exporting is considerably providential. Slovakia is in best position, where total external debt was lower than annual export value in 2006 (70 %), with tendency of further reduction. External debt comparing to export in 2006 was higher for 50% in Czech, 33% in Poland, 20% in Hungary and only 17% in Slovenia. Therefore, those countries, according to these indicators don't have any notable difficulties regarding servicing its external debt.

Faltering of the Serbian industry

Within Serbian economy concept, second phase of transition was initialized after October changings at 2000, service sector had priority position. It is a result of chosen strategy, but also prevalent direction of foreign investments within activities of this economy sector. Since 2001, Serbia accepted dominating neoliberal concept, in which market, i.e. profit determinate which activities will be developed, in other words where planned capital goods will be directed. External investors at the most, were invested in banks in Serbia, insurance companies, in modern and great commercial lines and telecommunications. Those are very rentable activities, which made their investments to be profitable and reliable. A few new capital expenditures, went to industry sector.

About 70 billions dollars was spent on importing, and it was the biggest part of total 105 billions dollars that in Serbia entered since 2001-2007, at various grounds. That huge quantity of goods should be transported, insured, sold and financed. Those activities, beside telecommunication sector have had

¹⁴ By the end of October 2008, it was evaluated that loss connected to current crises amounting to 2.800 billion dollars

¹⁵ EBRD Tranzition Report 2008

repeatedly faster growth than growth of GDP. High import provided stable and certain state budget charging, through collection of duties, accizes and VAT (value added tax). Mainspring of Serbian economy development was enormous huge importation, „covered up“ by the strong inflow of the external means of payment. Overvalued dinar was at the function of easier fulfillment of chosen model. Such development concept was acceptable for state also, because he produced high growth rate of GDP, partially damped down unemployment and provided stable and plenteously sources of financing of the state budget.

Through expending a half of implemented GDP, state authority gained absolute power. Ministry, agencies, boards and other government legislative bodies became the best places for employment. State on perfidious way, far away of market mechanism, practically had shaped economy structure. In a great deal, market was suspended, but speaking in favor of neo liberal concept, state was sheltered with alibi in case of entrepreneur bankruptcy. Each party bear its own risk, but it is obviously that state was to someone mother and to someone stepmother.

Due to pour accumulation of home resources, this development concept particularly, depends on external capital inflow¹⁶. Economy development as mechanism of pyramidal savings, will be satisfactorily, till there is fresh inflow of foreign means of payment. Next year, due to economy crises, growth rate of GDP will be perceptibly lower. Foreign capital, through direct investment or through indebtedness will be less available and considerably expensive. Certain mollification and crisis extension for short date, probably could be provided through selling of some of the public enterprises, but it's balefully effect can't be avoided, which confirms announcement of Serbian Prime Minister, that growth of our GDP in 2009 will be only 4 percent.

Does development concept of Serbian economy could be different comparing to the most successful countries in tranzition, but also to China, Ireland and other leading developing countries, where industry has key role. In terms of 2001-2006 average growth rate of industrial production in five the most successful countries in tranzition amounted to 4,2%. It is much more comparing to modest 1,9%, that was average growth rate of industrial production in Serbia. It is impressive industrial growth of Czech, Slovakia and Poland (12,6%, 11,1% and 10,1% in 2006). In terms of 2001-2006 the most dynamic growth (7%) effectuated Czech. After initial tranzitional wandering, industry in Czech caught the step and once again became guiding economy sector, where 41,9% of the GDP was made. Very dynamic industrial production growth at the same period effectuated industry of Slovakia (5,9%) and Poland (5%) wherein one third of GDP was made into industry sector. Thanks to long-standing double-digit growth rate of industrial production in China, participation of GDP was very high in year 2005 amounted to 47,9%¹⁷. Dynamic growth of Ireland, grounds on foreign investments resulted in expressive growth of industry participation in GDP, that amounted in 2004, even 42%¹⁸.

Non acceptance of positive world's experiences which confirms well known posture that industry is leading economy activity in middle phase of economy growth, as well as inadequately development strategy and (particular), Serbian industry practically leded to collapse. At the process of privatization foreigners had bought industrial capacities (cement plant, tobacco industry, steel works in Smederevo, pharmaceutical company at Vrsac, breweries, dairies,...).

Industrial capacities, designed for extensively larger market in Yugoslavia, were affected by the sanctions of the International community who were in force for many years. They didn't have chance to survive due to period when they were crushed because of bombing in 1999 and left to unmerciful international competition since 2001. The biggest part of great industrial companies, who were foundations of development within broader domains, next year won't exist due to insolvency. For their liquidation, unemployment will grow and industry participation in Serbian GDP will be reduced.

Evidently is that consequence on inadequate treatment of industry are extremely unstable and very low, even negative annual growth rates of industrial production. Our industrialization rate speed con-

¹⁶ Lj.Savic, Serbian transition - conflict between effectuated and expected, Institutional transformations as determinant of economy growth of Serbia in 2007, Kragujevac, p.75

¹⁷ China statistical yearbook 2006

¹⁸ World development Report 2006

siderably lags behind, comparing to many countries in transition and their development, which must be reflected also on participation of industry in creating GDP, which for the last six years had expressive tendency of reduction. It is incredibly that industry contribution to creating GDP in Serbia, was significantly lower than at some other developed countries, which have entered into process of reindustrialization few decades ago.

How to go farther?

Short analysis of transition effects showed that our country considerably lags behind the most developed countries in transition. „Price“ of our development was high, and perspectives in future period was quit uncertain. The huge dependence on foreign capital, under conditions of upcoming crisis will be dead-weight to the high vulnerable economy. Particularly during that period at Serbia entered over 100 billions dollars, and also there was certain good-will and readiness of world community to facilitate and speed up connection between Serbia and democratic world, after October changes. Unfortunately, within last few years there is a great pressure of world's community (the Hague and Kosovo). It permanent evokes instability and decreasing of interest of foreign investors to invest at Serbia.

Whether within some circumstances and with available funds could have been done more? Certainly it could, but it required different development concept. Industry (and agriculture also) should have been within focus of development strategies. Through developing competitive export industry for long term, it is provided stable growth rate of GDP, employment, export and standard of living. Industry positively affected on modern development of scientific-technical progress, and multiplicatively motivates progress of other branches of industry (clusters), so as dynamic regional development. Effective industrialization attracts foreign investors. Those facts in the best way confirms developmental experience of Czech and Slovakia, which have ensured, thanks to strong industry progress, very dynamic growth of GDP and global standard of living.

Reactions of leading countries on actual financial and economic crisis shown up that at modern global conditions it is not possible to implement effective and permanently consistent progress through continually reliance on market mechanism. Our experience also indicated that exaggerated regulation by the party state, which is camouflaged by the ostensibly free acting of market, on long-term leads to serious deformation of economy structure and to decreasing of economic performances. State acting should be between these two extremes. State must be infallible factor within passing on long-term development strategy, as well as in outlining and conducting of economic and other corresponding department politics (industrial, agrarian...). State also should provide creation and effective functioning of adequate institutions, objective and effective rule of law, as well as healthy and objective competition, considering principally – common national interests.

References

- Begovic B. and others, (2005), Four years of Serbian transition, CLDS, Belgrade
China statistical yearbook 2006
Duricin D., (2008), Abandoning transition, Business economics, 1-2/2008
EBRD, Transition report 2008
International Monetary Fund (2008), Republic of Serbia: Selected Issues, Country Report No. 08/55, February 05, 2008. www.imf.org
Kovacevic M., (2008), Possible Argentinean scenario of financial breakdown of Serbia. www.blic.co.rs, 18.02.2008.
Kornai J., (2006), The great transformation of Central eastern reform, www.economics.harvard.edu
National Employment Service, Monthly statistic bulletin, 8/2008, www.nsz.sr.gov.yu
Republic Development Bureau, Serbian Progress Report in 2007, www.razvo.gov.sr.yu

Savic Lj., (2007), Collapse of the Serbian industrialization – message for the future, International Conference „Contemporary Challenges of Theory and Practice in Economics - Economic Policy and the Development of Serbia“, Faculty of economics, Belgrade

Savic Lj., (2007), Serbian transition – divergence between effectuated and expected, Scientific gathering „Institutional changes as determinant of the economy development of Serbia in 2007“, Kragujevac

World Development Report 2006

Accountancy as a Means of Strengthening Farmers' Competitiveness

Duško Šnjegota¹

ABSTRACT – *Approaching the European Union is not possible without harmonization of legal regulations in all social segments with the regulations applicable in the EU member countries. In the agricultural sector, this also implies the adoption of an acceptable methodology for collecting and processing accountancy data from individual and other agriculture managements.*

European Union has been applying the FADN system (Farm Accountancy Data Network) since 1965, as the system of collecting and processing the accountancy data in agricultural managements, the application of which is mandatory for all member countries.

Applying of the integral methodology for collecting and processing the accountancy data from agriculture managements is the obligation to be fulfilled within the process of the approaching EU, but also the important requirement without which it is not possible to pass adequate measures of the agricultural policy, the basic goals of which should be improving competitiveness of domestic farmers and increasing the overall agricultural production to a significantly higher level.

KEY WORDS: *European Union, agriculture producers, FADN methodology, accounting*

Introduction

In relation to other branches of economy, agriculture is a very specific one. Due to a lower accumulative and reproductive capability, its economic position is below the average. Besides the natural limits, its unenviable position is influenced by the ones related to a specific role of agriculture in national and world contexts.

Farming has biological and genetic character and it largely depends on the factors such as soil fertility, sort potential, seed and seedling characteristics etc. The production process and working process often do not concur (which is the result of the biological and organic character of agricultural production), the production risk is far larger compared to other production fields, the seasonal character of production often hinders normal acting of the demand and supply law in the crop market, the turnover of the funds invested in agricultural production is slower than with those in other fields of economy etc.

Domestic farming traditionally takes place in households, and individual farmers and the society in general are not interested enough in setting up an organised system of bookkeeping or accounting records in agriculture. It can be considered one of the key reasons for insufficiently developed principles and methods in accountancy theory and practice of monitoring farming activities, whose application would create the necessary informational basis for both farmers and the state in general.

However, approaching to European Union is not possible without adjusting legal regulations in all social aspects to the regulations applied in EU member countries. In agriculture, besides some other issues, it includes adopting an acceptable methodology of accountancy data collecting and processing from individual agricultural managements.

¹ Dr Duško Šnjegota, Assistant Professor at Faculty of Economics, Banja Luka, Republic of Srpska

Data collecting on agricultural production

The statistics on agricultural production are separately collected for both legal persons and their parts, and individual agricultural managements. As a rule, producers in the status of legal persons present standard financial reports to external data users, whereas data for the purpose of statistics are created and delivered in statistically adjusted reports. Data on the production in individual agricultural managements in municipalities are formed by statistic evaluators based on appropriate statistical estimations.

The official records in individual agricultural sector are utterly simplified² and boil down to the selective use of certain financial data and economic indicators for tax duties accounting. Such state of affairs is partly the result of the fact that agricultural production was, before the introduction of VAT system, a privileged branch of economy, whereas the category of the so-called 'cadastre income' is dismissed as the basis of tax accounting³.

Without appropriate and methodologically adjusted registers the state cannot either have a successful credit policy and the policy of monetary stimulations in agriculture, or successfully intervene in the agricultural market. Besides, the circle of interested users of the data on domestic agriculture and its potentials i.e. its comparative advantages and deficiencies is gradually getting bigger and in the near future the circle will include the users from EU member countries and other regional communities. Also, a much bigger interest will be shown by financial and scientific institutions, professional and counselling services in agriculture etc.

In the beginning of 2007, the voluntary registration of agricultural managements started in Republic of Srpska and its basic purpose was to facilitate the analysis, planning and implementation of agricultural policy measures, based on the data collected in the single register⁴. An agricultural management is considered a production unit where agricultural production is done by companies, agricultural cooperatives, some other legal persons (scientific, research and educational institutions: universities, institutes and schools), monasteries, churches and other organisations, as well as entrepreneurs and family agricultural managements. The public register, in which about 34,000 agricultural managements⁵ has been entered by the beginning of June 2008, includes the data on agricultural managements, their members, bases of the use of farming land, used farming tracts, agricultural sorts being produced, live-stock resources, dedicated accounts for the use of stimulating funds etc. The demands still do not exist for establishing the registers as the bases of systematic collection of accountancy data in actual agricultural managements, except in the aforementioned context of the utterly simplified and selective data for the exclusive purpose of tax collecting.

The share of agricultural business in the creation of the total mass of added value in BIH in 2006 was 8.46%⁶. The share of agricultural business in the total mass of added value in Republic of Srpska in 2007 was 15.6% (including forestry and fishing), which is by 0.8% less in relation to 2006⁷. According to the statistical data, the agricultural production in Republic of Srpska is predominantly organised within individual agricultural managements. For instance, out of the total sown farming land area during the spring sowing, 96% was sown within agricultural managements. The similar situation is in cattle breeding too. Agricultural managements own 98% of beeves, 99% of swine and 86.3% of poultry. Out of the total production of cow milk, 97.3% is produced in individual agricultural managements, as well as 81.8% of egg production etc.⁸

² Registers prescribed pursuant to the Income Law (Republic of Srpska Gazette N° 91/06, 91/07 and 128/06) and the VAT Law (BIH Gazette N° 9/05, 91/07 and 35/05).

³ As it has been the case in Republic of Srpska since 2007.

⁴ The Regulation on Agricultural Managements Registration (Republic of Srpska Gazette N° 11/07, 91/07 and 5/08)

⁵ Danicic, D.: *Agricultural Managements and Duties based on the Income Tax*. SRR RS, Banja Luka, Finrar N° 06/08, p.64.

⁶ The data provided by BIH Statistics Agency: see for more at <http://www.bhas.ba/>

⁷ The source: Republic of Srpska Statistics Institute. *The statement derived from the national accounts statistics No. XIV/1.*

⁸ <http://www.rzs.rs.ba/Statements/Agriculture/>

The Law on Agriculture⁹ establishes the counselling business within agriculture whose purpose is, among some other things, training for bookkeeping and accounting of production in agricultural managements. The authorised ministry is trusted with the establishing of the agricultural bookkeeping data system, with the purpose of monitoring the level of incomes and costs of the registered agricultural managements, evaluation of the agricultural production efficiency and analysis of agricultural measures in those agricultural managements.

In the context of the aforementioned, establishing the methodology for collecting and processing accountancy data from agricultural managements, with the purpose of creating the informational basis for the implementation of reliable agricultural and economic analyses is, obviously, not only an obligation to be necessarily fulfilled within the processes of joining EU, but also an important premise for the introduction of adequate agricultural measures aimed to increasing the competitiveness of domestic farmers and raising the overall agricultural production to a significantly higher level than it is on now.

Methodology of data collecting on agricultural production in European Union

A significant step forward has been accomplished towards the improvement of agricultural accountancy at the European Union level by the adoption of the document called FADN - Farm Accountancy Data Network. FADN is the system of collecting and processing accountancy data in agricultural managements in the EU member countries and is based on a precisely defined and unique methodology that is obligatory for all member countries¹⁰.

FADN system has been implemented since 1965. It functions on the principle of the sample including around 80,000 agricultural managements and representing the population of over 5 million agricultural managements within 25 EU member countries. After Bulgaria and Romania had joined EU, the population of agricultural managements included into FADN system was increased to around 6.4 million. The sample is designed to include all regions in EU as well as different kinds of agricultural managements within them. Therefore, FADN does not include all the agricultural managements but only those whose size fulfils the criteria of commercial agricultural managements¹¹.

The integral methodology for the classification of agricultural managements at EU level was adopted by the European Commission in 1985. The classification is conducted on the basis of their economic size and the potential annual profit. In accordance with that, the average gross earnings are defined for all lines of productions as well as the coefficients for summarising between different regions in EU. The coefficients are recalculated in particular time intervals and are in accordance with the latest triennial average.

The economic size of agricultural managements is expressed in European Size Units¹². The total average gross earnings of an agricultural management expressed in Euros (€) is divided by the ESU coefficient, which makes the economic size of an agricultural management.

For instance, an agricultural management with the total average earnings of 20,000 per annum has the economic size of 17 ESU.

The grouping of agricultural managements in accordance with their economic size is conducted as follows¹³:

⁹ "Republic of Srpska Gazette, 70/06, 20/07 and 86/07.

¹⁰ <http://europa.eu.int/comm/agriculture/rica>

¹¹ Vukoje, V., Maletic, D. (2007): *The System of Accountancy Data Collecting in Agricultural Managements in EU – FADN Member Countries*. School of Agriculture, Department of agricultural economics and rural sociology, Novi Sad, Agricultural Economics N^o 36, p. 156-163.

¹² European Size Units - ESU; 1 ESU = 1.200 €.

¹³ <http://europa.eu.int/comm/agriculture/rica>

Table 1. Agricultural managements listed according to their economic size in EU

No	Agricultural management size	ESU interval
1	Very small	< 4 ESU
2	Small	4 < 8 ESU
3	Medium small	8 < 16 ESU
4	Medium large	16 < 40 ESU
5	Large	40 < 100 ESU
6	Very large	≥ 100 ESU

In 2007, Gross Domestic Product of Republic of Srpska was 7.4 billion KM, 940 million of which was the share of agriculture in the total gross added value¹⁴. Given the share of the individual agricultural sector in the total agricultural production as well as the number of agricultural managements in Republic of Srpska¹⁵, it could be concluded that, according to EU criteria, the average individual agricultural management in Republic of Srpska would be categorized as very small.

Basic features of FADN methodology

The application of FADN methodology includes collecting several different data segments on an agricultural management¹⁶. The data are collected for the 12-month accounting year¹⁷ which is not analogous to the calendar year in some EU member countries¹⁸.

Based on the data collected, certain indicators are defined. FADN methodology provides a big number of data which are after processing, classification and systematization presented through reports created to present the average results for standard groups of agricultural managements, determined by their production specialisation, economic size, available farming land and income.

Table 2. The data collected in accordance with FADN methodology

THE REPORTED SEGMENT	THE DATA COLLECTED
A - General data on the agricultural management	Data on the agricultural management identification and classification
B - The status of the used farming land	The farming land used, rented, the farming land partly cultivated etc.
C – Manpower	Data on paid and unpaid manpower, excluding the workers hired by a work contract
D - Livestock resources	The number and value structure of livestock at the beginning and the end of the year and the average number of the livestock during the year
E -Livestock procurement and sales	Procurement and sales of the livestock owned by the farmers (the data on the procurement and sales according to the sort of the animals)
F – Costs	Costs and expenses during the accountancy year
G - The land, objects, permanent stocks and working assets	The data referring to the capital assets, stocks and working assets, including the achieved, exchanged or

¹⁴ <http://www.rzs.rs.ba/StatementsNationalAccounts/>

¹⁵ It is estimated that in 1999 the number of agricultural managements in Republic of Srpska was about 220,000.

¹⁶ <http://europa.eu.int/comm/agriculture/rca>

¹⁷ Except in the case of Great Britain where the accounting year is finished on 31 December to 30 April and France where for a small number of agricultural managements the accounting year begins in the period from 1 October to 31 December.

¹⁸ For instance, the accounting year for agricultural managements in Germany begins on 1 July of the current year and finishes on 30 June in the next year.

	otherwise acquired permanent assets owned by the agricultural management and evaluated by the price and the purchase price
H – Duties	The initial and final agricultural management's state of duties.
I – Value-added tax	The calculation of the input and output VAT including VAT payments and returns
J - Bonuses, subventions and other kinds of financial support	The financial support which the agricultural management is given from the budget (bonuses, subventions etc.) excluding those referring to the investments in the farming land, facilities and equipment
K – The production of agricultural products	The production of agricultural and animal products, livestock excluded (the quantity and value of the products)
L - Quotas and other rights	The list of the prescribed quotas and other rights for different kinds of agricultural products
M - Direct payments for agricultural products	The data used to describe ways of direct payments and the bases for them
N - Details of the procurement and sales of the livestock	The procurement and sales of the livestock by the categories (e.g. working cattle, breeding cattle etc.)

Reporting on the financial success, financial position and cash flows in agricultural managements in accordance with FADN methodology

Financial reports prepared for agricultural managements in accordance with the unique FADN methodology are as follows:

- Profit indicators (success balance)
- Balance sheet
- Cash flow indicators (cash flow balance)
- Financial indicators

Profit indicators are determined in a report which is in its form and gist analogous to the profit and loss account. This report is structured as follow¹⁹:

Table 3. Profit indicators according to FADN methodology

N°	POSITION DESCRIPTION
1	PRODUCTION INCOMES IN THE AGRICULTURAL MANAGEMENT (1.1. + 1.2. + 1.3.)
1.1.	Incomes from agricultural products (1.1.1. - 1.1.2. + 1.1.3. + 1.1.4. + 1.1.5.)
1.1.1.	Final stock balance
1.1.2.	Initial stock balance
1.1.3.	Sales
1.1.4.	Personal use
1.1.5.	Business use
1.2.	Incomes from cattle production and livestock products (1.2.1. - 1.2.2. + 1.2.3. + 1.2.4. + 1.2.5. + 1.2.6. - 1.2.7. + 1.2.8. + 1.2.9.)
1.2.1.	Final stock balance
1.2.2.	Initial stock balance

¹⁹ Adapted according to: <http://europa.eu.int/comm/agriculture/rica/annex003>

1.2.3.	Livestock products sales
1.2.4.	Livestock products used for personal needs
1.2.5.	Livestock products used in business
1.2.6.	Cattle sales
1.2.7.	Cattle procurement
1.2.8.	Cattle used for personal needs
1.2.9.	Increase in the value of cattle resources
1.3.	Incomes from other kinds of production
2	BONUSES, SUBVENTIONS AND OTHER KINDS OF FINANCIAL SUPPORT = 2.1.
2.1.	Net incomes from bonuses, subventions and other kinds of incentives, apart from those allocated for investing in the agricultural management (2.1.1. - 2.1.2.)
2.1.1.	Total financial support excluding the support allocated for investing in the agricultural management
2.1.2.	Taxes related to the aforementioned financial incentives
3	THE VAT BALANCE EXCLUDING THE VAT RELATED TO THE INVESTING IN THE AGRICULTURAL MANAGEMENT (3.1. - 3.2. + 3.3.)
3.1.	Output VAT
3.2.	Input VAT
3.3.	VAT returned by the state
4	PRODUCTION COSTS EXCLUDING COSTS FOR SALARIES, AMORTIZATION, LEASE AND INTERESTS (4.1. + 4.2.)
4.1.	Total specific costs
4.2.	Total overhead costs
5	GROSS PROFIT (1 + 2 + 3 - 4)
6	AMORTIZATION COSTS
7	NET ADDED VALUE (5 - 6)
8	SUPPORTS AND INCENTIVES TO INVESTMENTS IN THE AGRICULTURAL MANAGEMENT (8.1. - 8.2.)
8.1.	Financial support allocated for investing in the agricultural management
8.2.	VAT in investments
9	'EXTERNAL' COSTS (9.1. + 9.2. + 9.3.)
9.1.	Salaries for the workers employed
9.2.	Lease costs
9.3.	Expenditure on interests
10	THE AGRICULTURAL MANAGEMENT PROFIT (7 + 8 - 9)

Based on the profit indicators presented, the two coefficients are calculated:

Net added value per sold product unit and

Profit per working unit of the members of the agricultural management.

The form of 'Profit Indicators' report, created in accordance with the FADN methodology rules, is generally correspondent to the balance model which is known in accountancy theory and designed upon the method of the total effects incomplete costs according to the gross principle.

The data are not entered into 'Profit Indicators' report on extra disbursements and extra incomes (e.g. damages caused by natural disasters, indemnity claims paid etc.) as well as on any other 'non-agricultural' incomes and disbursements, which is considered one of big deficiencies of FADN methodology²⁰. On the other hand, keeping records on incomes and disbursements of an agricultural management in the described way does not require formation of standard business records, because it is

²⁰ Mrša, J. (2006): 'Agricultural Accountancy according to MRS 41'. Financial Acts and Practice, Fircon d.o.o., Mostar, p.12.

possible to get data on 'agricultural' incomes and disbursements on the basis of the records through purchase and sales invoices, formed for the purpose of VAT calculation.

An agricultural management balance sheet²¹ is written in accordance with FADN methodology rules, in the form of a one-dimensional review, with the following structure:

Table 4. Balance sheet according to FADN methodology

AGRICULTURAL MANAGEMENT PROPERTY
A - FIXED ASSETS
1. Farming land, perennial plantations, forests
2. Objects
3. Plants
4. Basic livestock flock (reproduction cattle etc.)
Total fixed assets of the agricultural management
B - CURRENT ASSETS
4. Livestock (apart from the basic flock)
5. Farming products stock
6. Other current property
Total current assets of the agricultural management (4 + 5 + 6)
C - TOTAL AGRICULTURAL MANAGEMENT PROPERTY (A + B)
THE SOURCES OF THE AGRICULTURAL MANAGEMENT ASSETS
7. Long-term and mid-term loans
8. Short-term loans and other short-term obligations
D - TOTAL AGRICULTURAL MANAGEMENT OBLIGATIONS (7 + 8)
E - OWNER'S CAPITAL FUND – according to the current value (C – D)

Evaluation of the position of non-monetary property included into the balance sheet of an agricultural management is conducted according to the market values, which is sometimes correspondent to the accountancy concept of the current cost – the replacement cost (e.g. when evaluating equipment, objects etc.), sometimes to the concept of (predominant) selling value (e.g. when evaluating livestock and other biological property), and sometimes the modified market value concept (e.g. when evaluating farming land, which is estimated according to the market value, with the costs of investing into farming land deducted)²².

According to the FADN methodology rules, *cash flow indicators* (cash flow balance) are presented in a report which is mostly compliant to the requirements contained in MRS 7 framework, although certain modifications are necessary. Firstly, this report does not include cash flows from 'non-agricultural' activities conducted in an agricultural management, regardless of whether they are common or not. At the same time, cash flows related to agricultural activity of the management are quantified by the combination of direct and indirect methods.

The adjusted form of cash flow balances, composed according to FADN methodology can be presented in the following way²³:

²¹ <http://europa.eu.int/comm/agriculture/rica/annex003>

²² Mrša, J. (2006): the same, p.10.

²³ <http://europa.eu.int/comm/agriculture/rica/annex003>

Table 5. Cash flow balance in accordance with FADN methodology

No.	POSITION DESCRIPTION
1	CASH FLOWS IN AGRICULTURAL ACTIVITIES
1.1.	Inflows from selling farming products, livestock and other products
1.2.	Paid costs and specific costs
1.3.	Overhead costs paid
1.4.	External costs paid
1.5.	Inflows from livestock selling
1.6.	Outflows for livestock purchase
2	NET CASH FLOW IN AGRICULTURAL ACTIVITIES (1.1 - 1.2 - 1.3. - 1.4. + 1.5. - 1.6.)
3	BONUSES AND SUBVENTIONS USED AND OTHER KINDS OF AID (amount after taxing)
4	USED STIMULATIONS FOR INVESTMENTS IN THE AGRICULTURAL MANAGEMENT (the after-tax amount)
5	CASH FLOW 1 (2 + 3 + 4)
6	THE EFFECT OF CHANGE OF FINAL DUTIES BALANCE IN RELATION TO INITIAL DUTIES BALANCES (6.1. - 6.2.)
6.1.	Duties balance in the end of accounting year
6.2.	Duties balance in the beginning of accounting year
7	NET CASH FLOW FROM TRANSACTIONS WITH AGRICULTURAL MANAGEMENT PERMANENT ASSETS (7.1. - 7.2.)
7.1.	Inflows from permanent assets sale
7.2.	Outflows assigned for investments on the agricultural management
8	CASH FLOW 2 (5 ± 6 ± 7)

Based on the data collected according to FADN methodology the following *financial indicators* are calculated²⁴:

- change in the net assets value (the difference between initial and final balance of the net agricultural management assets)
- the average capital of the agricultural management (capital in the beginning of the year + capital in the end of the year, divided by 2) and
- gross and net investments in the agricultural management (the difference between these two is the amortization costs included into the agricultural management profit and loss account for the specific accounting year)

Harmonization of the agricultural accountancy regulations with EU requirements

Harmonization of the domestic accountancy regulations referring to agricultural production with the FADN methodology requirements is relatively easy to be done in the area applicable to business records and informing by agricultural companies and agricultural cooperatives. This is due to the fact that those legal persons, apart from the standard accountancy principles which are the basis of double bookkeeping, can also apply MRS 41 – Agriculture and other relevant MRS/MSFI's (MRS 2, MRS 16 etc.) whose regulations regarding estimation and balancing of financial reports elements presented by legal persons involved in agricultural production do not necessarily differ from the regulations FADN methodology is based on. For individual agricultural managements it is necessary to establish a complete new accountancy methodology which could be based on an adequate modification of basic, but also double bookkeeping.

Accountancy regulations contained in FADN methodology are sometimes identical to, and sometimes different from the regulations contained in the provisions relevant to MSFI/MRS, which is visible in the following table²⁵:

²⁴ <http://europa.eu.int/comm/agriculture/rica/annex003>

Table 6. Similarities and differences between MSFI/MRS and FADN methodologies

Balance position	Evaluation regulations according to	
	the relevant MSFI/MRS or the Frame	FADN methodology
INCOMES:		
from agricultural products trade	fair (market) value of sold agricultural products (MRS 18)	fair (market) value of sold agricultural products
change in value of agricultural products reserve	at the time of the crop, products are evaluated according to the fair value decreased by estimated sales costs (MRS 41)	changes in fair value of the final reserves of products in relation to the initial ones are included in the agricultural management incomes
change in the biological property fair value	the basic biological property evaluation concept is the fair value concept (MRS 41)	included in the incomes through including the initial and final property balance
personal use	a correction in the incomes is possible	included in the incomes
stimulation and support funds, except those assigned for investments	included in the incomes during one or several time periods (MRC 20)	the agricultural management incomes also include stimulations, apart from those assigned for investments
stimulations for investments in the agricultural management	included in the incomes in accordance with MRS 41 or MRS 20, depending on what is applicable	directly included in the agricultural management gross profit
EXPENDITURES:		
specific and overhead costs	according to the principle of a business event commencement i.e. on accounting basis	according to the principle of a business event commencement i.e. on accounting basis
non-biological property amortization costs	purchase value or revalorized value are amortized during the effective lifetime of the amortized property (MRS 16, MRS 38)	the value determined by the replacement costs is amortized during the effective lifetime of the property
biological property amortization costs	if the property is evaluated according to the fair value model, amortization is not conducted (MRS 41)	the value determined by the replacement costs is amortized during the effective lifetime of the property
external costs (salaries, rents, interest rates)	according to the principle of a business event commencement i.e. on accounting basis	on the cash basis i.e. only if the external costs are paid
ASSETS:		
farming land	at the purchase value or revalorized purchase value (MRS 16)	at the market value, decreased by farming land investments costs
perennial plantations and other forms of biological property	fair value (minus evaluated sales costs) or the purchase value (MRS 41)	at the market values on the date of balancing
buildings, plants and equipment	at the purchase value or revalorized purchase value (MRS 16)	at the replacement costs value on the date of balancing
agricultural products reserves	at the fair value, decreased by evaluated sales costs (MRS 41)	at market prices on the date of balancing
another current property	according to the 'past cost' concept	according to the 'past cost' concept
DUTIES:		
	in accordance with MRS 37	according to the 'past cost' concept
CAPITAL:		
	the concept of financial capital retaining	the concept of physical capital retaining

²⁵ Adjusted to: <http://europa.eu.int/comm/agriculture/rica/database/>

The incongruity in the evaluation rules of elements of financial reports is possible to overcome by certain corrections in FADN methodology or within relevant MSFI/MRS, primarily within MRS 41. Besides, MSFI's for small and medium companies could be in the near future available to farming companies and cooperatives, containing different rules in regard to evaluation of biological property and farming production effects compared to MRS 41. For example, pursuant to the provisions from Paragraph 35.1, Section 35 – Specialised Industries; Agriculture, the application of the fair value model in biological property evaluation is solely required in specific cases²⁶.

Business records of private entrepreneurs are traditionally defined by tax regulations and are predominantly determined by the rules based on which the income tax basis is determined for private businesses. In Republic of Srpska, records of private entrepreneurs for the purpose of tax accounting are based on the application of simple bookkeeping, 'cash register principle' i.e. accounting of collected incomes and paid out disbursements in the accounting (tax) period (the modified accountancy cash basis). The degree of congruence between simple bookkeeping based on the cash register principle and FADN methodology rules is very low and is reduced to the identical rules for calculating a part of the so-called 'external' agricultural management expenses (the salary, interest rate and rent) and the incomes based on the used stimulating funds for farming production.

Although FADN methodology is based on data collecting on the business of a chosen number of agricultural managements which represent the total population of farmers in a certain country, it is by all means applicable to any individual agricultural management, regardless of whether it belongs to the chosen sample or not. Combined with an organized accountancy system, this methodology can be a good basis for a continuous and systematic collecting of reliable and relevant data on long-term agricultural managements business based on which it is possible to determine not only realistic and reasonable tax duty but also calculation and analysis of the indicators of the financial position of individual agricultural managements and agriculture in general, economic justifiability and profitability of a concrete agricultural production, business and financial risks in agriculture etc.

Introduction and control of FADN methodology implementation in agriculture

Data collecting (with approximately 1000 different variables) on each individual agricultural management business is the responsibility of authorized state agencies²⁷ within national ministries of agriculture²⁸, cooperating with agricultural institutes, agricultural advisory services etc. Apart from Slovenia, the country from the region which also intends to adopt FADN methodology by the end of 2009 is Serbia²⁹, whereas Croatia will already begin the implementation of the methodology from the beginning of 2009 (in relation to which a relevant sublegal act has been adopted³⁰).

The authorized state agencies are also responsible for the implementation of a relevant quality control of data collecting, processing and delivering of the data collected to EU Commission. The current procedures related to this include completing the data collected from the selected agricultural managements, generating data reports on the state level (setting up 'national database') reviewing, correcting, and arranging the data summarized in the national database, formatting the report as required by EU Commission and delivering the data to the EU Commission to be included in EU-FADN report.

For the purpose of the quality control of the entire 'FADN process', EU Commission takes over the report from the authorized state agency, classifies it into the relevant category of reports, carries out the logical control (i.e. checks coherence, clarity, consistency etc.), checks the uniformity of the report,

²⁶ More on this issue can be found in the October 2007 working version of MSFI for small and medium companies, website: <http://www.iasb.org/Current+Projects/>

²⁷ http://europa.eu.int/comm/agriculture/rca/concept_en.cfm

²⁸ For example, in Slovenia, Kmetijsko gozdarska zbornica Slovenije (www.kgz.si), in Hungary, Agricultural Economics Research Institute (www.akii.hu) in The Czech Republic, Research Institute for Agriculture Economics (www.fadn.cz), etc.

²⁹ <http://www.minpolj.sr.gov.yu/>, see "Strategija razvoja poljoprivrede Srbije" (Agricultural Development Strategy of Serbia)

³⁰ Regulations on the establishing and implementation of agricultural bookkeeping data system ("Narodne novine", N^o. 66/08)

continuity, that is, correlation of the report to the previous one, arranges the data in the tested report, includes the arranged report into the comprehensive EU-FADN report and conducts ad hoc analyses, plans, evaluates and makes the relevant data available to EU member countries and other interested users.

Conclusion

Without the introduction of FADN methodology and inclusion of domestic agricultural managements and agriculture in general in the integral European FADN system, it is impossible to increase the competitiveness of domestic farmers in the European market to an acceptable level and, probably, become entitled to significant stimulations from EU pre-access funds.

A big number of agricultural managements has very small production and, from the EU point of view, can hardly prove themselves sufficiently sustainable to be included into the integral FADN system. Generally speaking, when defining the range of investigation and data collecting on agricultural production in EU member countries, EU Commission follows the instructions contained in EU Directive No 79/65/EEC, adopted on 15 June 1965, as well as the amendments and adaptations of the Directive aimed to creating a pragmatic approach based on the rule that FADN system must only include commercial agricultural managements.

The commercial agricultural management is defined as the management whose size is sufficient for a farmer, whose core (and often the only) business is farming production in their own agricultural management, to provide the income level sufficient for sustainability and development of the household. Practically, in order to be classified as the commercial management, it has to exceed the minimal economic size i.e. must provide a bigger productivity than that providing merely biological survival of the household members.

Given all this, the authorized institutions in Republic of Srpska and Bosnia-Herzegovina must also conduct a comprehensive analysis to define the optimal size of agricultural holding where it is, depending on the kind and type of the production, possible to accomplish an economically profitable production as well as the optimal structures of agricultural production on the state level. It is by all means impossible without the previous establishing of the methodology of accounting data collecting and processing from individual agricultural managements for the purpose of creating a reliable database which makes conducting all necessary agricultural economic analyses objectively possible to realize.

References

- Danicic, D. (2008): *Agricultural Managements and Duties based on Income Tax*. Association of Accountants and Auditors of Republic of Srpska, Banja Luka, Finrar N° 06/08
- Mrsa, J. (2006): *Agricultural Accountancy according to MRS 41*. Fircon d.o.o., Mostar, Fircon – financial regulations and practice N° 4/06
- Vukoje, V., Maletic, D. (2007): *Accounting Data Collection System in Agricultural Managements in EU – FADN Countries*. School of Agriculture, Department of agricultural economics and rural sociology, Novi Sad, Agricultural Economics N° 36
- Republic of Srpska Development Programme ('Republic of Srpska Gazette', N° 75/07)
- Law on Agriculture ('Republic of Srpska Gazette', N° 70/06, 20/07 and 86/07)
- Law on Business Classification and Categorization Units Register, ('Republic of Srpska Gazette', N° 113/04 and 110/05)
- Income Tax Law ('Republic of Srpska Gazette', N° 91/06, and 128/06)
- VAT Law ('Republic of Srpska Gazette', N° 9/05 and 35/05)
- Law on of Cadastre Income Establishing ('Republic of Srpska Gazette', N° 10/95)
- Decision on Farming Land Cadastre Income Establishing ('Republic of Srpska Gazette', N° 6/99)

Regulation of Agricultural Managements Registration ('Republic of Srpska Gazette', N° 11/07, 91/07 and 5/08)

Bylaw on Establishing and Implementation of Agricultural Accounting Data ("Narodne novine Republike Hrvatske", N° 66/08)

<http://europa.eu.int/comm/agriculture/rca>

<http://www.minpolj.sr.gov.yu>

<http://www.rzs.rs.ba>

<http://bhas.ba>

<http://www.iasb.org>

<http://www.kgzs.si>

<http://www.akii.hu>

<http://www.fadn.cz>

Economic Crisis and Crisis of Economics Thought (What about if Friedman was wrong?)

Dragoljub Stojanov¹, Vinko Kandžija²

ABSTRACT - The most serious financial and economic crisis threatens to destroy the most sophisticated financial architecture in the world – USA financial and economic system at the end of September 2008. The greatest financial drop of Dow Jones in the history took place on September 29, 2008. Stocks owner lost trillion and two hundred millions dollars of wealth (CNN news September 30.2008). Did they really lost wealth or they have just lost „imagined exuberance? Does anything have happened to companies, machines, physical capital? What are all financial crises about except imaginary accounting puzzle.

The hugest bailout package ever in history heavy more than 700 billion dollars, Congress of the USA is preparing. In the meantime, as a first aid approach, two mortgage homes Freddy Mac and Fanny Mea have been nationalized by the USA state despite the facts that Congress is led by republican party. The most heavy acquisition already took place (J.P. Morgan took over Merrill Lynch and Bank of America has taken over Lehman Brothers).

Free market dogma is buried. Strong state is in on the scene again together with insatiate market.

We are in the midst of economic drama. Practitioners are at work, and economic theoreticians seem lost.

In the paper we argue that American economy must undergo deep structural changes in both: ideological and systemic respect in order to put America and the world economy on right direction. What next economic paradigm should look like? Should it to be a post-capitalist economic system and how that one could be invented.

In this paper we examine the lessons of neoclassical economic thought, and then we proceeded to Keynes and even to Marx in an effort to find an answer for current economic events.

KEY WORDS: crisis, economic theory, deception, ideology, policy, power

Motto

To suppose that a flexible wage policy is a right and proper adjunct of a system which on the whole is one of laissez-fairer, is the opposite of the truth. It is only in highly authoritarian society, where sudden, substantial, All-round, changes could be decreed that a flexible wage policy could function with success. One can imagine it in operation in Italy, Germany or Russia, but not in France, the USA or UK» (Keynes, (1964), Hair Court Brace Jovanovic. p. 269)

Introduction or say's law and pareto optimality entrapped by: traps of expectation, marginal efficiency of capital and liquidity trap

Elementary textbook from Microeconomics teaches us that when marginal rate of substitution in consumption between good(X) and good (Y),that is: $MRS_x=MRS_y$ (we eventually may nominate as aggregate demand) is equal to marginal rate of transformation between good (X) and good (Y): $MRT_x=MRT_y$ (aggregate supply) an economy reaches state of equilibrium

¹ Dragoljub Stojanov, Economic faculty Rijeka

² Vinko Kandžija, Economic faculty Rijeka

Vjeverica56@yahoo.com

At that moment an economy enjoys the privilege of general equilibrium having all efficiencies and properties of general equilibrium (microeconomic and macroeconomics) reached: that is: efficiency in consumption, efficiency in production, efficiency in allocation of factors of production with maximized both: producers and consumers surplus.

Pareto optimum within a national economy suggests that the economy is at the level of full employment, there is neither balance of payments deficit nor surplus. Consequently, when equalization between aggregate supply and aggregate demand is reached there is no room for inflation.

According to Theory of Comparative Advantage, (which we consider as a component part of neoclassical economic model), and Say's law, two countries with common tastes and consumers preferences, and having the same technology plus being off equal or similar size, may enjoy benefits of open foreign trade, that is they can enlarge „common “GDP by means of international division of labor, and by international specialization in production..

Specialization in production in both countries reaches optimum-equilibrium when marginal rate of transformation between good s (X) and (Y) equalizes with prices of good (X) and good (Y).

At that very moment both countries enjoy full economic equilibrium expressed by equation as follows:

$$MRT_{xy} = P_x/P_y = MRS_{xy} (A) = MRS_{xy} (B)$$

Where (A) means country A and (B) means country B.

The logic of perfect competition, treating two countries as one country, or one country with two regions, and suggesting that both countries or regions are functioning as „connected dishes“, may enlarge well-being of both(all) countries importing lower priced foreign goods and therefore bringing social indifference curve to higher position. in comparison with pre-trade levels.

Under the condition of „International” Pareto Optimum free foreign trade contributes for both countries (global world) to the following effects:

- Optimal allocation of resources world-wide,
- optimal and enlarged consumers surplus without endangering producers surplus (win-win situation),
- Equalization of prices and wages in both countries and world-wide
- convergence of the growth rate of GDP in both (all) countries engaged in foreign trade.

All of these optimums are reached together with:

- full employment in both countries (world-wide),
- Price stability world-wide,
- equilibrium of balance of payments.

Having in mind all of these brilliant achievements of free market economy and free foreign trade, neoclassical paradigm firmly suggests to all countries theoretically, and to transition countries even practically, not to disturb automatic mechanism of market forces. The paradigm pleads for abstaining from all of possible sorts of social (state) intervention into the market and pleads for entrepreneurial animal and rational spirit.

Global financial crisis under way has raised the questions about the validity of the majority determinates of neoclassical economic doctrine. Invisible hand disappeared and visible hand of clever and frightened state is in the game again. Is the state involvement in regulating markets able to resolve financial and economic crisis is a question of utmost importance whole world look answer for? Next to that question open issue is: does the world economic crisis mean the crash of neoclassical economic doctrine or we are only on the verge of a new-revitalized and restructured economic view of the world –global- economy?

In this paper we try to examine some of the traps and deceptions of neoclassical economic thought that has been dominant in last thirty years world-wide. Then we go back to Keynes's economics and to

Marx economics for obvious reasons which is that present economic crisis might be more a normal consequence of malfunction of market economy which repeats itself in the sort of long waves, than a liquidity crisis alone. We find that at least two determinates are of decisive nature in composing economic thought and economic action over the course of time and these days a) interest and the ideology of power elite of a leading and dominant country, and b) the state of business cycle of dominant economy. These factors may be easily traced as back as A. Smith's time (Smith's remark that relates to destiny of a parliamentarian who lobby for free importation of goods that compete domestic infant) and may be followed up to present In the same time they can serve as foundation for building up a new economic paradigm and society.

Neoclassical dogmas or main-stream economics at work

On development, trade and income distribution

More than fifteen year the Washington consensus (WC) used to be / and to some extent is even today/ economic mantra thought and practiced by economists all over the world, let alone in transition economies. An economist, emanating from a transition economy in particular, (the author of this paper D.Stojanov has a personal experience working on strategy fro economic developmental of Bosnia and Herzegovina in 1997/ who dare to rise any sort of doubt in validity and efficiency of the WC even for a war-torn transition country has very often been blamed as an obsolete and as a Marxist. And all of these despite the fact that WC has drawn economic science back as many as 200 years, in time of J B Say or A. Smith.

However, some of the leading and distinguished world economists have recently started serious discussions on the validity of WC as a whole, let alone of its usefulness for LDC and a transition economy. (Barcelona Development Agenda; Serra-Stiglitz, 2008). The role of the state in economics, the export looking development strategies and openness of foreign trade as determinates of economic growth, import substitution, and to a great surprise unequal division of welfare between strong and poor are under reconsideration (Krugman in Serra. - Stiglitz, 2008)

Suddenly, question of economic justice and unequal exchange has become theme of the day, despite the pure fact emanating from neoliberal doctrine that division off fruits from GDP on two parts: labor and capital is both: efficiently and justly best done by the principle of marginal costs and marginal revenue. (For instance approach of professor. J.Brada introduction lecture on Moscow international conference, Patterns of transition and New Approaches to Comparative Economics, Moscow, August 2008).

Krugman (Stiglitz-Serra, 2008) on the same topic deliberates as follows: "we do not know why inequality begin surging circa 1980, or why there have been a sharp increase in wage inequality among people with similar level of education. so we should not expect too much from attempts to understand inequality rends in developing countries ,where the data are much less helpful: "In an attempt to explain himself where from unequal division of welfare comes from under the conditions of free and open foreign trade and increase of GDP Krugman quotes two serious problems which keep economists deceived for years:" First, people expected the positive effects of liberalization on growth to be large....Second there was general view that the free trade policies would tend to be equalizing rather than unequal zing. the view came from theoretical considerations: a simple Hecksher-Ohlin trade model suggests that opening labor abundant economies to trade should rise wages while depressing rents of capital and land...I al least was guilty of the belief that the low levels of inequality in South Korea and Taiwan were, at least in part, the result of outward-looking policies, and I was not alone n the belief that a shift to outward – looking policies would have an equalizing effect.

And that is not all. In the same paper Krugman resumes deliberations:" In my caricature of early WC views, I argued that people-certainly me-expected trade liberalization to be equalizing in the developing countries , because labor abundant countries would export labor intensive goods and import capital

intensive goods, rising wages while depressing returns on other factors. Clearly, that has not happened in Latin America. Why?

The validity of underlying assumptions

However, having extensively discussed assumptions of HO theory B.Horvat (1999) concludes as follows»One obvious consequence is that trade will not equalize factor prices. Wages in poor countries are much lower than in rich ones and no amount of free trade will equalize Indian and American wages. What is necessary is economic development, and this is not matter of trade but of investment. Productive capital is extremely unevenly distributed around the world. » Close to Horvat's observation on the role of HO theory as a determinant of competitiveness of a country, and its effect of economic growth and development, between the others are: Easterly, (1998), Adelman in Stiglitz, J. and Meier, (2001), Panic, M (2003), Pitelis, C (2000), Stiglitz, J. in (Stiglitz, J. - Meier, M (2001), Murakamy, J. (1996). However, the opinions of these and many other world-wide respectable economists simply have been rejected by the economic ideology and economic policies dictated by the most influential power group and their economists (US Treasury, the IMF, World Bank, WTO)

About macroeconomic stability

Non-mainstream economists discussing the issues of macroeconomic stability have for many years raised the eyebrow on attitude that so called nominal macroeconomic stability suggested by neoliberals means all what is necessary for a country prosperity. Non-mainstream economist suggest that nominal macroeconomic stability provides not any sort of comparative advantage for a country, let alone developing one in competition with a developed country. (Pitelis, 2000), Stojanov (1997, 2000). These days and since Barcelona Development Agenda in particular economists stick more and more to the attitude that real macroeconomic stability is what really matter for an economy J.A. Ocampo calls for a broader view of macroeconomic stability that includes not only price stability and sound fiscal policy, but also a stable real economy. In was natural in 1990, for example, after the episodes of high inflation and hyperinflation that Latin America experienced in the 1980s, to emphasize price stability. But real stability - variability in unemployment or real growth- is as, or arguably more, important. Price stability, as we have learned. may not lead to growth or full employment, and excessive zeal in pushing for price stability may stifle growth and lead to high levels of unemployment”(Ocampo in Serra-Stiglitz, 2008. p.)

Therefore, it is not surprising to learn from R.Dornbusch (1997) that »The worst enemy against transition to a free market economy is central bank staging fights against inflation or unduly concerned with maintaining a hard currency. Stable and moderate inflation is important for economic performance and there is a time and preference for everything. In Europe today, overdoing inflation fighting and playing desperate currency games do more to harm the cause of free market reform than the ideologies debate put together»

Dornbusch's opinion concerning inflation combating efforts in TE is shared by P.Krugman(1995) *what about the other half of the Washington consensus, the belief in the importance of sound money? Here is the case even weaker. If standard estimates of the costs of protection are lower than you might expect, such estimates of the cost of inflation – defined as the overall reduction in real income-are so low that they are embarrassing. Of course, very high inflation rates-the triple or quadruple-digit inflations that have, unfortunately, been all too common in Latin American history-seriously disrupted the functioning of a market economy. But its is very difficult to pin down any large gains from a reduction in the inflation rate from say 20% to 2%. Moreover, the methods used to achieve disinflation in LDC-above all, the use of a pegged exchange rate as away to build credibility-have serious costs.

To the list of distinguished economists fighting the IMF inflation rigidity we add J.Stiglitz and Ellerman (2000): «But too often, policies went beyond simply bringing down inflation to reasonable levels. Cutting inflation to lower and lower levels-no matter what the cost-became a fetish, despite overwhelming evidence that there are little if any gains in productivity or growth from reduction in inflation below 20%. And the costs to pushing inflation to this level have not been inconsiderable.

It is not the case that because hyperinflation is bad that the lower the inflation level the better of the economy. One must always consider the price of a single-minded focus on lowering inflation»

On convergence issue

Neoclassical and «the old view of growth assumed that where capital is scarce, it has a high return. There was a natural possibility about this: when you give a machine to a worker who previously did not have one, it has a big productivity effect. Together with the assumption of constant return to scale, and the existence of unalterable factors such as labor supply, the assumption of diminishing returns has a sharp prediction. During the transition to a new steady state, growth in capital – scarce countries will be high because of the high returns to capital. So poor countries should catch up fairly rapidly to richer countries. Growth is high when capital per worker (k) is low, then declines as (k) rises. Growth stops when the rate of return to capital is just equal to the discount rate « (Easterly, 1998)

Similar view on: growth, development and catching up process is expressed by Maddison (2001) «If the world consists only of two groups of countries (developed and developing countries) the pattern of world development could be interpreted as a clear demonstration of the possibilities for conditional convergence suggested by neo-classical growth theory. This supposes that countries with low incomes have «opportunities» of backwardness, and should be able to attain faster growth than more prosperous economies operating much nearer to the technical frontiers. «However, Maddison points out to the very crucial remark and fact never mentioned, but possibly hidden in neoclassical paradigm, that is an exogenously given technology and capital. Maddison concludes that «this potential can be only realized if such countries are successful in mobilizing and allocating resources efficiently, improving their human and physical capital to assimilate and adopt appropriate technology. Resurgent Asia seized these opportunities. The countries (other Asia, Latin America, Eastern Europe and former USSR, Africa) have not. Their relative position has deteriorated sharply since 1973.»

S. Fisher in “Economic Growth and Economic Policy, 1987» shares Maddison’s conclusion pointing to the role of technical progress as one of the main determinates of economic growth of a country, and of a developing country in particular.

«The modest long run rates of growth of the industrial economies and lessons learned from that growth are not necessarily relevant to the LDC. The prime reason is that those countries are far from the technological frontiers; technical progress could play a significant role in their future growth without any major technological breakthrough taking place.

A quick look at the evidence is not supportive of the hypothesis. Except for Japan, most of the countries currently in the ranks of the industrial market economies have been among the high income countries for at least a century.»

World-wide experience with economic growth of different developing countries lagging more and more behind developed the more they apply neoclassical economic prescription, have led Vanek, J (2004) to conclude on theory of comparative advantage, as an important component part of neoclassical economic paradigm, the following»

1. The point of departure of my paper is that the traditional theory of comparative advantage on which modern globalization is based is incorrect and not applicable to the present day conditions of world trading. Instead I propose a theory of destructive trade which explains much better what happens in world trading today, and whose conclusions are summarized on
2. Destructive trade leads to a world where a minority of the rich dominates a majority of the poor and what is worse, the situation tends to grow ever worse, the rich becoming relatively richer and the poor poorer. Technically, the situation is explosive.»

Discussion about convergence between LDC and developed countries touching upon the role of free trade and the role of capital flows hardly can escape Lucas paradox. Lucas paradox is that capital does not flow into the poor countries where capital is scarce, against the neoclassical view that the return to capital accumulation should be higher where capital is rare. Lucas concludes that the neoclassical paradigm should be abandoned, while Reinhart and Rogoff conclude that the risk premium due to bad

behavior is the main culprit. (Cohen in Serra- Stiglitz, 2008).Cohen point out that the capital/output ration is, in general, the highest among poor countries: This can be coined as Anty-Lucas paradox. "The intuition that we offer is that poor countries, lacking other inputs such is infrastructure, use physical capital as a substitute for the scarcity of those missing inputs."

At this moment seems useful to get an insight into the critics of the paradigm of neoclassical economics, and theory of comparative advantage provided by J.Stiglitz, (2005), Horvat (1995) Rodik (1999), Panic (2003), Pitelis, 2000), Adelman in Stiglitz-Meier, 2001). It is not by surprise that I.Adelman introduced a term KISS (keep it simple and stupid) in her "Fallacies in Development Theory and their Implications for Policy "(Meier, G.-Stiglitz,J (2001) Frontiers of development Economics, World Bank). She writes" I shall argue that the discipline of economics has enshrined the "keep it simple, stupid" principle as an overarching tenet, imbibed in graduate school, that can be violated only at the violator's peril. This principle demands simple explanation and universally valid propositions. It has led to three major fallacies, whit significant deleterious consequences for both-theory and policy: single-cause theories of under development; a single figure of merit criterion for development: and the portrayal of development as a log-linear process"

Historical and challenging proof with plenty of examples of development experiences of many countries all over the history in favor of theses of Adelman's, Stiglitz's, Horvat's, Pitelis's, Eatery's etc, might be found in seminal work of Madison A (2001) "The World Economy"

Crisis: USA financial crisis 2008 and economic thought

Neoclassical economics does not recognize possibility of crisis. Still, USA economy led theoretically by neoclassical economists at the end of September 2008 looks like as it is at the brink off the most serious economic crisis-slump in the world economic history ever. The bailout package heavy as much as 700 billion USA dollars has been proposed by President and the members of USA Congress. The package represents the biggest financial intervention since the beginning of the development of capitalist market economy.

No so long ago an economist might make a lifetime serious mistake proposing state intervention into the economy. He would be blamed of manipulation and stupidity. Because "Common sense" (mainstream) reading either of A.Smith or J.B.Say and Pareto do not allows economic crisis to be discussed in abstracto ,let alone to be considered as a threat for a economic system survival..

However, as History teaches there were 1929. Therefore, at the end of 2008 a question can be asked: has USA Congress (and powerful economists) or haven't learned the lesson of 1929. Nobel Prize in economics M.Fiedman was of opinion that the crisis of 1929 would never happened should central banks existed and intervened in the economy. He has considered the 1929 crisis as a liquidity crisis. However, J.M. Keynes, after experiencing state intervention in 1930's with pro-inflationary effect, even signs of stagflation, was stating as follows:" Three years ago was important to use fiscal policy in order to support investment... soon might be as much important to contract some investment. As much as was important to keep budget deficit in time of crash now is useful to resort to different policy....I thing we are approaching or we have approached point when intervention from the center becomes useless" In 1937 Keynes was deeply disturbed by high inflation rate (12% in the United Kingdom) that has already coexisted with high unemployment rate (12%), (Hutchison (1981)

World-wide accepted interpretation of Keynes explanation of economic crisis's is that economic crisis of 1929 was caused by insufficient consumption (for instance Vade, R, 2008). If such an explanation was right a proper one the state intervention like nowadays proposed by USA Congress, might have successfully fought over all three Keynes's traps: liquidity trap, trap of expectations and trap of marginal efficiency of capital. Therefore, from the angle of 2008 crisis seem utterly important to find out who was right and who was wrong in explaining 1929 crisis: Friedman (neoclassical economists-monetarists, like A. Metzler these days) or Keynes but not Keynesians who treat the 1929 crisis as crisis of insufficient consumption (Stojanov, 1985). Should we judge American bailout package having in mind opinion of neoclassical economist, or Keynes? Could it be that perhaps Marx was mostly right

in explaining the crises of XIX century and in general? This is why we resort to both: Keynes and Marx for some of the lessons to be learned

Keynes and Marx on economic crisis

Keynes

In addition to Keynes, Polany(1944) or Hilferding(1952), there are more and more contemporary economists who point out that the present state of economic affairs all over the world, including in developed countries, has to do with the ‘market fallibility’ hypothesis (Stiglitz-Serra, 2008) International “mega-mergers” taking place all over the world confirm more than ever a Marx proposition expressed as follows” and as soon as formation of capital were to fall into the hands of a few established big capitals. The vital flame of production would be altogether extinguished. It would die out. Things are produced only so long as they can be produced with profit...development of the productive forces of social labor is the historical task and justification of capital. This is just the way in which it unconsciously creates the material requirements of a higher mode of production”. The last case in points that confirm the thesis is the acquisition of Merrill Lynch by J: P. Morgan and Lehman brothers by Bank of America during September, 2008.

Keynes’s view (as we read it) was that the decline of marginal efficiency of capital is the main cause of economic crises, i.e. e. that it provokes trade cycle.” By a cyclical movement we mean that as the system progresses in, e. g. the upward direction, the forces propelling it upwards at first gather force and have a cumulative effect on one another but gradually lose their strength until a certain point they tend to be replaced by forces operating in the opposite direction.... we mean also that there is some recognizable degree of regularity in the time-sequences and duration of the upward and down-ward movements... There is, however, another characteristic of what we call the Trade Cycle which our explanation must cover if it is to be adequate; namely, the phenomenon of the crisis - the fact that the substitution of a downward for an upward tendency often takes place suddenly and violently, whereas there is, as a rule, no such sharp turning-point when an upward is substituted for a downward tendency.”

Thus, according to Keynes, (1964) prosperity suddenly changes the face and it is violently converted into a crisis. The market mechanism does not function the other way around so quickly, if it does at all automatically.

Keynes has meant that crises are not caused by the rise in interest rates. Crises are a consequence of suddenly declining marginal efficiency of capital. “The later stages of the boom are characterized by optimistic expectations as to the future yield of capital-goods sufficiently strong to offset their growing abundance and their rising cost of production and, probably, a rise in the rate of interest also. It is of the nature of organized investment markets, under the influence of purchasers largely ignorant of what they are buying and of speculators who are more concerned with forecasting the next shift of market sentiment than with a reasonable estimate of the future yield of capital-assets, that, when disillusion falls upon an over-optimistic and over-bought market, it should fall with sudden and even catastrophic forces.”

“At the outset of the slump there is probably much capital of which the marginal efficiency has become negligible or even negative. But the interval of time, which will have to elapse before the shortage of capital through use, decay and obsolescence causes a sufficiently obvious scarcity to increase the marginal efficiency, may be a somewhat stable function of the average durability of capital in a given epoch. If the characteristics of the epoch shift, the standard time-interval will change.”

In addition, duration of a slump has a definite relationship to the ‘normal rate of growth in a given epoch.

In time of the slump capital sells off. Goods sell off regardless of prices. A decline of marginal efficiency of capital badly affects propensity to consume by both lowering drastically investment and firing workers. We think that Keynes’s thoughts could be considered as especially relevant for devel-

oped societies of today, “serious drop in marginal efficiency of capital also tends to affect adversely the propensity to consume. For it involves a severe decline in the market value of Stock Exchange equities. Now, on the class who take an active interest in their Stock Exchange investment, especially if they are employing borrowed funds, this naturally, exerts a very depressing influence...With a ‘stock-minded’ public as in USA today, a rising stock market may be an almost essential condition of a satisfactory propensity to consume; and this circumstance, generally overlooked until lately, obviously serves to aggravate still further the depressing effect of a decline in the marginal efficiency of capital.” Crises can not be softened by lowering interest rate. “I conclude that the duty of ordering the current volume of investment can not safely be left in private hands,” This sentence has been written by J.M. Keynes in 1936.

Marx

According to Marx (1962), the stage of overproduction which we can call the stage of stagflation (according to the full description of the stage expressed in „The Capital“) converts into new stage of business cycle called a slump. A slump represents deep deflation. Precedent increase of prices, overproduction of goods or production of goods over the level of production which promises expected profit, must be lowered to the range of ‘normal limits’. The process is painful one and expresses itself in drop of prices, drop of incomes, mass unemployment, and closure of companies. “*The value of commodities is sacrificed for the purpose of safeguarding the fantastic and independent existence of this value in money.* As money-value, it is secure only as long as money is secure. For a few millions in money, many millions in commodities must therefore be sacrificed. This is inevitable under capitalist production and constitutes one of its beauties.”...The demand for means of payments is a mere demand for convertibility into money, so far as merchants and producers have good securities to offer; it is a demand for money-capital whenever there is no collateral, so that an advance of means of payments gives them not only the form of money but also the equivalent they lack, whatever it is form, with which to make payment... This is the point where both sides of the controversy on the prevalent theory of crises are at the same time right and wrong. Those who say that there is merely a lack of means of payment (*and we may say that Friedman has seen the causes of the Great Depression of 1929 in such a way as much as Paulson and Bernanke nowadays*) either have only the owners of bona fide securities in mind, or they are fools who believe that it is the duty and power of banks to transform all bankrupt swindlers into solvent and respectable capitalists by means of peace of paper. Those who say that there is merely a lack of capital, are either just quibbling about words, since precisely at such times there is a mass of inconvertible capital as a result of over-imports and overproduction, or they are referring only to such cavaliers of credit who are now, indeed, placed in the position where they can no longer obtain other people's capital for their operations and now demand that the bank should not only help them to pay for the lost capital, but also enable them to continue with their swindles.”

Instead of conclusion: crisis and solution?

According to both Marx and Keynes, crises represent the process of capital depreciation. At the first glance hardly could be said that the present crisis (2008) can be treated either as “constructive destruction” or “constructive construction”. Keynes considers that the process of depreciation of the value of capital creates a precondition for capital shortage and thus for an increase in its marginal efficiency. A crisis can hardly be avoided or made softer automatically by the automatic functioning of market forces. According to Keynes under crisis circumstances the policy of interest rate increase could be particulate destructive. With his economic policy measures, Keynes wanted to prevent crises. Therefore it is clear why he pleads for an expansive financial policy during the stage which precedes the crisis. He wants to convert the boom into a lasting quasi-boom.

Interests of leading power class of society used to shape world economic history and they continue to do so. Interests shape economic ideology and economic ideology provides munitions for creation of economic policy measures effective for the development of macroeconomic subjects.

In this regard we see the moves of FED, The USA Treasury, interest rates cut world-wide, Russia's central bank financial injection of \$ 180 billion, The Dutch financial injection of Euros 20 billion, the Iceland banks nationalization etc.

At this moment in the world history when neoclassical economics loses its ground, we think that we have to find a proper solution either, a) within framework of existing economic theory and political structure-what is utterly complicated task, or b) present political and economic structure should be changed in a new direction, what is an insurmountable task. In case of no successive solution for the crisis the world might be at serious risk.

We believe in the following scenario: the immense financial injections and new regulation might temporarily postpone banks crisis and to some extent rebuild confidence in the state power and the ability of state to keep system alive. However, strong financial injection may prove to be pro-inflationary. For instance, the price of oil usually follows suit of stock markets. Therefore, we might expect the world economy to be confronted with trap of marginal efficiency of capital having once solved liquidity trap. In such a case the crisis might be even deeper leading the world economy over the road of constructive destruction towards a new stage of capitalist market economy we nominate as mega capitalism.

In the meantime, the world political leader should be aware of the following Keynes's words"

„War has several causes... but, over and above all else is the economic causes of war, namely, population pressure and competitive struggle for markets. It is the second factor, which probably played a predominant part in the nineteenth century, and might again, that is relevant to this discussion... I pointed out in the preceding chapter that under the system of domestic laissez-faire and an international gold standard such as was orthodox in the latter half of the nineteenth century, there was no means open to a government whereby to mitigate economic distress at home except through the competitive struggle for markets.... *Thus, while economists were accustomed to applaud the prevailing international system as furnishing the fruits of the international division of labor and harmonizing at the same time the interest of different nations, there lay concealed a less benign influence*; and those statesmen were moved by common sense and a correct apprehension of the true course of events, who believed that if a rich, old country were to neglect the struggle for markets its prosperity would drop and fail.”

Until September 2008 neo-classical economists believed that world-wide free trade and world-wide laissez-faire are forging world peace for ever.

Keynes and Marx were of opposite opinion.

The role of economists in securing world prosperity and peace is great. Is economic science and economic knowledge adequate enough to secure prosperity will be visible soon?

References

- Adelamn, I. (2001), Fallacies in Development Theory and Their Implications for Policy, in “Frontiers of Development Economics”, in – Frontiers of development Economics - ed. by G. Meier and J. Stiglitz
- Coricelli, F.; di Matteo, M; Hahn, F.-(1998), New Theories in Growth and Development-St' Martin's Press
- Dornbush, R. (1997), Key to Prosperity, Internet
- Easterly, W. (1998), Economic Policies, Economic Shock and Economic growth, in: New Theories in Growth and Development-ed.: Coricelli,F., Matteo, M., Hahn, F., Macmillan Press,
- Easterly, W. (2002), The Elusive Quest for Growth, The MIT Press,
- Fisher, S. (1987), Economic Growth and Economic Policy, in – Growth Oriented Adjustment programs, ed. Corbo,V; Goldstein, M; Khan, M, the IMF
- Frankel, J. (1999), No Single Currency Regime is Right for all Countries or at all Times, International Finance Section, Princeton University,
- Hilferding, R. (1952), Finansijski kapital, Kultura, Beograd

- Horvat, B. (1995), *Theory of International Trade*, Macmillan
- Hutchison, W. (1981), *The Politics and Philosophy of Economics*, Basil Blackwell
- Keynes, M., (1964) *The General Theory of Employment, Interest and Money*, Harcourt, Brace and Company, New York,
- Krugman, P. (1995), *The Dutch Tulips and Emerging Markets*, Internet
- Krugman, P. (2000), *International Economics*, Addison-Wesley Publishing
- Maddison, A. (2001), *The World Economy*, OECD
- Marx, K. *Capital* (1962) vol. I International Publishers, New York, vol II, III Foreign Language Publishing House, Moscow.
- Murakamy, (1996), *An Anti-classical Political-Economy Analysis*, Stanford University Press
- Pitelis, C. (2000), *Supply-side Strategy for Productivity, Competitiveness and Convergence*, the EU-PHARE-ACE Project
- Polany, K (1944) *The Great Transformation*, Farrar & Rinehart, New York
- Panic, M. (2003), *Globalization and National Economic Welfare*, Palgrave
- Rodrik, D. (1999), *The New Global Economy and Developing Countries: Making Openness Work*, ODC, Washington, D.C.
- Rodrik, D. (1997), *Has Globalization Gone too Far?*, Institute for International Economics, Washington D.C.
- Smith, A “ *Inquiry into the Causes of the Wealth of Nations*,
- Soderstein, B. and Reed, G. (1994), *International Economics*, Macmillan Press,
- Stiglitz, J. and Charlton, A (2005), *Fair Trade for All*, Oxford University Press,
- Stiglitz, J.,-Ellerman, D. (2000) »New Bridges Across the Chasm: Macro-and-Micro-Strategies for Russia and other Transitional Economies« *Zagreb International review of Economics @Business*,
- Stiglitz, J. and Hoff, K. (2001), *Modern Economic Theory and Development*, in: *Frontiers of Development*-ed. by Meier, G. and Stiglitz, J.
- Stiglitz-Serra, (2008), *The Washington Consensus Reconsidered*, Oxford University Press,
- Stiglitz-Serra (2008), *Liberalization of Capital Market and Economic Development*, IPD
- Stojanov, D. (1985), *Economic Crisis and Economic Policy: Neoclassical Economics*, Keynes, Friedman, Marx, Informator, Zagreb
- Stojanov, D. (1997), *Economic Development Strategy for Bosnia and Herzegovina*, UNDP
- Stojanov, D (2000), *Supply-Side Strategy for Productivity, Competitiveness and Convergence between the EU and CEEs. The Case of Study of Bosnia and Herzegovina*, South-South, New York
- Vade, R. (2008), *The First-World Debt Crisis in Global Perspective*, Essay on conference on sub prime crisis, University of Warwick
- Vanek, J. (2004) *Globalization, Destructive Trade and Remedies Through Cooperation*, IAFP papers.

Privatization and Restructuring of Serbian Economy Real and Banking Sector*

Ivan Stošić¹, Saša Stefanović², Gordana Vukotić-Cotić³

ABSTRACT - The real sector Serbian economy process of privatization has not been completed after 18 years of implementation. Nevertheless, the privatization (and restructuring) of socially owned enterprises is one of the key requirements for enhancing business performances of the real sector and entire economy. Although relatively satisfactory results of key macro economic trends in Serbia have been realized in previous period, it could not be stated that all desired and expected effects have been efficiently realized up to now. As a result, according to the World Economic Forum Report, the Serbian economy is at 91 place among 130 countries on the level of competitiveness. Partly, it's a result of unsatisfactory trends in the field of real sector privatization and restructuring. On the other side, during transition period after the year 2000, the banking sector in Serbia has been transformed and revitalized. The main weaknesses of banking system in the period before 2000. (illiquidity and general insolvency, the lack of confidence towards financial institutions, the lack of stable deposit bank, etc.) have been overcome. In the last few years most of domestic commercial banks are privatized by foreign ones, and consequently the banking sector became profitable, liquid and highly capitalized. The trends, resulting from the increased competitiveness and efficiency of banking sector, are confirming the benefits of banking sector restructuring and have positive impact on local economy.

KEY WORDS: Serbian economy, privatization, restructuring, real sector, banking sector

Introduction

Numerous changes, immanent to the process of transition, progress in Serbia with slower than desired pace. Among them is the privatization and restructuring of enterprises, which have the key importance for economic activities performances improvement and change in economic structure. While the majority of countries of Central and Eastern Europe has already carried out the privatization, improved significantly business environment and quality of socio-economic activities (and joined EU or are about to be joined to EU), Serbia is still lagging behind in real sector economy transformation.

On the other side, much better results have been achieved in banking sector transformation. After democratic changes in the year 2000, followed by restructuring and bankruptcy of few banks, bank market is liberalized and opened to foreign investors. Foreign banks penetrated Serbian market, either by establishing the new banks, or by taking over the existing domestic banks, resulting ownership structure of Serbian banking sector to be predominantly foreign owned.

After more than seven years of the banking sector restructuring, it is obvious that domestic banks are less competitive than foreign ones, particularly in two aspects: access to international capital markets and domestic deposits. Having in mind that banking sector privatisation and restructuring process is not finished, is likely that ownership structure will change slightly in favor of foreign banks.

* This paper is a part of researching project no. 159004, financed by the Ministry of Science and Technological Development of Republic of Serbia, named: "The Integration of Serbian Economy into the EU - Planning and Financing of Regional and Rural Development and Enterprise Development Policy"

¹ Ivan Stošić, PhD, Research Fellow, Institute of Economic Sciences, Belgrade.

² Saša Stefanović, MSc, Research Assistant, Institute of Economic Sciences, Belgrade.

³ Gordana Vukotić-Cotić, MSc in Economics, Research Associate, Institute of Economic Sciences, Belgrade

The results of privatization of the real sector of the economy of Serbia

In Serbia, not even after 18 years of implementing privatization, according to several different basic models and laws, this process has not been successfully completed!

By the current Law on Privatization, it is determined that the process of privatization of socially owned enterprises, which had begun even in the year 1990, should be finished by the end of 2008. However, within the portfolio of Agency of privatization, in the November 2008, were more than 900 socially owned non-privatized firms (among them 72 in the process of tender privatization and 47 in the process of privatization through restructuring). In addition to that, there are a great number of stocks socially owned enterprises within Share fund. Furthermore, the privatization of public state enterprises, on republic and local level, has not even practically started. Among them are 17 large public state enterprises that employ more than 100 thousands employees (or some 10% of total labor force) and realize some 17% of total economy revenues.

The process of the real sector of the economy privatization has been intensified in Serbia after the democratic changes (in fact since the beginning of 2001.) along with the implementation of intensive transitional reforms. In period from 2002 up to June 2008. the following results have been achieved:

Table 1. Results in the process privatization real sector of Serbia in period 2002-June 2008.

	Tenders	Auctions	Share Fund	Total
Number of privatized enterprises	93	1 591	515	2 189
Number of employees in privatized enterprises	79 772	144 579	110 897	335 247
Privatization revenues (in mil €)	1 145.2	1 089.8	497.6	2 732.6
Total investment in privatized enterprises (u mil EUR)	998.1	221.7	5.9	1 225.7
Redundancy programme (u mil EUR)	276.7	-	-	276.7

Source: Bulletin of Public Finances of the Republic of Serbia

It is noticeable that very significant share of up to now privatization revenues (around 43%) was realized in 2002 and 2003. Namely, efforts in privatization were initially directed to the most attractive parts of the economy (tobacco industry, cement, beer, medicines, rubber, construction materials, then sugar refineries, chemical industry, oil derivates distribution...) and successful enterprises. Concerning the attractiveness of these enterprises (large market and/or significant property), a greater number of investors were interested in buying them, which influenced on the results in privatization to be initially very favorable. With the privatization of only 14 most attractive enterprises in 2002 and 2003, the revenue of around €869 millions or somewhat more than 30% of total realized privatization revenues.

However in 2004, a certain slowdown became evident in privatization in the real sector of the economy of Serbia. To a significant extent this was caused by the fact that the corpus of enterprises attractive for privatization was noticeable decreased, i.e. that some market attractive public enterprises have not entered the privatization process. At the same time, for majority of remaining "business controversial" enterprises in difficulties and problems, there was no great interest from potential investors. Considering an immense number of these enterprises, a question was imposed in which method to access to the privatization and transforming of enterprises, which can very hardly find new owners.

For those reasons, by the middle of 2005, do amendments of the Law on Privatization were introduced. By the Amendments of the Law on privatization, basically, the government (and public enterprises) has written of their debts towards non-privatized enterprises. In that way, indebtedness has been reduced considerably and remaining socially owned enterprises have been made more attractive to potential investors. That has put revenues from the sale of enterprise and their support to the budget of Serbia into the second plan, and the priority was given to speeding up and finishing the process of privatization. Besides, the government has taken over to itself financing the redundancy, with which a great number of enterprises burdened by enormous of employees in relation to current production and market possibilities, has been made more attractive for potential buyers.

By these legal changes a new incentive was given to the process of privatization. In 2005, 189 enterprises were sold by auction privatization, with around 20 thousand employees, and revenue of €156.5 million was realized. Through tender privatization 13 enterprises were sold, with around 8.0 thousand employees, and revenue of €96.4 million was realized. In 2005 activities in sale of minority packages were intensified and Share Fund of the Republic of Serbia realized the best results in number of sold shares of the companies (more than 132) as well as in financial result (more than €124,8 million). All that indicates to certain acceleration of the process of privatization compared to previous year.

In 2006, 184 enterprises were sold by auction privatization, with around 18 thousand employees, and revenue of €147.6 million was realized. Through tender privatization 22 enterprises were sold, with around 19.9 thousand employees, and revenue of €99.8 million was realized. In 2006. Share Fund of the Republic of Serbia sold shares of the 78 companies for €67.7 million.

In 2007, 272 enterprises were sold by auction, with around 26.2 thousand employees, and revenue of €341.8 million was realized. Through tender privatization 17 enterprises were sold, with around 14.6 thousand employees, and revenue of €123.6 million was realized. In 2007 Share Fund of the Republic of Serbia sold shares of the 76 companies for €77.2 million.

In the field of privatization through restructuring, modest results were realized until 2005. Through processes of financial and organizational restructuring (mainly fragmentation of enterprises), the government i.e. the Privatization Agency has been trying to prepare a certain number of once large and/or significant enterprises for local self-government for privatization and more successful business operating in forthcoming period. Unfortunately, in around 70 economic entities that have initially been in the process of restructuring, until the alteration of the Law on Privatization in 2005, this process was implemented in a small number of enterprises (“Livnica“ Kikinda, “Sever“ Subotica, parts of other enterprises, like “Zmaj“ Zemun, etc.). Therefore, visible effects of implemented processes of restructuring to total business operating of domestic economy were not noticeable.

After the amendment of the Law on Privatization (since 2005), visible moves in restructuring field were realized, and some big enterprises were privatized, like “Azotara“ pančevo, “FVK“ Kraljevo, “Hisar“ Prokuplje, “Nitex“ niš, “Partizanski put“ Beograd, “Hipol“ Odžaci, etc. Reducing indebtedness and number of employees, as well as stabilization of total economic ambient are key reasons that influenced on adding dynamics to the process of restructuring of the real sector of the economy of Serbia since 2005. However, the achieved results are still inadequate and energetic actions are needed.

According to the EBRD estimates the level of transition indicators for Serbia in the field of privatization is constantly improving since 2001. The EBRD in Transition report 2008 do not estimate the results of large-scale privatization and enterprise restructuring very highly, even in comparison to other countries of former Yugoslavia. On the other hand the results of small-scale privatization are estimated much better:

Table 2. Transition indicators in privatization and banking sector of Serbian economy *

Year	Large scale privatization	Small scale privatization	Enterprise restructuring
2001	1,00	3,00	1,00
2002	2,00	3,00	2,00
2003	2,33	3,00	2,00
2004	2,33	3,33	2,00
2005	2,67	3,33	2,33
2006	2,67	3,67	2,33
2007	2,67	3,67	2,33

Source: EBRD, *Transition EBRD report 2008*

(*The measurement scale for the indicators ranges from one to 4+, where one represents little or no change from a rigid centrally planned economy and 4+ represent the standards of an industrialized market economy).

Problems and opposing to changes in privatization and restructuring real sector process

The process of privatization of the real sector of Serbia has been followed by numerous opposing and problems. The problem of opposing to changes often presents the main obstacle to successful privatization and restructuring process, and the most often leads to significant dragging out in implementation of necessary changes. Opposing is present when a concept of implementing changes is concerned, as well as proposed implementation method. Namely, changes affect the management and employees, that is, their positions, responsibilities and existing forms of behavior. Therefore the majority of employees, including their managers too, not only are not interested in changes, but also with hostile attitude towards them. There is no readiness in the management to enter into the privatization and restructuring, i.e. alter the gloomy present of business operating of their enterprises "with uncertain", maybe even better future. Instead of working on enabling their enterprise for business activities in completely different conditions of business operating, efforts of management are still significantly directed to keeping old-fashioned methods of business operating (not rarely based on renting capacities to private entrepreneurs) or to searching for different aspects support from the government. Besides all that, it is not rare a domination of temporary private interest of some managers over the interests of the whole enterprise and the employed in them.

Unfortunately, neither the employees are too much interested in the privatization and restructuring, because they do not see direct interest in that. In addition, the majority of the employed is very scared for their work posts and wages and opposes to strategic changes due to fear from future, although they are unsatisfied with their current status as well.

The processes of privatization through restructuring, especially of large enterprises of the real sector of Serbia are burdened by substantial business problems. Although great differences exist from an enterprise to an enterprise, numerous mutual problems are characteristic for all these enterprises, which cannot be systematized to presented SWOT matrix.

Table 3. SWOT matrix of large non-privatized enterprises in difficulties

Strengths	Weaknesses
<ul style="list-style-type: none"> ▪ Long tradition and production experience ▪ Experienced and trained labor force ▪ Large surface of land and building facilities ▪ Significant production capacities 	<ul style="list-style-type: none"> ▪ Lack of profitableness ▪ High indebtedness and chronic lack of own working capital ▪ Out of date production equipment and technology ▪ Old-fashioned production programme and lack of marketing concept ▪ Surplus of employees, inadequate qualification and age structure of employees ▪ High fixed costs and non-competitiveness ▪ Property-legal relations ▪ Numerous court disputes
Opportunities	Threats
<ul style="list-style-type: none"> ▪ Written off debts through financial restructuring ▪ Implementation of redundancy programmes ▪ Investments in state-of-the-art production technologies and products development after privatization ▪ Possibilities for increase of sale on domestic and European market through privatization by strategic partners 	<ul style="list-style-type: none"> ▪ Intensification of competition by smaller private domestic and big foreign producers ▪ Liberalization of import regulations ▪ Non-understanding of creditors for existing situation ▪ Inefficient legal system ▪ Political instability

Numerous controversies related to new owners and their behavior form is also a significant problem of privatization in Serbia. In a certain number of enterprises, the privatization was mainly motivated by speculative reasons, in the first place by the acquisition of property that those socially owned enterprises possessed. Therefore, new owners and management are not interested in enhancement of the business performances, but to buy (and sell) the property. The new owners frequently create conditions, with different measures (before all low wages and introducing rigorous working discipline), for employees to give notice and leave enterprises (in spite of social programme of adopted plan). In these cases the existing property remains on disposal of new owners, which they offer after the term anticipated by law (related to a ban of alienation of privatized enterprises' property) for sale on the market (probably at considerably higher prices in comparison to those at which they had bought the capital of those enterprises).

A number of "annulated privatizations" in which purchase contracts were cancelled due to the method of business operating of new owners is relatively small and amounts around 10%. Nevertheless, a number of enterprises in which even after implemented privatization there was no visible improvement of performances is considerably higher, which emphasizes opposition of the management and employed in up to now non-privatized enterprises.

In Serbia practically everybody speaks in favor of privatization, but new owners bother almost everybody. For many people, privatization by multinational foreign companies presents sale of national property ("family silver"). Even more undesirable are domestic private, especially substantial entrepreneurs (Delta M, MK Commerce, East Point...). Although it has been exposed that the privatization by multinational companies, and even large domestic entrepreneurs by rule, in middle term, brings to an increase of efficiency of economic operating and raising the competitiveness and volume of operating (e.g. "USS Serbia", "VB" Sevojno, "Juhor" Jagodina) almost all serious strategic investors are subject to numerous criticisms and demands for revision of purchases done. A concept of workers' shareholding, at one time applied, was abandoned in Serbia (which was incorporated in legal provisions until July, 2001) and it is clear that overall consensus has not been realized in regard of existing concept of privatization, in particular when new owners are considered. In addition, negative examples of behavior of some new owners do not contribute to overcoming the opposition to privatization and restructuring process.

Negative effect on employment presents key problem in the implementation of the process privatization and restructuring. The number of employed drop in Serbia from 2.1 million in 2001 to 1.99 million in June 2008. Namely, as a consequence of the process of privatization and enterprises restructuring, the number lay off workers increased. That in combination of low level economic activity and still insufficiently incentive measures for small and middle enterprises development, influences on high unemployment rate in Serbia.

The number of unemployed in Serbia is very high and presents one of the greatest economic and social problems. During the implementation of privatization and restructuring the number of unemployed has increased for around 200 thousands up to 2006. Starting from 2007 the number of unemployed has a decreasing tendency and according to available data for the end of 2008, the number of unemployed amounted 756 thousands persons. Unfortunately, the unemployment rate has the level of around 18.1% according to survey on labor and is the highest in region.

The results of privatization of the banking sector in the Serbia

The main weaknesses of banking system in the period before 2000. were: illiquidity and general insolvency, the lack of confidence towards financial institutions, inadequate legal environment, and/or common practice of not following the legal procedure, the lack of stable deposit bank, non-performing loans.

As a result, one of the priorities of the revitalization strategy was to create the modern and efficient financial system. The priority was to rehabilitate the banking sector as a key driver of Serbian financial system, due to the fact that non banking institutions represented only 10% of overall financial system

balance sheet. After voluntary pension funds, investment funds and leasing companies emerged and following the insurance sector development, non banking institutions increased their share to 25% of overall financial system balance sheet.

Foreign banks penetrated Serbian market either by establishing the new banks or by taking over the existing domestic bank resulting in ownership structure of Serbian banking sector to be predominantly foreign owned. In relatively short period foreign owned banks significantly increased their market share.

As at 30 June 2008, banks in majority foreign ownership accounted for RSD 1,236.4 billion or 75.0%, banks in the majority ownership of the Republic of Serbia for RSD 263.2 billion or 15.9%, and banks in majority private ownership for RSD 149.4 billion or 9.1%, of the banking sector balance sheet total. In late June 2008, the overall banking network included a total of 2,564 business units, branches, branch offices, teller units, agencies and exchange bureaus. Total banking-sector employment in Serbia was 31,331.

Table 4. The ownership structure of the banking sector at the end of June 2008

End of period	No. of banks	State owned banks		Privately owned banks			
		No.	Share (%)	Private owned domestic banks		Foreign owned banks	
		No.	Share (%)	No.	Share (%)	No.	Share (%)
2002	50	23	49.4	15	23.6	12	27
2003	47	17	46.7	19	30.4	11	22.9
2004	43	14	36.1	18	26.2	11	37.7
2005	41	11	26.1	12	10.6	18	63.3
2006	37	8	14.9	7	6.5	22	78.6
2007	35	8	15.7	6	8.8	21	75.5
2008*	34	8	15.9	6	9.1	20	75.0

Source: NBS (Annual and Quarterly Reports - various issues); * end of June

Interest rates on Serbian market are significantly higher than rates in European Union countries due to several factors, but we observe the trend of their decrease since the beginning of transition. The trend of constant decrease of interest rates is the best evidence of the benefits of privatization and banking sector restructuring.

Table 5. Weighted average active 12m interest rates (as %)

Year	2000	2001	2002	2003	2004	2005	2006	2007
Interest rate	77.90	32.52	19.16	14.81	14.59	14.41	15.88	11.13

Source: NBS (Statistical Bulletin)

Simultaneously with a decrease of active banking interest rates and interest rate spreads, we observe increase in passive banking interest rates on domestic and foreign currency denominated deposits.

Finally, we have to emphasize the fact that in last few years we observe the banking sector to be profitable, liquid and highly capitalized, enabling banks to be more resistant to risks and actual global financial crisis.

Instead of conclusion

The privatization (and restructuring) of enterprises is not the aim by itself, but means for improvement of performances of business operating of the real sector and entire economy. That should result with an increase of production volume, export, then decrease of inflationary pressures, inflow of foreign in-

vestments, and increase in wages of the employed, etc. Although relatively satisfactory results of key macro economic trends in Serbia have been realized in previous period, it could not be stated that all expected effects efficiently have been realized up to now. Furthermore, as it could be seen from the data on Global competitiveness indicators, the Serbian economy has not yet reached the satisfactory level of competitiveness. It is, according to the World Economic Forum report, on 91 places among 130 countries.

The restructuring is often "painful" process followed by some undesirable effects, which includes leaving certain productions, "cutting" of the number of employees and closing numerous non-propulsive enterprises or their parts, the privatization and restructuring of the firms in real sector of the economy of Serbia is inevitable. Although processes of privatization and restructuring had initially negative effect in transition countries (so called transitional crisis), the economies characterized by intensive privatization and restructuring processes come faster out of the crisis and realize faster economic growth. Namely, the sooner it comes to change in economic structure and changes in a method of operating of the real economy and financial sector, the sooner are realized assumptions for faster and sustainable economic growth, improvement of competitiveness and increase of export, living standard, and even growth of employment. All that indicates to necessity of implementation intensive processes of privatization and restructuring, regarding the fact that with archaic economic structure and obsolete method of business operating successful results of business operating cannot be achieved.

Privatization and restructuring of banking sector had substantial positive impact on the stability and efficiency of the financial system, and contributed largely to decrease of active banking interest rates and interest rate spreads followed by increase of passive banking interest rates on domestic and foreign currency denominated deposits. We believe that marked trends, resulting from the increased competitiveness and efficiency of banking sector, are confirming the benefits of privatization and banking sector restructuring.

References

- Stošić I., *Privatizacija preduzeća u Srbiji: rezultati, problemi, perspektive*. Konferencija Izazovi ekonomske politike Srbije u 2007. godini, Beograd, 2006. *Referati*. Beograd: Ekonomski fakultet u Beogradu i Naučno društvo ekonomista Srbije, Beograd, 2007. godina
- Petrović, P., D. Vesić, S. Stefanović (2008), "Influence of SEE Trade Agreement on Foreign Direct Investments", Thematic Collection – *Cental European Trading Area and Serbian Interests*, Institute for International Politics and Economics, Belgrade
- Vuković, V. (2006), "Transition, banks and investment banking" in Drašković, B., ed, *Current Status and Perspectives of Serbian Economy*, Institute of Economic Sciences and Belgrade Banking Academy, Belgrade
- Đukić. Đ., H. Hanić (2005), *Privatization of banking sector in Serbia*, Institute of Economic Sciences and Belgrade Banking Academy, Belgrade
- EBRD, *Transition EBRD Report 2008*
- Ministry of Finance of the Republic of Serbia, *Memorandum on Budget and Economic and Fiscal Policy for 2009 with the Projections for 2010 and 2011*
- Ministry of Finance of the Republic of Serbia, *Bulletin of Public Finances of the Republic of Serbia*, July 2008
- National Bank of Serbia, *Annual Report 2007*
- National Bank of Serbia, *Financial Stability Report 2007*
- National Bank of Serbia, *Statistical Bulletin*, January 2008
- World Economic Forum, *Global Competitiveness Report 2008-2009*.
www.priv.yu
www.nbs.rs
webrzs.stat.gov.rs

Development of Dental Tourism in the Sarajevo Region

Boris Tihi¹, Almir Peštek², Sanid Vlajčić³

ABSTRACT – *The paper examines the perspective of developing dental tourism in the Sarajevo region, as a special form of health tourism. Dental tourism (also known as health vacation or global health care) signifies a constant increase in traveling outside one's country with the aim of obtaining health care. Health care services, in this sense, include both routine procedures, but also specialized services such as organ transplant, heart surgery, esthetic surgery, and dental services. The factors that lead to a rise in the popularity of health tourism include extremely high prices of health care services in (mostly developed) countries, lack of choice for specific groups of health insurance beneficiaries, length of the waiting period for individual services, possibility of quick, easy and cheap traveling, and the globalization of knowledge. Dental tourism is a set (package) of services that includes a tourist offer, and provision of dental care services to a potential client, under terms that the client finds acceptable. Having in mind the possibilities and tourist potential of the Sarajevo region, and the local dentist offer with the favorable prices and high quality of service, it is plausible to assume that the Sarajevo regions possesses the necessary prerequisites to develop this form of tourism, similarly to Serbia or Croatia. This paper is based on the research conducted in September 2008, the results of which present an analysis of the business practices in the area of dental tourism in the countries of the region, as well as some other countries in the world, together with the analysis of possibilities and identification of factors affecting the development of dental tourism in the Sarajevo region, and the determining factors of a successful marketing strategy for (a group of) local health care service providers.*

KEY WORDS: *tourism development, dental tourism*

Health tourism

Health tourism (also known as health vacation or global health care) signifies the phenomenon of steady rise in the travel outside the borders of one's country in order to obtain health care. These services include both routine procedures and specialized services such as transplants, heart surgeries, esthetic surgeries, and dental services. The concept of health tourism is not a new one. History has witnessed examples of health resorts, air spas, and thermal health resorts that used to be very popular and visited by people who did not live in these regions, which can be considered as forerunners of health tourism.

In recent times, the factors that lead to a rise in the popularity of health tourism include extremely high prices of health care services in (mostly developed) countries, lack of choice for specific groups of health insurance beneficiaries, length of the waiting period for individual services, possibility of quick, easy and cheap traveling, and the globalization of knowledge in the area of health care services (Lagace, 2008) As patients are exposed to greater financial burdens resulting from higher co-payments and price transparency efforts, they are likely to seek low-cost treatment alternatives. This, in turn, has major implications for health care providers, health plans, employers, regulators and policymakers. Medical care in countries such as India, Thailand and Singapore can cost as little as 10 percent of the cost of comparable care in the United States. The price is remarkably lower for a variety of services,

¹ Boris Tihi, PhD in Economics, Full Professor, School of Economics in Sarajevo

² Almir Peštek, MA in Economics, Senior Teaching Assistant, School of Economics in Sarajevo

³ Sanid Vlajčić, BA in Economics, School of Economics in Sarajevo

and often includes airfare and a stay in a resort hotel. Thanks, in part, to these low-cost care alternatives which almost resemble a mini-vacation, interest in medical tourism is strong and positive.

From the market aspect, this segment is one of the fastest growing ones. (Chanda, 2002) Deloitte's 2008 "Survey of Health Care Consumers" explored the consumer's outlook on medical tourism. The survey discovered that medical tourism is set to explode in growth over the next three to five years. In 2007, an estimated 750.000 Americans traveled abroad for medical care; this number is anticipated to increase to six million by 2010. Nearly 40 percent of respondents to Deloitte's survey said they would travel outside the country for medical treatment, if the quality was comparable and the cost was cut in half. (Deloitte, 2008) By 2010 medical travel is expected to be a 40 billion USD business, with over 780 million patients seeking care outside their principal country of residence. (Research and Markets, 2008) According to the Federation of Indian Chambers of Commerce and Industry, the health-care market, which includes health insurance, is expected to expand by 2012 from 22,2 billion USD, or 5,2 percent of gross domestic product (GDP), to between 50 billion USD and 69 billion USD, or 6,2 and 8,5 percent of GDP (WHO, 2007). Concurrently, inbound medical tourism and medical tourism across state lines continue to present opportunities for specialty hubs offering treatments unavailable elsewhere in the world or in a community setting.

The level of medical tourism development world wide is further proved by the dilemma presented by Blouin in the WHO bulletin: „Should health tourism, that is patients traveling abroad to receive medical care, be promoted as an export industry?“ (Blouin, 2007) Leading the medical tourism industry is India, with Thailand, Malaysia and Singapore close behind. India's medical tourism industry grows around 30 per cent annually, thanks to an aggressive marketing plan that focuses on all-inclusive package tours. Countries such as Thailand, Malaysia, and Singapore have been taking advantage of low production costs to specialize in the export of hospital, medical, and dental services. They have begun to build up a significant export base in the health care trade. (Davies, Erixon, 2008)

Health tourism requires a multidisciplinary approach. Thus, besides the basic physicians' or dentists' services, it is also necessary to develop the support sector, which in turn implies logistic activities accompanying the service itself. The communication aspect is very important – from the very first contact with the patient until the patient transport to the destination and organization of his stay. It also requires a more active role of tourist associations in promoting this type of services, as well as of the state.

Countries are increasingly recognizing the significance of health tourism and are consequently developing programs prompting its growth (Deloitte, 2008; Research and Markets, 2008):

The Department of Health in the Philippines has produced a medical tourism guidebook that will be distributed throughout Europe.

The Korean medical tourism promotion policy has led to the planning of new medical institutions for international patients.

In Taiwan, the government has announced a \$318 million project to help further develop the country's medical services.

In Malaysia, the government has increased the allowed stay under a medical visa from 30 days to six months.

The government of Singapore has formed a collaboration of industry and governmental representatives to create a medical hub in Singapore.

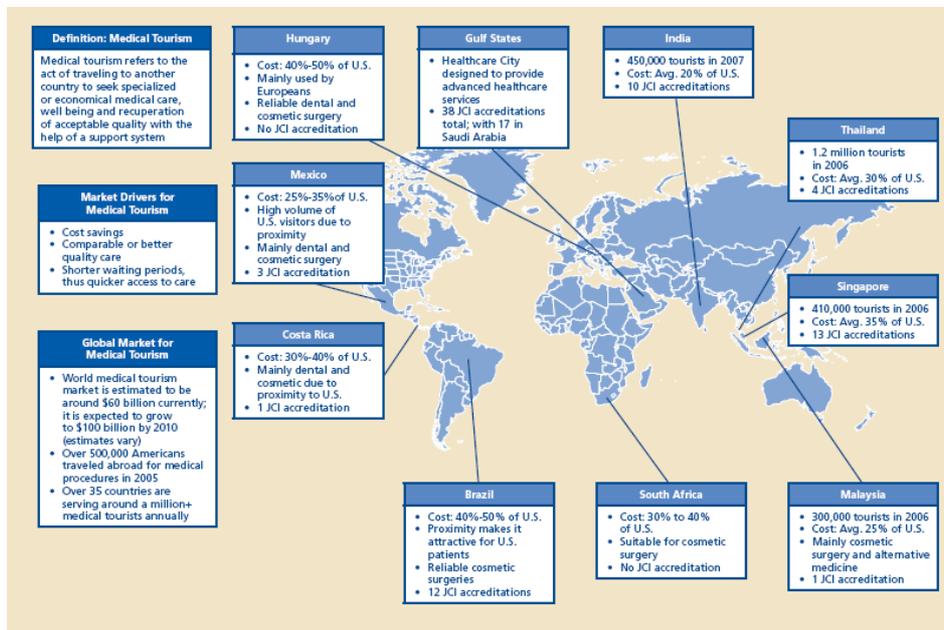
In India, healthcare will be accessible to areas that hardly have any medical facilities now as the Government plans to invest in the development of health centers in partnership with private healthcare companies.

The most common issue related to health tourism is the quality of the medical institution itself. In order to define quality and safety, the Joint Commission International (JCI) was launched by the Joint Commission in 1999 after a growing demand for a resource to effectively evaluate quality and safety. There are over 120 hospitals worldwide that are accredited through the JCI. Several other organizations, such as the International Society for Quality in Health Care (ISQUA), the National Committee for Quality Assurance (NCQA), the International Organization for Standardization (ISO), and the

European Society for Quality in Healthcare (ESQH), have taken steps to ensure that medical tourism facilities provide the highest-quality clinical care.

The following graph shows the main medical tourism hubs in the world.

Graph 1. Medical tourism hubs



Source: Deloitte Center for Health Solutions, 2008

Dental tourism

Dental tourism, as a branch of medical tourism, is also expanding. Dental tourists most often come from the developed Western countries, primarily from the USA, Canada, Japan, Great Britain, Ireland, Germany Austria and Italy. In the service provider segment, India is the superior leader on the global level. Some of the countries that also offer dental tourism services include Costa Rica, Mexico, Hungary, Poland, Romania, Lithuania, Croatia, and Serbia. Hungary is a leader in the area with cheap and reliable dental and cosmetic surgery. In general, Eastern Europe offers cheap and reliable medical, dental and cosmetic surgery. Eastern Europe mainly appeals to Western Europeans due to its convenient location and much shorter airplane flights with medical procedure costs much lower than in the west. The major draw is that these countries are convenient to European tourists by air or train. Another primary advantage is availability of procedures (no year-long waiting lists). It is also the fact that techniques and materials are equally available to everyone in today's global market, same as the high-quality staff. However, since prices can be 50% of the US or United Kingdom, that can also be a big advantage, but almost all patients that go to these destinations are Europeans with heavily state-supported health care systems.

The world's Dental Tourism survey, carried out by RevaHealth.com, leading medical and dental tourism search engine, reveals high levels of satisfaction among the dental tourists questioned, with an average satisfaction rating of 84%.

Dental tourism has been present in the surrounding countries for a few years already. Croatia and Serbia have a comparatively well-developed network of services offered to international patients, potential tourists, through various forms of communication. In most cases these are web presentations, although the development of this branch of tourism has also brought about stories on some of renowned TV channels (BBC or CNN) or in print media. The basic pre-requisite for dental tourism is the existence of website with multilingual contents, which is usually linked to a database of services in dental and medical tourism (e.g. oxygenzone.co.uk, treatmentabroad.net, revahealth.com i sl.). These web-

sites offer the full review of offered services with prices in the currency available to a potential patient (US dollar, British pound, or Euro). The website also frequently includes the comparison of dental service prices with other countries. Besides the information on health care services, many offices also offer the possibility of accommodation, transportation, travel organization, tourist routes, etc.

Almost every place offers the standard dental cleaning, gingivitis treatment, sealants and amalgam filling. The most frequent services are: apicoectomy, dental bondings, dental bridges, dental caps, dental fillings, dental implants, porcelain tooth crowns, root canal, teeth whitening, tooth contouring and tooth veneers.

As was already describe, service prices are one of the most important reasons for the development of dental tourism. The following table provides a comparative review of prices for some dental services in the countries in the region:

Table 1. Comparative review of dental services prices

	Great Britain	Poland	Hungary	Romania	Croatia	Serbia	Macedonia	Bosnia & Herzegovina
Tooth extraction	102	38	47	25	50	30		10
Dental fillings	140	38	72	30	100	30	45	15
Root canal			103	133	100	30		40
Porcelain crown	1050	450	507	225	300-350	120	255	100
Implant	2550	830	960	545	1000	700	960	600
Crown for implant	1050	450	507	225	300- 350	150	255	100
Ultrasonic teeth whitening	95	38		40	50	30		20
Digital X-ray Examination and diagnosis	95	free	free	15	free	20	free	5
	57	free	free	10	free	free	free	free

Source: Dental offices' websites, 2008

The table clearly shows that the range of prices is wide. In terms of service prices, it is the fact that Bosnia and Herzegovina (B-H) is one of the countries with low prices of dental services. The price of porcelain crown is among the lowest in the region, and the same is true of the prosthetic services. Besides, prices for dental implants are also very competitive.

Practice shows that international patients typically ask for more complex services such as prosthetics and implants, since these are the services that offer the greatest savings. Regardless of the economic rationale for the diversified, urgent and routine dentistry, the most attractive service segments are certainly prosthetics and implantology, which significantly affects the definition of the offer by dentist offices interested in this user segment.

Possibilities for dental tourism development in the Sarajevo region

Subject of research

A great number of dentists in the Sarajevo area provide dental services mainly to B-H citizens living outside B-H during the vacation period (June, July and August, December and January). The number is growing every year, mainly owing to the word-of-mouth promotion. Besides, a growing trend of the

number of international tourists is evident in the Sarajevo region. To illustrate this, in 2003 the number of tourists was 189.484, with 138.615 of them being international, while in 2007 there were 332.259 tourists, with 251.499 international ones, from as many as 78 countries. (Federal Statistics Institute, 2008). Tourists visiting Sarajevo are mainly those on their way to the Adriatic or Međugorje, and the average number of bed-nights in June 2008 was only 1,9. The international tourists mostly included those from Croatia, Slovenia, Serbia and Montenegro, Germany, Austria, Belgium, Denmark, France, USA, Turkey, etc. (Tourism association of Sarajevo Canton, 2008)

The obvious problem in their market appearance is that there is no systematically defined and clear approach to potential clients. Therefore, this paper is aimed at analyzing possibilities for a more intense development of dental tourism and essential elements of successful marketing strategies.

Methodology

The study was conducted on a sample of 20 significant dentist offices in the Sarajevo region selected from the list of Dentists' Chamber of the Federation B-H, according to which there are 160 dentists operating in the Sarajevo region. Selection criteria included the year of establishment, location and the number of employees. The study was focused on collecting qualitative data, and therefore in-depth interviews were conducted with respondents aided by a reminder developed by the author. The available secondary data were also analyzed. The research was conducted in September 2008.

Dental tourism in the Sarajevo region

Private dental practice in Sarajevo started to develop only in the late 1990s, and thus most private dental offices were opened in the period after 2000.

In most cases, dentist offices have only one permanently employed dentist who provides general dental services such as teeth treatment (caries removal, root canal, fillings, cleaning, extractions). A smaller number of offices employ two or more permanently employed dentists. Most dentists employed in the offices have years-long experience, and some of them are even teaching at the Faculty of Dentistry in Sarajevo. When necessary, offices also occasionally use services of external associates, and employ dental technicians.

The most frequent services include dental treatment, extractions, dentures and porcelain crowns, children dentistry, mouth diseases, oral surgery, implantology and X-ray. Most offices give warranty for their services.

Service prices are mostly at the level of prices prescribed by the Dentists' Chamber of the Federation B-H, and the respondents consider them affordable.

Permanently employed dentists (and external associates) specialize in certain fields of dentistry. In most cases, they are specialists in:

- oral surgery – specialized in more complicated procedures in teeth extraction and other dental services.
- orthodontists – specialists in straightening teeth by means of braces,
- pedodontics – specialists in children dentistry,
- periodontics – specialists in the diseases of mouth cavity and gums.
- maxillofacial surgeons – specialized in implantation,
- prosthodontics.

All the surveyed offices have employees that are able to communicate in English, while German, Italian and French were rarely listed.

All the offices have recently made investments into equipment. Most of them invested in purchasing new chairs and/or X-ray machine, and consequently about 30% offices own an X-ray machine. Besides, the respondents invested into instruments for treating root canals, electronic teeth imaging and teeth whitening. About 25% offices believe that their office has top equipment, and besides the de-

scribed devices and instruments they also own a video device that allows patients to watch the procedure, apex locators (a device for measuring root canal depth), or cordless earphones used by sensitive patients to listening to relaxing music. All the respondents use high-quality materials originating from the European Union.

The average use of office capacity is around 80%. If the need arises, particularly due to the dental tourism development, the offices see solutions through:

- intensified work by the currently employed dentists and technicians,
- extension of working hours and
- cooperation with other offices.

It can be inferred that most offices are willing to make new investments, both in technical and in human resources in case of inflow of more patients, and see only economic profitability as the main prerequisite for investments.

Over a half of surveyed offices own Internet presentations. The analysis of their websites established that the offices mainly provide basic information on the services they provide and experienced of employed dentists and staff. Only a small number of them display the service price list or information on the warranty for their work. Half of the analyzed Internet office presentations is bilingual (English and the local language). The offices believe that the web presentations are mostly useful, and consequently even the offices that do not have at the moment plan to develop it soon.

Respondents' experience in work with international patients is limited to individual, not organized visits or patients who are in Sarajevo on duty (SFOR forces, diplomats, foreign company offices), which can by no means considered dental tourism.

The offices are mostly informed on the possibilities of dental tourism as an extremely attractive tourist niche. What is important to say is that there already are some thoughts about and initiatives for a more active approach to this issue, which can be summed up through:

- general belief that there is a potential for dental tourism development,
- the quality of services provided by the offices and their prices are competitive,
- it is necessary to focus on countries from closer surroundings (Slovenia), and those where most B-H citizens live (Sweden),
- it is necessary to improve knowledge of advertising and marketing orientation in general,
- it is necessary to work on improving the on-line presence and online communication with patients (which includes sending results, X-rays, offers, estimates, additional information), which is crucial for the success of this form of services,
- it is necessary to network dentist offices so that could appear as a cluster in the market and offer a wide range of service packages, with prosthetics seen as a particular opportunity,
- it is necessary to work on networking accommodation and tourist capacities and developing the overall offer.

The study identified the following limiting factors in the development:

- well organized offices in Hungary, Serbia and Croatia,
- poor image of Bosnia and Herzegovina as a crisis region,
- transportation links with the region and European countries are not satisfactory: poor quality of roads, underdeveloped highway network, poorly developed railroad transport, a limited number of flights, particularly direct ones,
- complex surgical procedures require suitable support in the post-operative period.

Since it was established that there is a potential for dental tourism development, a systematic approach is needed, and framework suggestions can be defined for improving the possibilities for dental tourism development in the Sarajevo region:

- It requires a more intense involvement of cantonal authorities, regional development agency (SERDA), and Canton Tourist Association in the integration and promotion of services, as one of development priorities in tourism, which has already been identified as one of driving forces of the development of the region and B-H.

At the level of trade chamber, discussion should be initiated on the topic of dental tourism, aimed at networking better-equipped dentist offices into a cluster, which would appear together toward tourist agencies and potential clients. The cluster would thus provide a broader – more complete set of services and increase their quality by offering a higher value to the client. This is closely tied to the development of efficient online presentations of the cluster and its members, which would be included in the global health care web portals.

Through education programs, dentist offices' owners should improve their marketing and management skills in order to develop promotional programs and programs of services that would be accessible to dental tourists. Dentists must be familiar with world-wide achievements and good business practices of India, Thailand, Malaysia, etc.

The overall service should be networked with tourist agencies and transporters in B-H and abroad. The focus should be on the countries from closer surroundings, and those with the most B-H citizens.

References

- American Dental Association (2006): “The Phenomenon of Dental Tourism”, Chicago
- Blouin, Chantal (2007): “Trade policy and health: from conflicting interests to policy coherence”, *Bulletin of the World Health Organization*, 85:169-173
- Chanda, Rupa (2002): “Trade in health services”, *Bulletin of the World Health Organization*, 80 (2):158-163
- Davis, Lucy & Erixon, Frederik (2008): “The Health of Nations”, Fraser Institute, Fraser Forum 09/08, pp 28-31
- Deloitte US – Deloitte Center for Health Solutions (2008): “Medical Tourism: Consumers in Search of Value”, Washington DC
- Federalni Statistics Institute (2008): “Kanton Sarajevo u brojkanama”, Sarajevo
- Lagace, Martha (2007): “The Rise of Medical Tourism”, Harvard Business School, Boston
- <http://www.bigsmileinternational.com>
- <http://www.dental-klds.ba>
- <http://www.dental-serbia.com>
- <http://www.healism.com>
- <http://www.jointcommissioninternational.org>
- <http://www.medicalnewstoday.com>
- <http://www.oxygenzone.co.uk>
- <http://www.poliklinikanasasa.com>
- <http://www.polishmysmile.co.uk>
- <http://www.researchandmarkets.com>
- <http://www.revahealth.com>
- <http://www.sarajevo-tourism.com>
- <http://www.treatmentabroad.net>
- <http://www.trident.ro>
- <http://www.uniline.hr>
- <http://www.vitalpoint.hu>
- <http://www.who.org>
- <http://www.zagrebdental.com>

Minimum Wage and Average Wage in Slovakia

Renáta Vokorokosová¹

ABSTRACT – *The aim of this article is to outline the theoretical background and genesis of minimum wage and national average wage. It copes with the changes of minimum wage and national average wage under Slovak conditions. The share of minimum wage to national average wage is expressed by Kaitz index.*

KEY WORDS: *minimum wage, average national wage, labour market*

Introduction

Wages including minimum wage are always subject to many discussions within academicians, social partners, government members, politicians, inhabitants. Moreover, it concerns the interest of many international institutions e. g. ILO, OECD, Eurostat as wages represent one of other factors a country can compete on the world market. Wage levels affect wage structures, labour costs of entrepreneurs and employment status alike. There are different approaches as to the minimum wage changes and their impacts upon the employment or wage level of employed people. Majority of working papers come from the USA and some of them reject the postulates of economic theory of negative impacts of minimum wage increases upon the employment (Card, Katz, Krueger, 1993; Card, Krueger, 2000). The minimum wage is meant to be a floor that will support workers' basic needs. Critics of minimum wage institute argue that its changes might negatively influence the national competitiveness. This is possible unless the minimum wage increase is not being compensated by increased labour productivity in that sector, which might have been negatively influenced at the most through the minimum wage changes.

Theory of wages goes back to a just-wage doctrine introduced by Italian philosopher St Thomas Aquinas. Just wage should enable the recipient to live in a manner suited to the person's social position. This principle was followed by a subsistence theory supported by mercantilists further worked out by Adam Smith (1937) and refined by David Ricardo (2004). Mercantilists advocated low wages as factor of comparative advantages of a nation engaging in international trade. Wages above the subsistence level could be a restriction of workers' exertions. Adam Smith on the contrary was in favour of high wages just for improving labour productivity leading finally to the improvement of the wealth of nations. Ricardo argued that wages cannot long depart from the subsistence level. A modified view over the production process was there introduced by John Ramsay Culloch (2001) extending production in a plant beside labour with factors like water and machines. John Stuart Mill (2008) put an observation of a wage-fund theory in relation to labour supply and demand. A wage fund was determined by labour demand while labour supply by population of workers. A substantial part of his wage principles was devoted to trade unions and effects of education and training to population and demographic development. The wage theory was further on added by e.g. a doctrine of Sismonde de Sismondi when supporting state interventions into the economy.

Substance of wage indicates basic wage functions: economic (from the macroeconomic and microeconomic point of view), and a social one (while regulating minimum living standards). From the macroeconomic point of view there are such relations observed like balance of goods, money, and inflation, microeconomic function is closely related with costs of entrepreneurs.

¹ Renáta Vokorokosová, doc. Ing. Mgr. PhD., - Technical university of Košice, Faculty of Economics, Nemcovej 32, Košice, Slovakia.

According to the economic theory wage levels are subject to changes in price level, inflation, labour productivity and employment/unemployment status.

Our article copes with the matter of average wage in national economy and minimum wage aspects under Slovak conditions relating to labour productivity as one of other factors changing wage levels. The contents of the article are organized as follows. After introductory part there is a short genesis of minimum wage within international and domestic context, followed by data analysis including a description of average monthly wage on national level in selected economic branches. Final part concludes.

Genesis of minimum wage

Minimum wage history dates back to 19- th century in Japan. Minimum wage was put forth to guarantee a certain living standards of skilled, unskilled and trained labour forces (Barošová, 2004, 2008). Minimum wage as constitutional law came to being for the first time in Mexico in 1917. Further on was minimum wage approved in New Zealand in 1896, Australia in 1899 followed by Great Britain in 1909, in the USA in 1938, France in 1950 etc. Within the EU the institute of minimum wage is in entire competence of individual EU state members. There are 20 countries of the EU that introduced a certain form of national minimum wage (mandated by law or through collective bargaining).

Slovakia puts a uniform minimum wage mandatory within all economic branches since 1996. Minimum wage is thus governed by the Law of Minimum wage which among others defines minimum wage, and mechanism necessary for its changes. Social partners are to negotiate about the adjustment of the minimum wage for a period of the forth coming year. Based upon this mechanism minimum wage is to be increased owing to the changes in average national wage in Slovakia of the previous year.

Data analysis

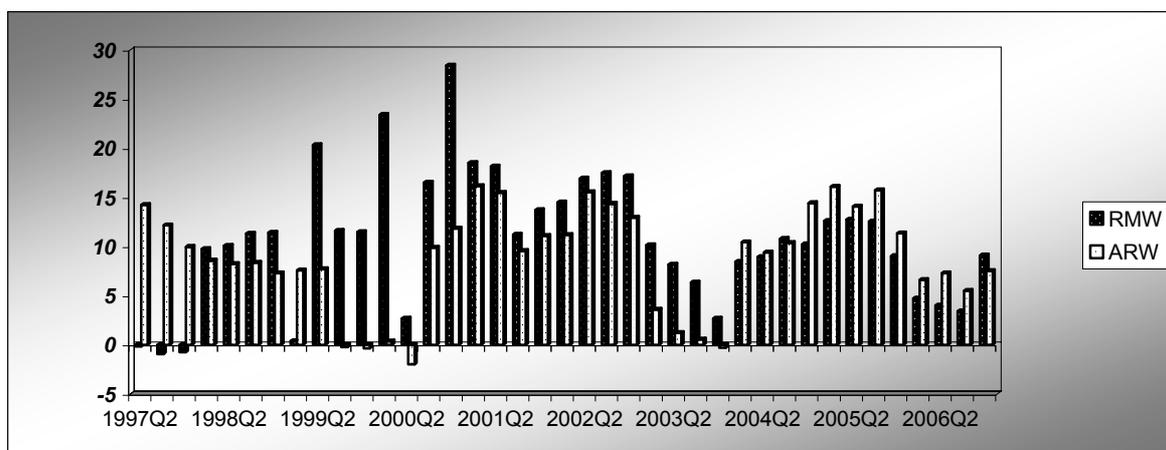
Data necessary for our analysis of minimum wage and average wage in Slovak economy were taken from the databases of the Statistical office of the Slovak Republic (SOSR), involving labour productivity in the industry of SR. Information concerning monthly average wages in selected economic branches were converted to euro and derived from the databases of the SOSR.

This part of article starts with presentation of minimum wage and average wage changes in Slovakia (graph 1), followed by depicting relations between minimum wage, living wage and average wage in SR. In addition to the minimum wage changes there are graphs (2, 3) describing growth of average monthly wages in selected branches of Slovakia. Based upon the theoretical assumptions, that a faster productivity growth leads to higher real wages and improved living standards further on there is an analysis of the relation between wages and labour productivity in the industry of SR.

The following graph and table (1) describe the status of the minimum wage, average national wage and Kaitz index (Kaitz, 1970) expressed as share of minimum wage upon average wage in national economy. Graph 1 indicates year to year changes of real minimum wage and real average national wage in Slovakia. Average national wage was marked by negative changes in the year 1999 Q3 and Q4 and 2000 Q2 (ARW – average real wage declined by about 2 %) compared to the same quarters of previous years due to the price index increases in corresponding quarters. Similarly real minimum wage changes tend to copy the trend of consumer price index and changes in average national wage alike.

At present the actual minimum wage level achieves 8 100 SK that is about 270 Euro.

Graph 1 Minimum wage and average national wage changes (%) in SR (quarter compared to corresponding quarter of the previous year).



Reference: calculations from data of the SOSR.

Highest contributions of average national wage were achieved in the Q4 of observed period due to higher compensations to employees at the end of a year. From this point of view it was required to make a comparison of each quarter to the same quarter of the previous year.

Table 1. Relations between minimum wage and living wage (LW) of a person and average monthly wage in national economy of Slovakia (σ wage).

Year	Minimum wage (MW)			Share of netto MW to LW in %	Share of brutto MW to σ wage (Kaitz index) in %
	brutto	netto*	Valid since		
1991	2 000	1 603	1.2.	94,3	53,1
1992	2 200	1 740	1.1.	102,4	48,4
1993	2 450	2 126	1.10.	107,4	45,6
1994	2 450	2 126		107,4	38,9
1995	2 450	2 126		97,5	34,1
1996	2 700	2 316	1.4.	106,2	33,1
1997	2 700	2 316		96,1	29,3
1998	3 000	2 550	1.1.	85,0	30,0
1999	3 600	3 093	1.4.	95,8	33,6
	4 000	3 484	1.1.	107,9	35,0
2000	4 400	3 785	1.10.	108,5	38,5
2001	4 920	4 163	1.10.	109,8	39,8
2002	5 570	4 693	1.10.	119,4	41,2
2003	6 080	5 095	1.10.	121,0	42,3
2004	6 500	5 629	1.10.	122,9	41,1
2005	6 900	5 975	1.10.	126,3	39,9
2006	7 600	6 581	1.10.	132,1	40,5
2007	8 100	7 014	1.10.	137,7	40,2

Reference: Barošová, 2008. MW, LM: 1991– 1992 v Czechoslovak crowns, since 1993 v SK

* From MW of a childfree individual

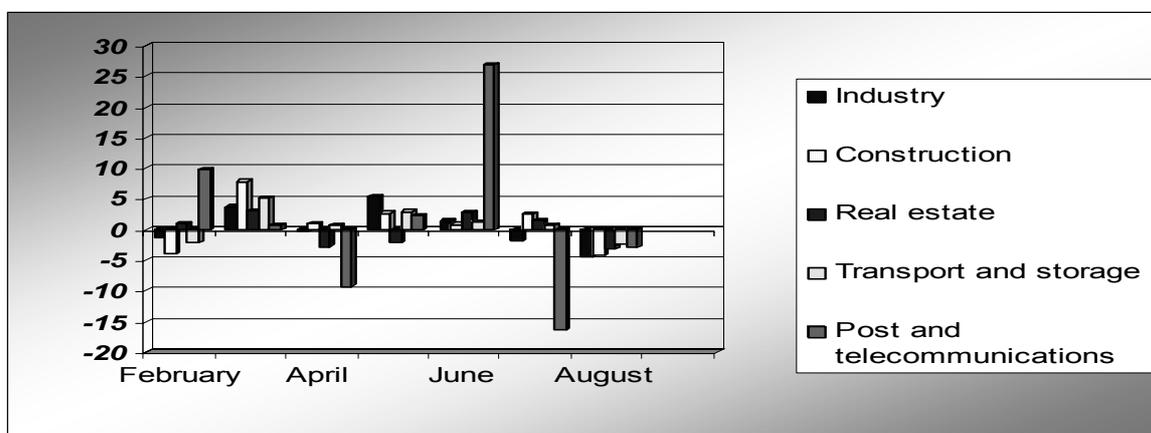
A new mechanism specified in the Law of minimum wage in Slovakia being in power at present enables to adjust the level of minimum wage to the changes of the average national wage of the previous year so that the changes of the minimum wage will copy the trend of average national wage with a

year lag. From this point of view studies analyzing minimum wage and e.g. identifying the impact of minimum wage changes upon the employment status² will recognize this present trend.

During the observed period of time (1991 to 2007) the absolute money level of the monthly minimum wage in SR increased from 2000 Sk to 8 100 Sk. Table 1 presents the % relation between minimum wage and average wage in national economy, as well as the % relation of minimum wage to living wage in Slovakia.

At the beginning declining tendency of minimum wage on the average national wage was remarkable (in 1991 it was about 53.1 % while in 1997 about 29.3 %), later with some slight changes of growth and decline. However, at present the share of minimum wage upon average wage results in about 40 %. As to the living wage, there are more frequent changes (increases and declines); however, in 2007 the index of minimum wage to living wage achieved more than 137 %.

Graph 2. Month-on-previous-month % changes of average wages in observed economic branches in euro in Slovakia.



Reference: calculations from data of the SOSR.

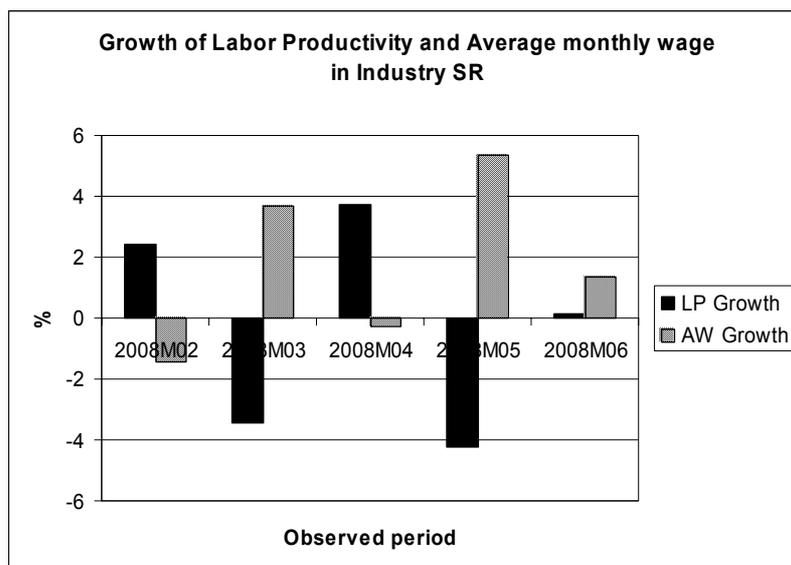
Values of average nominal monthly wages in Slovakian economic branches in 2008 indicate the present situation on the labour market of Slovakia. The highest values of average nominal monthly wages reflect the demand of labour forces mainly in post and telecommunication sector. These sectors are followed by industry, real estate, construction. However, all sectors under review are effected by present financial crises already indicated in august 2008. Information technology (Puchá, 2007, Ratman, 2007, Urbanska, 2008) and telecommunication services are the preferable sectors in most economies while increased demand for corresponding labour force relates to the wages people can earn.

Further on we analysed the sector of industry of SR. Changes of labour productivity and average monthly wage in industry of SR are depicted in the following graph.

There is an opposite development of labour productivity and monthly wage in industry of Slovakia. When e. g. in February 2008 the labour productivity growth achieved more than 2%, the average monthly wage growth was negative.

² As far as the impact of the minimum wage changes upon the total employment of Slovakia is concerned, a study worked in 2008 (Vokorokosová, 2008) shows that 1 % increase in Kaitz index might result in about 0.108 % decline in total employment status.

A negative impact of minimum wage changes might have been more expected as to the qualification of labour force, as one percent increase of Kaitz index results in 0.308 % decline of employment of workers with basic qualification (Vokorokosová, 2008).

Graph 3. Changes of labor productivity and average monthly wage in industry of SR.

Reference: calculations from data of the SOSR.

Positive contributions of labour productivity to the wage levels are to be expected with some time delay so that they fully magnify themselves in a long run.

Economic theory argues that faster productivity growth leads to higher wages and improved living standards and that increasing labour productivity is a key source of economic growth. However, productivity changes are determined by cyclical and non cyclical factors³. If economic activity is intensive, business entities tend to actively apply their resources. On the other hand, if the economy is slacking, companies are adjusting their capacities to lower productivity. A relationship between productivity and wages is to be specified according to a type of a sector, namely tradable⁴ and non tradable sectors with higher productivity growth in the tradable sector that pushes prices and wages up in the non tradable sector.

Labour productivity if being fast and sustained increases wages and living standard without altering competitiveness. Higher wages are thus a question of higher labour costs and higher labour productivity. To study the impact of higher wages upon the competitiveness many working studies distinguish between the raw cost of labour (wages and non wage components of labour costs), and productivity – adjusted wage measures, which adjust labour costs to labour productivity (Vokorokosová, 2008) since labour forces can be more productive because they have more and better working conditions, equipment, or because the technology they work with is more efficient.

Conclusion

Owing to Lisbon strategy which aims to make the EU "the most dynamic and competitive knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion, and respect for the environment by 2010 the labour market comes to the limelight of corresponding economic subjects. It is a challenge that calls not only for creating more jobs, but even better quality of working places resulting in increased labour productivity and higher wages of workers. This calls for increased demand of skilled labour, free mobility over market of labour,

³ The non cyclical components of productivity are e. g. Technical changes, innovations. These new technologies accelerate the production, save costs, facilitate business activities.

⁴ Tradable sector according NACE classification (classification of economic activities in the European Community) involves: C – mining and quarrying, D – manufacturing, E – electricity, gas and water supply.

flexible legislation, etc. So is the young skilled labour force with foreign language knowledge requested on the labour market more and more.

However, the labour market is nowadays characterized by demographic aging - the aging of population. There are remarkable shifts in the age distribution of a population toward older ages. These demographic changes characterize not only Slovakia but other countries as well.

This article is a part of scientific research area worked out under project VEGA 1/3815/06 and international project V4 30810004-IVF.

References

- Barošová, Margita. *Mechanizmus úpravy minimálnej mzdy*. Stredisko pre štúdium práce a rodiny, Bratislava, 2004.
- Barošová, Margita. *Fungovanie a vývoj minimálnej mzdy v Slovenskej republike*. FÓRUM SOCIÁLNI POLITIKY, 5/2008, Praha, 2008.
- Card, David - Krueger, Alan, B. Minimum Wage and Employment: Case study of the Fast-Food Industry in New Jersey and Pennsylvania: Replay. *American Economic Review*, 2000.
- Card, David - Lawrence F. Katz - Alan B. Krueger. *An Evaluation of Recent Evidence on the Employment Effects of Minimum and Subminimum Wages*. NBER Working Paper No. 4528, 1993.
- Kaitz, Hyman. *Experience in the past: The national minimum*. In Youth Unemployment and minimum wages. Bulletin 1657, U. S. Department of Labor, Bureau of Labor Statistics, 1970.
- Mac Culloch, John Ramsay. *Principles of Political Economy: with a Sketch of the Rise and Progress of the Science: Essay on Interest and Value of Money by John Locke*. Adamant Media Corporation, 2001.
- Mill, John, Stuart. *On Liberty*. Oxford University Press, 2008.
- Puchá, Nikoleta. *Faktoring a forfaiting – alternatívy financovania malých a stredných podnikov v novom podnikateľskom prostredí*. Bratislava: Poradca, č.11/2007.
- Ratman, Krzysztof. *Formulation and implementation of Product Marketing Strategies in the Enterprise. (Literature review)*. In: Interdisciplinary Approach to Sustainable Development. Ed. by Ralph Lescroart, Piotr Pachura and Tomasz Nitkiewicz.; Virton, ISI Pierrard HEC du Luxemburg; 2007.
- Ricardo, David. *On the Principles of Political Economy and Taxation*. Dover Publications, 2004.
- Smith, Adam. *Wealth of Nations*. New York: Random House, 1937.
- Urbanska, Jolanta. *Types of intermediaries in modern distribution channels*. In: micro CAD 2008. Miskolc: International Scientific Conference, 2008.
- Vokorokosová, Renáta. *Minimálna mzda a konkurencieschopnosť*. Košice, elfa, 2008.
- Vokorokosová, Renáta. *Unit Labor Costs – a Factor of Competitiveness? A Case of Slovakia*. *Národohospodársky obzor*, roč. 8, 1-2/2008, Brno, 2008.

The Image of Leasing Services as a Factor in Increasing Investment Activity in Countries in Transition

Slobodan Vujić¹, Saša Vujić²

ABSTRACT – *The aim of this paper is to analyse the impact of the image of leasing services on the increase in investment activity in transition countries, using the example of Bosnia and Herzegovina. For a number of reasons, many investors are not in a position to access or use bank loans and face a complex problem in trying to realize planned investment.*

If we define image as a general idea of leasing services and the associated process and conditions that customers have, based on prior experience, attitudes, information, and opinion, then it is realistic to expect the investment cycle to be rounded off by use of leasing arrangements. Leasing services' image is based on: the swift processing of requests, simple paperwork, uncomplicated security for loan repayment, a negotiable repayment schedule, the high likelihood that financing will be approved, and the quality of services and operations. This aim of this paper is to illustrate the elements that go to make up leasing's image, why leasing companies have a good image, and how it can be improved even further. The development of leasing companies' image is closely connected to the growth of investment activities in countries in transition, where the two types of activity reinforce each other.

To demonstrate these theories we present primary research carried out amongst the customers of leasing services. A formal analysis confirms which factors have a positive impact on leasing services' image and to what degree.

KEY WORDS: *leasing services, image, image factors, investment activities*

Introduction

“Image can be defined as the realization of images of a company, product, person, process, or situation that an individual shapes based on the overall previous experience, attitudes, opinions, and views that are more or less in accordance with the actual features.”³ “Viewed overall, a series of perspectives influences the creation of image. Image is a general perception of a product or company, created based on information, experiences, and previous consumption. Image is a very important concept in contemporary marketing, since the success of the whole company, a new product, competitive relations, prices, etc. depend on it.”⁴ Thus, image is a set of opinions, attitudes, and impressions that others have about us. We can speak about the image of a company, person, product, store, etc. In our example we will primarily discuss the image of VB LEASING BH Sarajevo.

Leasing can be defined as a contracted relation between two parties, the beneficiary and owner of the asset that is the subject of leasing arrangement, where the beneficiary acquires the right to use the assets and in the same time takes the obligation to make a series of periodical payments to the owner, i.e. the leasing company over the lease period.⁵ A leasing service is a service related to the insurance of monetary resources in acquiring necessary equipment. Essentially, a leasing company buys the equipment and pays the supplier for it. The purchased equipment was previously chosen by the lessee, who rents it from the leasing company and pays monthly annuities for the renting service to the leasing company.

¹ Slobodan Vujić M.Sc., General Manager, VB Leasing BH

² Saša Vujić, M.Sc., Senior Fellow Lecturer, Sarajevo University Economics Faculty,

³ Tanja Kesić, “Integrirana marketinška komunikacija”, Zagreb, 2003., *Opinio*, p. 102

⁴ Editors: B. Tihi, M. Čičić, N. Brkić, “Marketing”, Sarajevo 2006., Ekonomski fakultet, p. 169

⁵ Mr. Saša Tvrković, “Finansiranje lizing aranžmanima”, Sarajevo 2002., *Revicon*, p. 13

“In order to have a successful business in modern conditions, it is necessary to implement the image strategy by means of guided impression (the strategy used by a company in order to influence the way in which it will be experienced by the public, and starts from what the company is, what it should be, and how to present it). The aim of this strategy is to better position the company image in the market, i.e. in consumers’ minds.”⁶

Kinds of leasing services

In the world, the leasing business has been known for years already, while in B-H it has been developing only for the past seven to eight years. The first company specialized in leasing was founded in 1952 in the USA, while in Europe it happened about ten years later.

‘Lease’ is an English word and means renting, conveying property for a specified period. Essentially, the leasing beneficiary – lessee selects the leased subject independently, and the leasing service provider – lessor purchases it, conveys it to lessee for use over an agreed period for a specified reimbursement. Here we have a distinction between the ownership over the asset (it remains in the ownership of the leasing company) and its use (it is used by the lessee). In this way, the user of asset exploits it without engaging his own funds for acquisition, and without acquiring the ownership over the asset.

After the terms of lease has expired, the lessee returns the asset to the leasing company or, according to a different arrangement, he can buy it out or make a new leasing contract and continue using the asset over a new agreed period, paying the contracted amount.

There are two basic types of leasing: operating and finance leasing.⁷

Operating leasing

In operating leasing, there is no transfer of ownership over the subject of leasing. The lessee selects the subject of leasing himself, and pays the contracted compensation. After the contracted lease period has expired, the lessee returns the specified property (car, machine, piece of equipment, etc.) to the lessor, who can then sell it or lease it again in accordance with the remaining value of the property. In the course of operating leasing period, the property is owned by the leasing company, and it is bound to calculate the amortization at their own expense, The costs of using and maintaining the asset are born by the lessee. The lease installments are treated as a cost by the lessee, and as income by the lessor.

A special variety of operating leasing is lease with the agreed remaining value at the end of the lease period. Such a distribution of installments stimulated the lessee to accept the lease, since all the installments except the last one are very low. In this way of calculating installments, the lessor transfers interest to the last installment and, as a rule, this system is more expensive for the lessee; however, many buyers accept it in order to postpone the higher installment till the end, when they plan to achieve profit with the asset. In most cases, the lessee “shifts” the contracted remaining value at the end of the period as the down payment for a new leasing arrangement, and in this way clients develop long-term ties with individual leasing companies.

Finance leasing

In this form of leasing, the initial contract already provides for taking up the ownership over the subject of the lease, although upon the expiration of contracted lease period. The lessee pays monthly compensation, and records the asset in their inventory and calculated amortization on it. The lessor keeps the right of ownership over the asset until the last installment, and this serves as guarantee for

⁶ Mirjana Babić, „Korporativni imidž“, Rijeka 2004., Adamić, p. 22

⁷ For more details about kinds of leasing and their characteristics, see: Southeast Europe Enterprise Development (SEED), seminar “Financijski leasing”, Sarajevo, 2004

payment of all the installments. The lessor does not calculate asset amortization, and records the monthly installments as income, while it is recorded as operating cost by the lessee.

Basic features of operating and finance leasing can be shown and compared by a table.

#	Feature	Finance Leasing	Operating Leasing
1.	Transfer of ownership - legally	YES	NO
2.	Transfer of economic ownership	YES	YES
3.	Calculation of amortization	LESSEE	LESSOR
4.	Credit risk	YES	YES
5.	Exploitation costs	LESSEE	LESSEE
6.	Additional services	NO	POSSIBLE
7.	Risk to the leased property	NO	YES

There are other types of leasing which are basically operating or finance leasing, but with some additional characteristics – variations, such as:

Sales leasing. This type of leasing is based on the lessor's gaining additional profit at the moment of making the arrangement.

Sales and lease back. If a company wants to improve its current liquidity, it can sell its asset to a leasing company for cash, and then rent it from the leasing company and keeps using it pursuant to the leasing contract.

Leveraged leasing. In this form of leasing, the lessor uses a loan from the asset manufacturer, and gives the lease contract as collateral.

Seasonal leasing. This type of leasing can be used when after paying the first or several installment, the payment of the following few installments is postponed due to seasonal influences, but without paying penalties or breaching the lease contract. When the seasonal influences (the break in installment payments) have stopped, the lessee continues with regular payments of contracted installments.

Image of leasing company

In modern business, the significance of company image is increasing since it helps sales, and in many cases it is decisive for sales, particularly in those when offers are similar and of similar quality, and it is nuances that make the buyer decide whether to buy one product or another, i.e. satisfy their needs with products of our or another company. "In modern service marketing business, positive image is more significant than product marketing, since companies try to transform it from a commodity into a product."⁸ Company image is affected by a number of factors. We can influence most, but not all of them in order to improve the company image.

A leasing company image is the overall image that includes attitudes, opinions, experiences, beliefs, prejudice and feelings of the company by traders (sellers), buyers – legal persons, buyers – natural persons, potential buyers (companies and individuals), as well as suppliers, bankers and public overall.

There are a few companies in B-H involved in the leasing business. Results of research into the overall company based on collecting primary data conducted by the author have revealed that the following five factors have the greatest significance for the overall image of VB LEASING BH:

- speed in processing applications,
- public relations,
- simple procedures and forms,
- professionalism, and
- grace period.

⁸ Sak Onkvist, John J. Shaw, „Service marketing: image and competition” San Jose State University, Business Horizons 1989

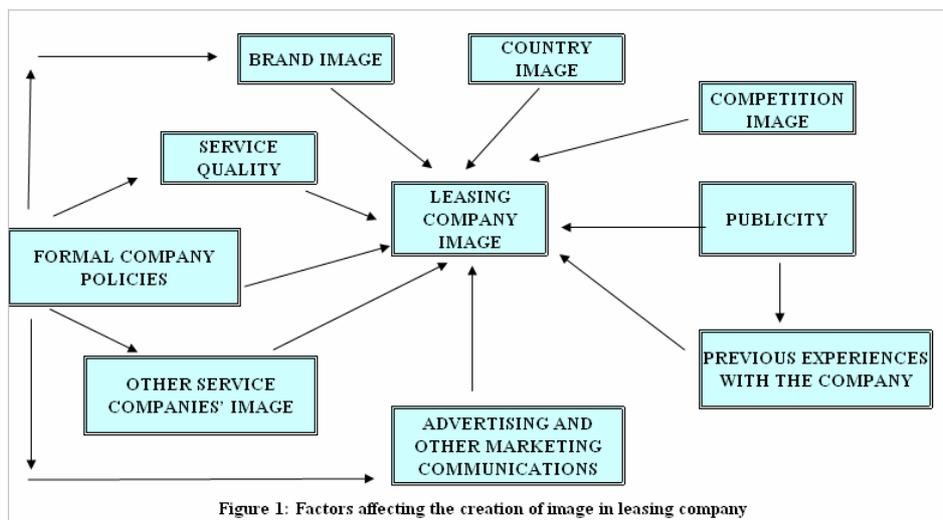


Figure 1: Factors affecting the creation of image in leasing company

The research of the overall image of VB LEASING BH also revealed other factors that significantly influence the overall company image, and these could also be used as an advertising message:

- longest payment period,
- the smallest number of guarantors,
- highest-quality service,
- simplest collateral,
- lowest service price, and
- greatest number of additional services – list them.

The good, high-quality and favourable VB LEASING BH image affects:

- increase in service value,
- accurate positioning of VB LEASING, which cannot be confused with similar messages by competition, and
- affects customers' awareness and perception that they will resolve their problems by using VB LEASING BH services.

In this way, a leasing company presents itself in public and distinguishes itself from competition. With respect to the significance of image in doing business, the leasing company manages it. In leasing companies, image management is achieved through following stages:

- analysis of the present image conditions,
- analysis of present conditions in actual business,
- establishing differences (if there are any),
- setting alternative objectives and assessments,
- making the final decision on image objectives,
- conducting activities in actual operations,
- conducting activities in communication appearances,
- control of the achievement of plans and planned image-related goals, and
- possible corrections in achieving the set plans and image goals of the leasing company.

Results of research into the overall company image

The significance of individual factors for the overall company image is ranked according to the number of responses (in percentages) classified into two groups: the first group (important, very important and extremely important) and the second group (not important or somewhat important).

The order of significance of individual factors for the overall company VB LEASING BH image is as follows:⁹

Order	Factor	First Group	Second Group
		important, very important, extremely important	Not important, somewhat important
1.	Fast application processing	100%	0%
2.	Public relations	100%	0%
3.	Simple procedures and forms	100%	0%
4.	Professionalism	100%	0%
5.	Grace period	100%	0%
6.	Duration of payment	98,9%	1,1%
7.	Number of guarantors	98,9%	1,1%
8.	Service quality	98,6%	1,4%
9.	Marketing communications	97,8%	2,2%
10.	Type of collateral	97,8%	2,2%
11.	Price of services	92,5%	7,5%
12.	Innovation (product in accordance with time)	92,0%	8,0%
13.	Additional services	90,2%	9,8%

Based on the table, the order of significance of individual factors for the overall VB LEASING BH image can be classified into three groups:

Factors in the first group, that have the greatest significance for the overall VB LEASING BH image are:

Speed of application processing. (All the respondents attached an extreme significance to this issue. 37.2% respondents consider this issue as important, 40.4% considers it very important, and 22.4% as extremely important. No respondent considers the issue as not or somewhat important.)

Public relations. Responses to this questions are following: 41.9% considers it important, 37.9% very important and 20.2% extremely important. Again, no respondent answered that it is not or somewhat important.)

Simple procedures and forms. (Out of all respondents, 37.2% said that this issue is important, 31.0% that it is very important and 31.8% that it is extremely important.)

Professionalism. (As many as 51.6% respondents consider this issue important, 35.0% very important and 13.4% extremely important.)

Grace period. (36.8% respondents stated that this issue important, 33.2% that it is very important and 30.0% that it is extremely important.)

Factors in the second group, which have an average significance for image, include:

Payment period. (4% respondents stated that this issue is not important and 0.7% that it is somewhat important. All the others attached extreme significance to the issue: 46.2% believes it is important, 32.1% it is very important and 20.6% it is extremely important.)

The number of guarantors (16.6% stated that this issue is important, 41.9% that it is very important, and 40.4% that it is extremely important. However, only 0.7% stated that the issue is not important and 0.4% that it is somewhat important.)

⁹ Data for this table are taken from a research conducted by the author.

Service quality (56.7% respondents stated it is important, 27.5% that it is very important, and 14.4% that it is extremely important. On the contrary, a very small number of them stated it is not important (0.7%) or somewhat important (0.7%).

Marketing communications (Most respondents believes this issue is particularly significant since 48.4% stated it is important, 28.9% that it is very important, and 20.5% that it is extremely important. A very small number of respondents stated that it is not important (1.1%) or somewhat important (1.1%).

Kind of collateral. (55.6% respondents stated this issue is important, 26.3% that it is very important, and 15.9% that it is extremely important. Only 1.1% claims that it is not important and 1.1% that it is somewhat important.)

Factors in the third group. Which have comparatively low effect on image include:

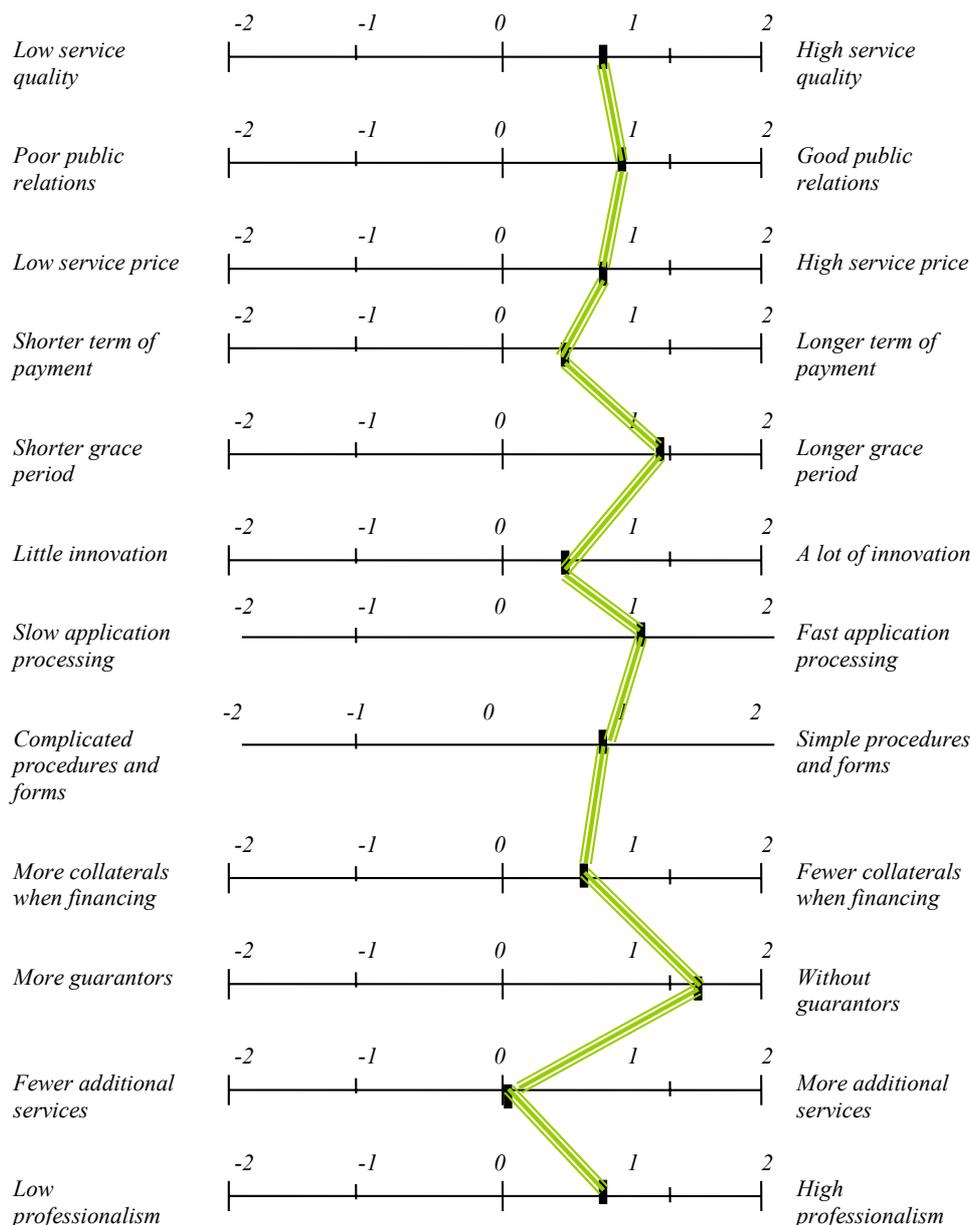
Price of the service. With respect to the significance of this factor, 41.2% respondents stated it is important, 30.4% that it is very important and 20.9% that it is extremely important. On the other hand, 3.6% stated that it is not important, and 3.9% that it is slightly important.

Innovation (the product that fits the time). 61.7% stated this factor is important, 28.9% that it is very important, and 1.4% that it is extremely important. As opposed to this, 2.9% considers this factor as not important and 5.1% as somewhat important.

Additional services. 46.2% respondents assessed this factor as important, 36.8% as very important, and 7.2% as extremely important while 4.7% assessed it is not important and 5.1% as somewhat important.

On a scale from 1 to 5, where 1 is not important and 5 important, after a survey of all the three target groups (sellers, buyers – legal persons, and buyers – natural persons), a total average value of 3.62% was obtained, which looks as follows on a number scale:

T24	Average
Service quality	3,54
Public relations	3,78
Marketing communication	3,67
Price of services	3,31
Duration of payment	3,72
Grace period	3,93
Innovation (product in accordance with time)	3,21
Fast application processing	3,85
Simple procedures and forms	3,64
Type of collateral (mortgage, guarantors, etc.)	3,55
Number of guarantors	4,21
Additional services	3,00
Professionalism	3,62
TOTAL	47,02
AVERAGE VALUE	3,62



Connection between a leasing company image and an increase in investment activity

At first sight, the question arises as to what is the connection between a leasing company image and the increase in investment activities in transition countries, on the example of B-H. The answer to this question is indirectly provided in this paper, and we will now list the elements of the connection and describe the way in which a leasing company's image increases investment activities.

Partners believe that the professionalism of a leasing company is extremely important, and in complex investment processes such professionalism indicates that a foreign partner will find it easier to get involved in investment procedures, since they are convinced that the investment construction will be completed successfully. In this way, a direct cause-effect connection between a leasing company's image and the investment activity is established.

A similar connection was observed between the speed of application processing and investment activities. The very fact that leasing companies resolve the issue of financing speedily and efficiently encourages investors to make faster decisions in favour of investments.

The connection between leasing companies' image and investment activities can also be observed in clients' (investors') responses that simple procedures and forms for lease contracts are extremely important. Knowing this, investors are more likely to decide in favour of starting an investment activity.

Besides, financing with the possibility of grace period are directly correlated with investors' willingness to enter an investment cycle, since they can be granted a grace period in paying the lease until they start making use of the investment.

The research observed and proved the connection between the leasing company and increase in investment activity.

The significance of leasing contract in the increase of investment activities will increase further due to the financial market crises and decrease in lending potentials aimed at investment activities.

However, based on all the affirmative answers on the connections between a leasing company's image and the increase in investment activities, in the B-H example we are witnessing the slowed-down growth of investment activities. Although it is not a topic of this paper, it can be claimed that all the favourable influences of leasing companies' image on the growth of investment activities are neutralized by other negative processes that slow down this process. The negative factors may include political instability in B-H, slow resolving of property relations, slow obtaining or various permits, particularly the building ones, urban-development approvals, etc.

One of the biggest negative influences on the decrease in investment activities is also the fact that B-H financial market, by the structure of ownership and sources of re-financing is fully in the hands of international corporations, which in turn bring direct "sensitivity" to all the crises acute on the world scale. One of the latest crisis is a good example of the degree to which the B-H financial market is connected to and dependent on the situation and conditions of the world financial market. In a very short period of time, the liquidity problem in the inter-bank market "spilled over" to the B-H market, and brought about disturbance in the financial market, from a "more conservative" approach to the complete cessation of financing of some leasing companies.

Based on the improvement of image of leasing companies, the investment activity will also increase, which ultimately leads to:

- increase in employment
- increase in the scope of manufacturing
- increase in exports and decrease in imports
- decrease in trade deficit
- decrease in poverty, and
- increase in GNP per capita.

Conclusion

IT has already been claimed that a leasing company image is decisive in the supply and sales of leasing contracts, For this reason, it is extremely important for leasing companies to improve their image so that existing and potential buyers could require and demand the resolution of their problems with financing the purchases of cars, machinery, equipment etc., through contracts with a given leasing company. Generally, leasing services have features similar to other types of services, although there are some distinguishing features. They are manifest in resolving the problem of financing the purchase of various capital assets, since in the stage of the lack of available monetary resources companies can acquire an asset they need without significant engagement of revolving capital. In this way, companies investing in capital assets can resolve it in another way as well, without spending monetary resources, which they can use to acquire raw materials or improve current liquidity.

The paper proves the connection between a leasing company image and increase in investment activities, although it also points to elements that neutralize, or slow down investment activities.

Compared to other transition countries, B-H has poor results in attracting FDI. Potential investors, both local and international, consider the risk of doing business in B-H too high. Factors that present a further obstacle for the development of private sector include the non-existence of a single economic area, too many state interventions into economy, poor implementation of laws, non-existence of sound and modern financial sector and fragile public financing.

Local investors that start local businesses most often understand the environment they are in, but are not financially strong enough for investment undertakings. Besides, in many cases the overall level of know how in B-H is a limiting factor for attracting more investment activities.

References

- Babić Mirjana, „Korporativni imidž“, Rijeka 2004., Adamić, p. 22
Kesić Tanja, „Integrirana marketinška komunikacija“, Zagreb, 2003., Opinio, p. 102
Onkvist Sak, Shaw J. John, „Service marketing: image and competition“ San Jose State University, Business Horizons 1989
Tihi B., Čičić M., Brkić N., „Marketing“, Sarajevo 2006., Ekonomski fakultet, p.169
Tvrtković Saša, „Finansiranje lizing aranžmanima“, Sarajevo 2002., Revicon, p.13

The Free Movement of Capital Under the Stabilisation and Association Agreement

Jovan Zafiroski¹

ABSTRACT – *The free movement of capital is an essential condition for the achievement of a full economic integration in Europe and particularly for the creation of the European Economic and Monetary Union. For these reasons, it is perceived as one of the fundamental freedoms in the European Union together with the free movement of peoples, goods and services. The aim of this text is to explore the notion of the free movement of capital in the framework of the Stabilisation and Association Agreement which is the key element for a preparation of the Western Balkans countries in the process of a complete integration in the European Union and its Internal Market in particular. Thus, after a short introduction, the significance of the free movement of capital in the European Union and the reasoning of the European Court of Justice concerning this issue is given. Secondly, the provisions of the Stabilisation and Association Agreement signed with the Western Balkans countries relating to the free movement of capital are analysed. Thirdly, the Commission's estimation about the achievement of a certain degree of free movement of capital in the countries in the process of Stabilisation and Association is examined considering the wording of the recent reports concerning the progress in the Stabilization and Association Process.*

KEY WORDS: *free movement of capital, Western Balkans countries, Stabilisation and Association Agreement, Stabilisation and Association Process*

Introduction

The free movement of capital is an essential condition for the achievement of a full economic integration in Europe. It is perceived as one of the fundamental freedoms in the European Union together with the free movement of peoples, goods and services. The rights relating to movement of goods, workers and services are useless without freedom of movement of capital. Development of an integrated financial market depends on two basic conditions. Firstly, it depends on the elimination on all the legal and technical barriers relating to cross-border services and the right on establishment. Secondly, a legal framework for free circulation of capital is necessary. Moreover, the free movement of capital is crucial for the creation of the European Economic and Monetary Union.

The aim of this text is to explore the notion of the free movement of capital in the framework of the Stabilisation and Association Agreement (hereinafter SAA). It is the key element of the Stabilization and Association Process which is used as a preparation instrument for the Western Balkans countries towards complete integration in the European Union (hereinafter EU) and its Internal Market in particular. The process of the removal of all the legal and technical barriers on the free movement of capital between the European Union and the countries which are candidates for EU membership is fundamental for accomplishment of the other objectives settled in the SAA notably those relating to the Internal market.

The text is composed of two parts. In the first part an overview on Community law both from the aspect of the Treaty provisions, secondary legislation and the Case law concerning this issue is given. In the second part, the provisions in the SAA relating to the free movement of capital are presented and the current situation in this filed in two countries from the Western Balkans is examined.

¹ Jovan Zafiroski, doctorant en droit at University of Nice Sophia Antipolis, teaching assistant at the Faculty of Law "Justinianus Primus", University st. Cyril and Metody, Skopje Macedonia

Overview of the EC legal framework relating to the free movement of capital

The Treaty of Rome which came to force in 1958 was based on four freedoms: goods, services, workers and capital aiming to create an economic community with a strong competition. However, capital was not following the dynamics of the integration process of the other freedoms. This was due to the fact that the Treaty provisions relating to the capital declare that Member States are obliged to remove all the restrictions on the free flow of capital only to extent to proper functioning of the Common Market. In this respect, the free movement of capital was an objective which is to be achieved gradually. Nevertheless, the Treaty of Rome was a starting point in the process of complete liberalization of capital movements which was achieved in 1990 with the Directive 88/361/EEC as a secondary legislation of the Community.²

The success of the Directive was further incorporated in the Treaty of Maastricht which created the EU. This Treaty settled the principles of a common currency for the members of the Union which was an additional reason for strengthening the capital movements within the EU and its Member States.

The EC Treaty makes no difference of treatment of the movement of capital between Member States within the Union and the movement of capital between the Union and third countries. Even so, the exceptions from the basic rule of the free movement of capital are leading to different approach on this issue. Therefore, in the following part of the text the EC Treaty provisions relating to the free movement of capital will be analyzed both from the aspect of the movement of capital within the Union and between the Member states of the Union and third countries.

Capital movements within the EU

The central provision relating to the free movement of capital is Article 56 EC (ex Article 73b) which in the first paragraph states that “all the restrictions on the free movement of capital between Member States and between Member States and third countries shall be prohibited”. The same approach is taken for the payments. Second paragraph of the Article declares that “all restrictions on payments between Member States and between Member States and third countries shall be prohibited”. With this approach on a most clear and unambiguous manner freedom of movement of capital is promoted.

Article 56 EC contains an unconditional prohibition on any restriction on free movement on capital and payments. Considering the exceptions on this rule settled in Article 58 EC (1) (b) the dilemma is if the rights on the Member States to take all requisite measures to prevent infringements of national law or regulations does not preclude Article 56 from having a direct effect. In its decision on the Case *Sanz de Lera* the European Court of Justice (hereinafter ECJ) found that no further implementing measures is required for Article 56 to have effect or in other words, Article 58 EC (1) (b) does not prevent the direct effect of Article 56 EC simply because those discretions are subject to judicial review³.

Article 56 EC does not identify which transactions might be considered as movement of capital and does not interpret what the capital is. These are mainly practical questions for determining the scope of implementation of these provisions. The answer might be found in the secondary legislation. Namely, in its Annex I, the Directive 88/361/EEC contains a nomenclature of transactions that are to be considered as movement of capital. Taking into account that the Treaty provision on which the Directive is based is no longer in force the legal status of this document is doubtful. However, in the Case *Trummer and Mayert* the ECJ declared that “insofar as Article 73b EC carried over in substance the contents of Article 1 of the Third Directive, that nomenclature retained the indicative value it had for the Directive”⁴

² European Commission- DG Economic and financial affaires, 2003, European Economy, No 6, pg.330

³ Sideek Mohamed, 1999, European Community Law on the free movement of Capital and the EMU, Kluwer Law International, pp.97-101

⁴ Flynn Leo, “Coming of Age: The Free Movement of Capital Case Law 1993-2002“, 2002, Common Market Law Review 39, pg. 4

The limitations of Article 56 are laid in Article 58 EC which provides rights on Member States to apply the relevant national provisions relating to taxation and prudential supervision on financial institution. Measures taken by Member States justified on grounds public policy and public security are also permitted. This broad possibility for restriction might lead to serious distortions of the principle of the free movement of capital. Nevertheless, the third paragraph requires that those measures and procedures shall not constitute means of arbitrary discrimination or restriction or hidden obstacle for free movement of capital and payments and should be objectively justified. This was supported by the Case law of the ECJ which will interpret the objective justification requirement strictly. This can be confirmed in the *Verkooijen* Case⁵.

Third countries

Provisions settled in Article 56 EC relating to the free movement of capital and payments with third countries give an impression that they equally treat the capital flows and payments as the capital and payment flows between the Member States. In practice it is not the case for the reason of Articles 57, 59 and 60 EC which contain certain restrictions on the free movement of capital. Namely, by the virtue of Article 57 EC the Member States have maintained all the restrictions on the free movement of capital that existed before 31 December 1993 involving direct investment, the provisions on financial services or the admission to securities on capital markets. Moreover, in circumstances when movement of capital from third country extremely endanger the operation of economic and monetary union Article 59 gives a possibility to adopt restrictive measures for a period not exceeding six months.

According to Article 57 (2) EC the cooperation and further liberalization might be achieved by adopting measures by the Council. Thus, acting by qualified majority voting the Council may additionally strengthen and foster the free movement of capital with a third country. Unanimity is required when the measure relating to the movement of capital means step back from current provisions.

The role of the EU concerning economic and financial issues becomes more important on international level and on the European continent in particular. Therefore, as far as the third countries are concerned, there are several forms of multilateral and bilateral agreements which are affecting in a different manner the movement of capital and payments. Thus, the agreements with the Mediterranean countries are called Euro- Mediterranean Association Agreements, Association Agreements with third countries, agreements with the eastern countries from the ex-soviet bloc are entitled Partnership and Cooperation Agreements and the most important for the analyses of this text the Stabilization and Association Agreements which are signed with the countries from the Western Balkans.

The free movement of capital in the Stabilization and Association Process

After a long period of uncertainties and debates, the European Council in Feira in 2000 presented its strategy for integration of the countries from the South- Eastern Europe in the EU i.e. the Stabilization and Association Process. The key element of this process is the Stabilization and Association Agreement. At present, almost all the countries (except Montenegro) from the region have signed the Agreement and it is in force in Macedonia and Croatia.

The main objective on the SAA is to prepare the country to become a member of the European Market and to strengthen the capacities and abilities to perform the responsibilities of being a member of the EU. As it was explained above, the free movement of capital is one of the four fundamental freedoms on which the European integration process is based. For that reason, one Chapter in the SAA is dedicated to this issue.

The importance of the free movement of capital and payments in the pre accession period might be also seen in the negotiation process which is held by the European Commission and the candidate

⁵ Craig Paul, Grainne de Burca, 2002, EU Law: Text, Cases and Materials, pg. 683

country⁶. The process of negotiation concerning the free movement of capital is in the fourth chapter and it is led by the Directorate General for Internal Market. At present, Republic of Macedonia is a candidate country but there is still no recommendation for opening the negotiation process. Republic of Serbia is expected to become a candidate country in 2009.

The wording of the provisions concerning the free movement of capital in the different SAA signed with the Western Balkan countries are similar or in some case identical. Therefore, in this part of the text the provisions concerning the free movement of capital settled in the SAA signed with the Republic of Macedonia and the Republic of Serbia are going to be analyzed. Current situation in this area is going to be presented from aspect on the legislation in force and the Commissions opinions concerning the countries progress in adopting of this part of the *acquis communautaire*.

Legal basis for free movement of capital in the Stabilization and association agreement

A reading of the texts of the SAAs concluded with Macedonia and Serbia shows that there is a same wording relating to the question of free movement of capital. Thus, the free movement of capital and payments is covered in the Title V concerning Movement of workers, establishment, supply of services, capital, or to be more precise in its chapter Chapter IV relating to Current payments and movement of capital. A single difference in the two texts might be found in the possibility for acquisition of real estate in Serbia by nationals of EU Member States.

The obligations settled in the SAA concerning the free movement of capital are to be achieved in two stages. During the first stage, four years after entering into force of the SAA, the Parties will prepare all the necessary conditions for providing the capital movements. In the second stage, which will be discussed and decided by the Stabilization and Association Council the approach for the entire fulfillment of the free movement of capital will be considered. At present, the SAA with Serbia waits its ratification from all the Member States of the EU. The SAA concluded with Macedonia has not de jure pass in the second phase even it is in force from 2004, however, as it is going to be discussed in the last part of this text numerous questions concerning the second stage are by now de facto implemented.

The provisions might be divided on provisions relating to payments and transfers on the current account of balance of payments and transactions on the capital and financial account of balance of payments.

The SAAs provides that “the parties undertake to authorise, in freely convertible currency, in accordance with the provisions of Article VIII of Agreement of the International Monetary Fund, any payments and transfers on the current account of balance of payments between the Community and Macedonia/Serbia”⁷. With this provision there is unconditional opportunity for all the transfers and payments on the current account which means fostering the trade between the parties of the Agreements. This liberalization in payments and transfers on the current account of balance of payments affects the trade in goods and services, dividends/interests from abroad and net unilateral transfers form abroad. Since the main objective on the SAA is creating better conditions in the countries for joining the European market it is understandably why the same provision is settled in the Interim Trade Agreements which were signed with both countries⁸.

Liberalisation in relation to the strengthening the economic ties between the Parties is provided by ensuring the free movement of capital relating to direct investments in companies (and the liquidation or repatriation of these investments and of any profit stemming there from). The cooperation in the financial markets and financial services is provided by providing the free movement of capital “relating to credits related to commercial transactions or to the provision of services in which a resident of

⁶ After obtaining a status of a candidate country on Commission’ recommendation the Council decides if the country is ready to open the negotiation process by chapters.

⁷ Article 62 of the SAA concluded with Serbia, Article 58 of the SAA concluded with Macedonia

⁸ Article 35 of the Interim trade agreement concluded with Serbia, Article 31 of the Interim Trade Agreement concluded with Macedonia

one of the Parties is participating, and to financial loans and credits, with a maturity longer than a year". Furthermore, in the second stage on the implementation on the Agreement free movement of capital for portfolio investment and financial loans and credits with maturity shorter than a year is to be provided⁹.

A difference in the wording and the obligations imposed in SAA concluded with Serbia and the one with Macedonia makes Article 63 (3) which requires Serbia to authorize the acquisition of real estate by nationals of Member States of the EU. Thus, from entering into force of the SAA the acquisition will be performed by the existing procedure and four years after entering into force of the SAA Serbia should adjust legislation relating to the acquisition of real state and ensure a same treatment of nationals of Member State of the EU as compared to its own nationals. This provision imposes obligation on very explicit manner which confirms the impression that every future enlargement is more demanding than the previous. The same demand was addressed to Macedonia not in the SAA but thought the possibility for further facilitating the movement of capital which SAA includes. Namely, the SAAs authorize the Parties to consult each other with a view to facilitating the movement on capital in order to promote the objectives of the SAA¹⁰.

The Agreement provides a possibility for safeguard measures with regard to movements of capital for a period of maximum six months. This kind of measures might be taken in exceptional circumstances when movement of capital threatens to cause difficulties in monetary policy or exchange rate policy in one of the contracting Parties¹¹. There should be no doubts about this solution since, as explained above the original Treaty provisions impose same rights for Member States concerning the free movement of capital within the EU.

Current situation

Macedonia

The obligations relating to the transactions on the current account of balance of payments are completely fulfilled. Namely, in 1998 Republic of Macedonia adopted Article VIII of the IMF Statute introducing convertibility in payments through current transactions with abroad. In this respect, all the transactions between the residents and non resident on the current account are liberalized in respect to Article 58 of the SAA.

For the area of the movement of capital and payments the most important are the provisions settled in the Law on Foreign Exchange Operations¹². Namely, the transactions which should be liberalized in the first stage of the SAA concerning direct investments, commercial credits and financial loans and credits with maturity more than one year are incorporated in this law. Furthermore, free flow of financial credits with maturity less than one year is provided for non residents, which is an obligation for the second stage of the SAA, as explained, has de jure not started yet.

The acquisition of real estate (apartments and residential buildings) by nationals of the Member States of the EU is provided even it is not an explicit obligation deriving from the SAA. It is considered as highly important element in completing the freedom of movement of capital. This was done by amendment on the Law on ownership rights and other real rights. However, the right of ownership of construction land requires prior authorization and acquisition of agricultural land remains.

In its recent report on the progress of Macedonia in the integration process presented in November 2008 the European Commission estimates that good progress has been made in the liberalization on the free movement of capital. Macedonia performs well in complying the obligations settled in the SAA for this part of the of the *acquis communautaire* especially in its approximation of legislation¹³.

⁹ Article 63 (1) and (2) of the SAA concluded with Serbia, Article 58 (1) and (2) of the SAA concluded with Macedonia

¹⁰ Article 63 (7) of the SAA concluded with Serbia, Article 58 (5) of the SAA concluded with Macedonia

¹¹ Article 63 (5) of the SAA concluded with Serbia, Article 58 (4) of the SAA concluded with Macedonia

¹² Law on Foreign Exchange Operations, Official Gazette of the Republic of Macedonia, No. 34/01, 49/01, 103/01, 51/03 and 81/08

¹³ European Commission, Commission Staff Working Document, Republic of Macedonia 2008 Progress Report, pp. 33-34

However, the remaining obstacles in the free movement of short term capital movements and cross-border transfers have to be removed.

Serbia

With the adoption on the Law on foreign exchange transactions in 2002 which meets the terms on Article VIII of the IMF Statute the transactions on the current account of balance of payments are liberalized. Moreover, on May 2002 dinar became external convertible in current transactions. Hence, the obligations settled on the SAA concerning the current account are to a great extent fulfilled.

As far as the capital and financial account is concerned good progress has been made with the adoption on new Law on foreign exchange transactions¹⁴ which introduced gradual liberalisation of movement of capital. In the Commissions 2006 Progress Report it was estimated as an important step in the process of fulfilment of the criteria relating to the Stabilisation and Association Process. The Law introduces several novelties which are of a great significance for the free flows of capital and payments as described in the SAA. Namely, capital transactions of long dated securities (investments in equity instruments and debt securities issued by OECD countries and International financial institution), financial derivatives, investment and voluntary pension funds and insurance are liberalised for free flow. Transfers originating of direct resident investment abroad/ non resident in the Republic of Serbia are liberalised. Residents are authorized to commit deposits abroad, in respect of the legal act passed by the National Bank of Serbia. Furthermore, transfers abroad from the foreign currency or dinar bank accounts of non-residents, after tax deductions are flowing freely. Payments aiming to acquiring real estate are liberalized both for residents and non residents.¹⁵ Even if there is strong commitment for removing all the obstacles in the free movement of capital many efforts should be done in the liberalisation short -term capital flows.

In its recent report on the progress of the Republic of Serbia in the integration process presented in November 2008 the European Commission estimates that slight progress in the filed of free movement of capital has been achieved. The Commission finds as positive the regulation on personal transfers of foreign cash to and from Serbia. However, the Commission finds that the transactions on current account and external payments are not completely liberalized and restrictions relating to short- term credit and portfolio investments are still present. As far as the direct investments are concerned there some restrictions in the arms sector where investment are subject on certain preconditions. Regarding the liberalization on the acquisition of real estate foreign nationals and legal persons may purchase property only if there is reciprocal agreement with their country of origin and if they can prove that they are conducting business activities in Serbia. In order to acquire property legal entities are required to be established in Serbia. The general evaluation on the progress in the filed on free movement of capital and payments even if there is slight progress in liberalization, Serbia needs further efforts to respond on the obligations laid in the SAA.¹⁶

Conclusion

The free movement of capital and payments is crucial element for implementation of the EU goals and objectives. Namely, the integration on the financial markets and creation of the European Economic and Monetary Union is impossible to be achieved without free circulation of capital and payments. Nevertheless, the elimination on the obstacles impeding the free movement of capital was not following the dynamics of the other freedoms relating to the free movement of persons, goods, services. The complete liberalization is achieved with the Treaty of Maastricht creating the EU and the jurisprudence on the ECJ promoting the free movement of capital in a broader sense.

¹⁴ Law on Foreign Exchange Operations, Republic of Serbia, Official Gazette, No. 62/2006

¹⁵ The Government of the Republic of Serbia, October 2008, National Programme for Integration with the European Union (NPI), pp. 254-255

¹⁶ European Commission, Commission Staff Working Document, Republic of Serbia 2008 Progress Report pp. 33-34

Article 56 EC provides full liberalization of the movement of capital and payments between the EU Member States and third countries. Several forms of bilateral and multilateral cooperation between the EU and third countries are known. In this respect, after a long period of uncertainties and debates, the European Council in Feira in 2000 presented its strategy for integration of the countries from the Western Balkans in the EU i.e. the Stabilization and Association Process and its key element the SAA.

The SAA contains provisions on gradual liberalization on the movements of capital with the EU and its Member States which should be accomplished in two stages. During the first stage, four years after entering into force of the SAA, the Parties are to prepare all the necessary conditions for providing free capital movements. The second stage is going to be discussed and decided by the Stabilization and Association Council. The provisions in the SAA concerning free movement of capital might be divided on provisions relating to payments and transfers on the current account of balance of payments and transactions on the capital and financial account of balance of payments. A slight difference in the wordings on the SAA concluded with Macedonia could be noticed relating to the question of acquisition on the real estate in Serbia by nationals on the Member States of the EU.

The progress in the achievement of free movement of capital and payments is evaluated by the European Commission in its Progress reports. In its recent report on the progress of Macedonia in the integration process presented in November 2008 the European Commission estimates that good progress has been made in the liberalization on the free movement of capital. Macedonia is a candidate country since 2005 but has not opened the negotiations yet. According to the Commission Macedonia performs well in complying the obligations settled in the SAA for this part of the of the *acquis communautaire* notably in the filed of approximation of legislation. Nevertheless, the remaining obstacles in the free movement of capital are short term capital movements and cross- border transfers which have to be removed.

The recent report on the progress of the Republic of Serbia in the integration process prepared by the European Commission and presented in November 2008 finds that slight progress in the filed of free movement of capital has been achieved. The main remarks are concerning the transactions on current account and external payments which are not completely liberalized and on the restrictions relating to short- term credit and portfolio investments which are still present. However, the SAA concluded with Serbia is not yet in force and Serbia is expected to become a candidate country in 2009. In this respect, much effort should be done in the process of liberalization on the free movement of capital.

References

- Craig Paul, Grainne de Burca, 2002, *EU Law: Text, Cases and Materials*
- European Commission- DG Economic and financial affairs, 2003, *European Economy*, No 6
- Flynn Leo, 2002, "Coming of Age: The Free Movement of Capital Case Law 1993-2002", *Common Market Law Review* 39
- Sideek Mohamed, 1999, *European Community Law on the free movement of Capital and the EMU*, Kluwer Law International
- Government of the Republic of Macedonia, National programme for adoption of the *acquis communautaire*, April 2007, available at, http://www.sep.gov.mk/content/Dokumenti/EN/00_NPAA_2007_en.pdf
- Government of the Republic of Serbia, October 2008, National Programme for Integration with the European Union (NPI), available at, http://web.uzzpro.gov.rs/kzpeu/dokumenti/npi/npi_october2008_en.pdf
- European Commission, Commission Staff Working Document, Republic of Macedonia 2008 Progress Report, available at, http://www.sep.gov.mk/content/Dokumenti/EN/the_republic_of_macedonia_progress_report_en.pdf
- European Commission, Commission Staff Working Document, Republic of Serbia 2008 Progress Report, available at, http://ec.europa.eu/enlargement/pdf/press_corner/key-documents/reports_nov_2008/serbia_progress_report_en.pdf

- Interim Agreement Trade Agreement between the Republic of Macedonia of the one part and the European Communities of the other part, available at,
http://www.sep.gov.mk/content/Dokumenti/EN/Interim_agreement_on_trade_and_trade_-_related_matters_between_the_European_Communities_of_the_one_part_and_the_Republic_of_Macedonia_of_the_other_part.PDF
- Interim Agreement Trade Agreement between the Republic of Serbia of the one part and the European Communities of the other part, available at,
http://ec.europa.eu/enlargement/pdf/serbia/key_document/interim_agreement_trade_en.pdf
- Law on Foreign Exchange Operations, Official Gazette of the Republic of Macedonia, No. 34/01, 49/01, 103/01, 51/03 and 81/08
- Law on Foreign Exchange Operations, Republic of Serbia, Official Gazette, No. 62/2006
- Stabilisation and Association Agreement between the Republic of Macedonia of the one part, and the European Communities and their Member States of the other part, available at
[http://www.sep.gov.mk/content/Dokumenti/MK/SSA\(1\).pdf](http://www.sep.gov.mk/content/Dokumenti/MK/SSA(1).pdf)
- Stabilisation and Association Agreement between the Republic of Serbia of the one part, and the European Communities and their Member States of the other part, available at
http://web.uzzpro.sr.gov.yu/kzpeu/dokumenti/ssp/saa_textual_part_en.pdf
- The Treaty on European Union and the Treaty establishing the European Communities, December 2006, consolidate text, available at,
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2006:321E:0001:0331:EN:pdf>
- Babić Mirjana, „Korporativni imidž“, Rijeka 2004., Adamić, p. 22
- Kesić Tanja, „Integrirana marketinška komunikacija“, Zagreb, 2003., Opinio, p. 102
- Onkvist Sak, Shaw J. John, „Service marketing: image and competition“ San Jose State University, Business Horizons 1989
- Tihi B., Čičić M., Brkić N., „Marketing“, Sarajevo 2006., Ekonomski fakultet, p.169
- Tvrčković Saša, „Finansiranje lizing aranžmanima“, Sarajevo 2002., Revicon, p.13

Models of Public Administration Reform: Which to Choose for Serbia?

Jelena Žarković-Rakić¹, Milena Lazarević²

ABSTRACT – *A professional and competent public administration is necessary for successful transition from a socialist, centrally planned economy to a functioning market democracy. The difficulty lies in building an organised and effective civil service sector. This paper gives a brief overview of formal bureaucratic reasoning, beginning with Niskanen's theory, followed by the principal-agent model. The New Public Management, as one of the most influential schools of thought on public administration development, strongly influenced by the principal agent model, is subsequently explored. Special attention is given to the "Weberian state hypothesis," which provides an alternative view of bureaucracies in less developed and transition countries, is subsequently explored. Finally, the current state of Serbian public administration is described, along with a discussion of challenges to be addressed in the future.*

KEY WORDS: *bureaucracy, Niskanen's theory, Principal-agent model, new public management, Weberian approach to bureaucratic reform, Serbian public administration*

Introduction

The transition from a centrally planned socialist economy to a functioning market democracy requires significant institutional reform. This can entail creation of wholly new organisations in addition to revision of the existing political and economic institutions. Professional and legally bound public administration is necessary to achieve these ends.

Under Communist rule, the civil service sector of Central and Eastern European countries and the Soviet Union were highly politicised. State administration became only an implementation apparatus with no role in policymaking. Civil service agencies were under the full political governance of the Communist party. In Yugoslavia, however, this situation was somewhat different because its bureaucracy has long been impartial, even under Communist rule. Milosevic's authoritarian regime undermined this tradition during the last decade (Verheijen and Rabrenovic, 2001). After the democratic changes of Serbia in October 2000, the new government was faced with a challenge to reform its civil service sector. Despite numerous initiatives to improve bureaucratic structures, the Serbian public administration system did not go through a comprehensive reform until 2004. Nevertheless, since that time, a more comprehensive and strategic approach to public administration reform has been adopted and some important reforms have been implemented and are still being implemented today.

This paper describes the features of a well-organised and effective bureaucracy, and illustrates Serbia's status relative to this ideal. Section two outlines formal reasoning regarding bureaucracy, beginning with Niskanen's theory followed by the principal-agent model. These two theories were chosen because of their long-held acceptance. The same chapter outlines the main characteristics of the New Public Management, the school of thought on public administration influenced by the principal-agent theory. Section three explains the "Weberian state hypothesis", an alternative view pertaining to the bureaucracies of less developed and transitional countries. Section four unites theory with empirical findings about Serbian public administration and explains challenges that must be addressed in the future.

¹ Jelena Žarković-Rakić, MSc, Teaching Assistant, Faculty of Economics, University of Belgrade, Serbia

² Milena Lazarević, MA, Ministry of Public Administration and Local Self-Government, Serbia

Theoretical framework

Niskanen (1971) was the first public choice theorist to model the behaviour of bureaucracies. His theory rests on the following assumptions. First, the bureau has a virtual monopoly on true supply cost information. Second, the bureau knows the legislature's demand for the bureau's services. These assumptions allow agencies to make all-or-nothing offers (concerning both the budget and output) to the legislature. Consequently, the budget of a bureau would always be above the point where marginal public benefits (from the activities performed by the bureau) equal marginal costs. In other words, it is assumed that the bureau's principal objective is to secure an ever-larger budget. At the same time, the agency is determined to produce an output above the social optimal level.

As demonstrated by Mueller (2003, p.363-364) this concept may be expressed mathematically. In response to an output y , the bureau is rewarded by the government with the budget $G = G(y)$. With the rise of output the budget increases but at the falling rate ($G' > 0$, $G'' < 0$). This function could be regarded as a public benefit which, as the first and second derivations show, increases with increasing output, but at a diminishing rate. On the other hand, the agency has a cost function $T = T(y)$ that increases at an increasing rate, that is: $T' > 0$, $T'' > 0$

The fact that agencies can make take-it-or-leave-it proposals to the legislature results in bureaucrats having exclusive knowledge pertaining to this cost function. The legislature is consequently handicapped in its ability to determine whether the output of the agency reflects the socially optimal level. Therefore, the bureau can maximise its budget with only one constraint, to cover the output's total costs, that is:

$$\begin{aligned} \max G(y) \\ \text{s.t. } G(y) = T(y) \end{aligned} \quad (0.1)$$

Optimisation can be expressed by the Lagrangian:

$$L = G(y) - \lambda [G(y) - T(y)]$$

where λ is the Lagrange multiplier. First order conditions for the optimum imply:

$$G'(y) = \frac{\lambda}{\lambda + 1} T'(y) \quad (0.2)$$

From the government's perspective, the optimal condition requires that $G'(y) = T'(y)$, but because the Lagrangian multiplier is a positive value, expression (1.2) implies $G' < T'$.

As Mueller asserts, Niskanen's theory was a pioneering effort to model bureaucratic behaviour, but new theories later emerged with different assumptions and hence, conclusions. Of particular interest is the principal-agent model. It is necessary before proceeding to clarify some simplifications on which Niskanen's analysis rests.

First, as noted by Bendor and Moe (1985, p.756) Niskanen assumes that decision makers in both the agency and the legislature base their choices on complex mathematics. These calculations would be beyond the capacity of most persons. Second, Niskanen's analysis rests on the assumption of perfect information on the part of the agency. There is only information asymmetry between the bureau and the legislature. In other words, agencies hold all the cards.

Niskanen developed his theory on neoclassical grounds, so it is understandable that he uses this premise. Additionally, formal modelling requires the adoption of simplifications like these. The quest for a more realistic paradigm of bureaucratic behaviour leads us to principal-agent models.

The principal-agent framework recognises the hierarchical relationship between bureaus and the legislature, with the legislature as a principal and the bureau as its agent (Moe 1984, p.770). Politicians,

acting as principals, are more powerful than Niskanen asserts, since in reality they issue orders, control the agenda, create the incentive structure, etc. Moreover, these models accept the notion of information asymmetry. This results in greater attention being paid to the incentive scheme and monitoring instruments. These schemes are used to mitigate the asymmetry and hence confront the problems of hidden action and hidden information (Moe 1984, p.766). In other words, for problems of political control of bureaucracy, principal-agent models are better suited than Niskanen's theory.

These models are used to explain the relationship between upper level bureaucrats and their subordinates. Namely, the existence of the residual (profit) motivates the manager to control his team members in private firms. In the same manner, principal-agent theory implies that the slack, the difference between the true costs of a bureau's services and what the bureau actually spends, can be used as an instrument of internal control (Moe 1984, p.763).

Incentives are of great importance in principal-agent models because they serve as a monitoring and control mechanism. However, risk aversion on the part of subordinates can make incentives expensive and/or inefficient. Similarly, Holstrom (1982) argues that asymmetric information would cripple implementation of any incentive scheme that could reconcile organisational efficiency with the self-interest of individuals.

New Public Management (NPM), as one of the most influential schools of thought on public administration development, was strongly influenced by the principal agent theory. It became popular in the advent of the economic difficulties of the 1980s, which prompted a realisation of the "scarcity of resources available to the public sector." (Peters, 2001, p. 372) The emphasis was on the efficiency, effectiveness and economy, the "three E's" which have characterised the market-driven reform agendas (Peters and Pierre, 2003, p. 5). The concern over efficiency was the result of a widespread understanding that market should be the "instrument of resource allocation, leaving little support for public institutions." (Peters and Pierre, 2003, s. 4) This approach is based on the assumption that if "government were to use the principles of the market, both in the design of the individual programs and in the internal management of government programs, then government will do its job much better" as well as cost less to the tax payers (Peters and Pierre, 2003, p. 6). Efficiency was thus for the first time introduced as a normative variable for creating a good government.

It is in this period that the NPM approach to administrative development was experimented with in many European states. Nevertheless, it remained the predominant model for Anglo-Saxon countries, while its elements have selectively been introduced in the continental states as well. Its main building blocks can be summarised as performance management with an emphasis on flexible and devolved financial management; introduction of personalised contracts and pay based on performance, thus rendering public servants more alike to private sector employees; introduction of client-oriented public services; placing greater authority and responsibility on lower government echelons; use of market-type mechanisms; and privatisation of public enterprises (Löffler, 2003, p. 480). It has been argued that such practices may be well-suited for already developed and advanced public sectors which possess strong human resources and technical capabilities throughout the system "to allow for thorough monitoring of financial and personnel management activities." (Nunberg, 1999, p. 264)

The central debate in the last few decades of the study of public administration, as well as in its practice, has been the one between the NPM and classical "Weberian" school. It is important to analyse the latter not only because it represents the influential school of thought on public administration development, but because this approach has played an important role in administrative reform in CEECs, especially after some rather unsuccessful experiments with reforms based on NPM in those countries.

Weberian state hypothesis³ and its role in public administration reform in CEECs

The question of which state structures are necessary in a country promoting economic growth was long subservient to interest directed at the proper model to describe bureaucratic behaviour. Despite

³ This section is largely based on Evans and Rauch (1999;2000) and Ahrens (2002).

this, economists such as Knack and Keefer, (1994) Rodrik, (1999) and Kaufmann (2004) began focusing their attention on basic principles of good governance. Knack and Keefer (1994) measured the quality of governance using indicators such as government repudiation of contracts, risk of expropriation, corruption, rule of law, and bureaucratic quality.

By the mid-1990s there was a growing consensus, among economists studying market transitions, that a suitable government structure is a precondition for successful reform. Formulation and implementation of both broad and specific macroeconomic policies necessitate a professional and effective public administration. In order to fulfil these complex tasks it was necessary to define basic principles on which good public administration should rest.

At the same time there was a consensus among public administration theorists that the reforms conducted in line with the New Public Management approach have been considered as not the most appropriate for CEECs. Hence, the 1990s saw a gradual return to the classical themes in administrative development.

The classical model is based on Max Weber's study of a bureaucracy and the concern with the possibility of a bureaucratic rule, which prompted the debate on the dichotomy between politics and administration. This model is characterised by a strong emphasis on legality, impartiality, objectivity, regularity and a public service ethos." (Goetz , 2001, p.1032-3) The public administration is clearly distinguished from the private sector, thus representing a "distinct social sphere," organised hierarchically with functional divisions of work and employing a distinct class of professional civil servants. (Goetz , 2001, p.1032-3) Weber, as well as other "fathers" of the classical administrative thought, was mostly worried with preventing the "usurpation of administrative powers by political leaders." (Verheijen and Rabrenovic, 2001, p. 13). He viewed the bureaucracy, independent from societal pressures, as a full-time agency devoted to administrative tasks. At the same time, Weber believed that an administration's duties need specific definitions, and that such policies are vital in the construction of an advanced market economy (Ahrens 2002, p.142). Building on his insights about public administration, Rauch and Evans (1999, p.752) define the Weberian-type bureaucracy as featuring the following institutional characteristics:

- meritocratic recruitment of personnel based on their education and competitive examinations,
- predictable prospects of long-term career rewards,
- strictly defined, non-overlapping jurisdiction of each public administration within the state apparatus.

In their empirical testing of characteristics of bureaucracy most related to good economic performance, Rauch and Evans choose meritocratic recruitment and predictable and rewarding career ladders. These factors were selected based on the ease by which they could be measured across countries. Rauch and Evans argue that meritocratic recruitment results in greater personnel competence and contributes to their adherence to shared norms and values of the agency. The latter is of great importance for the creation of esprit de corps among bureaucrats and their sense of loyalty to the organisation. In other words, meritocratic recruitment and promotion contribute to the development of the corporate identity among bureaucrats. This in turn increases the cost of corrupt behaviour. Making this activity less attractive for public officials would reduce the implicit tax on the private sector, which is nearly 20% of entrepreneurial revenue in transitional countries (World Bank, 2004).

At the same time meritocratic procedures can attract more talented individuals and increase their integrity and level of professionalism. Therefore, competent public officers are better able to help private entrepreneurs to overcome problems of coordination and collective action. This is especially important when they are entering new markets.

Corporate coherence and minimisation of corrupt activity is also facilitated by predictable long-term career rewards. These also contribute to a bureaucracy's propensity to invest in infrastructure rather than spend resources on personal promotion.

While the 1990s saw a gradual return to the classical themes in administrative development, they did not signify a complete overthrow of the issues raised by New Public Management. Rather than that, NPM served the role of "re-emphasizing classic issues in Public Administration, such as accountabil-

ity, control and co-ordination, and re-awakening such dormant issues as the role of lower civil servants, and citizens' empowerment" (Brans, 2003, p. 430). Another three E's have been added to the ones introduced by the market-oriented paradigm, without erasing them: 'ethics, equalities and equity' (Löffler, 2003, p. 480-1). It has been realised that efficiency, although being important, is not as important for the wider public as it was originally thought, (Peters and Pierre, 2003, p. 8) as well as that a "balance between different approaches" is the real challenge to be tackled on the road towards good public administration (Peters and Pierre, 2003, p. 6). The unsuccessful attempts of some of the NPM reforms which took no account of the domestic conditions to which they were applied drew new attention to the importance of national traditions for the success of reform programmes. Accordingly, the latest reforms both in the already developed EU states, as well as in the aspiring members, have combined elements of both the classical and NPM approaches. The CEECs focused more on traditional frameworks, while seeking to incorporate some NPM mechanisms, such as "performance-related remuneration and assessment" (Dimitrova, 2002, p. 182).

Serbian public administration: current state of affairs and future challenges

This paper has analyzed dominant theories of bureaucratic behaviour. It began with paradigms that for a long time represented the mainstream view of public administration. The objective of this section is to assert the predominance of the Weberian approach to administrative building in Serbia, as the approach argued to be the most appropriate for transitional countries.

Niskanen's theory has been criticized on several grounds, mostly because it asserts that bureaucracy holds all the cards, whereas in reality legislature is the principal and therefore has greater authority. This is recognized in the principal-agent model. The main contribution of this model to bureaucratic theory has been the notion of legislature-agency information asymmetry. The model pays special attention to the incentive scheme and monitoring instruments which mitigate this asymmetry. By doing this, problems of hidden action and hidden information are neutralized. In young democracies, however, there are few checks and balances to limit the corrupt behaviour of their politicians. Moreover, lack of political will on the part of the principals (politicians) to create and implement strategies that will induce better performance of agents, and to engage in their serious monitoring, makes the principal-agent approach less applicable in these countries. In fact, the principal-agent model could be implemented but only after significant bureaucratic reform in these countries. The experience of public administration reforms in CEECs have showed that the Weberian approach could serve as a guiding principle for institutional building within Serbian public service. Hence, this paper analyses the main features of the Serbian public administration within the framework of the Weberian approach.

At the moment when democratic changes happened in 2000, the Serbian administration was in a much neglected condition and integrity of the whole public service was on a very low level. The initial reforms did not result in quick amelioration of this condition, but rather resulted in fragmentation of the system, especially in terms of responsibility and control.

In November 2004 the Government adopted the Public Administration Reform Strategy, a rather short document, which nevertheless envisaged reform plans which were in accordance with the general principles of European Administrative Space, i.e. a concept principally in line with the Weberian concept of public administration. Most attention was, thus, to be paid to the production of appropriate laws which would regulate the public administration system as a whole, the rights and obligations of civil servants, provide conditions for the reform of the salary system for civil servants as well as establish accountability and financial control mechanisms in line with European principles.

Most of the legislative acts envisaged by the Strategy and its Action Plan have been adopted, though with the exception of two important pieces of legislation: the Law on General Administrative Procedure and the Law on Administrative Dispute. These laws are still in the draft phase and their adoption is foreseen for 2009. A long list of other laws was adopted (though with delays of up to one year), thus creating conditions for conducting reforms in the public administration, which would lead to increased integrity and accountability of the Serbian administration.

Probably the most important impact on the integrity and accountability of the administration was achieved through the two laws regulating the position of the civil servants, especially the provisions of the Law on Salaries, which allowed for significant increase and decompression of salaries, thus bringing a large part of the civil service above the existential minimum. By passing and implementing this Law, the recommendation of the World Bank to conduct “the reform of incentive structures and to make remuneration packages more attractive and more performance-based, while containing the fiscal cost of the system” (2004, p.18) has largely been implemented.

Importantly, these pieces of legislation have introduced key elements of Weberian administration, especially in terms of merit-based recruitment. By centralizing the recruitment procedure, which now heavily rests on the Human Resources Management Service of the Government, the space for recruiting candidates based on political or personal fitting has been significantly reduced. This is not to say, of course, that this space has been altogether eliminated, as the procedure still allows for certain managerial discretion. Nevertheless, satisfying basic conditions for a given position can hardly be avoided.

Job security has also been improved, not only through legislation, but also through decreased political interference in this area. The procedures envisaged by the law for dismissing a civil servant are very strictly defined and are under strong judicial control, due to which it is often hard to dismiss even the civil servants who severely neglect their working duties. However, these procedures largely correspond to the Weberian-style administration, where decreasing the possibility of political dismissals is given precedence over efficiency and effectiveness in work. It must be noted, however, that political influence over job security has not been entirely eliminated, given that the change of management can certainly affect the working environment and everyday conditions under which a civil servant works. Thus, it may certainly happen that a politically inadequate civil servant is de facto sidelined after a political change.

A persistent problem, which hinders the increase of job security on the highest managerial positions, is the extension of the deadline for appointing people in these positions in accordance with the Law on Civil Servants, which in fact provides for de-politicisation and professionalisation of this layer of administration. The level of assistant ministers and directors has so far been in the realm of politics, while in the future these positions are to be filled with professionals, who must pass through open competitions and satisfy the criteria enumerated by the Law (possess a university degree, at least 9 years of professional experience and pass the state professional exam). According to SIGMA, there have so far been “very rare attempts on the part of politicians to interfere in the selection procedures; [...and] the trust of candidates in a professional selection based on merit has increased” (SIGMA, 2008, p.6). This process has, however, been slowed down by a series of elections and resistance of ministers to give up the possibility to choose their direct collaborators in the ministries. An additional reason for the difficulty with which this process is being conducted might also be the requirement for these civil servants to have at least 9 years of professional experience, which makes it rather difficult to find appropriate candidates for such positions, especially those related to new processes, such as EU integration, project management, etc.

The Serbian civil service, however, fails to meet the third characteristic of Weberian bureaucracy because jurisdictions of public administrations are not strictly defined and indeed often overlap (Kavran and Rakic 2001, p.5). Although the Law on Ministries provides for the scope of competencies of each ministry and some of the special organisations, these competencies are often defined somewhat vaguely, due to which overlaps do happen. Of course, it might be impossible to divide the competencies of the ministries so strictly that all overlaps are avoided and certain overlaps might not be the problem if there were a strong culture of horizontal coordination and inter-ministerial cooperation in the Serbian administration. In the environment, however, where efforts to coordinate the work of ministries and other bodies is still a novelty in the Serbian system, mostly forced by new processes, such as EU integration, overlaps of competences do tend to be a problem.

Some other important problems which were very visible in the past, such as lack of motivation, shortage of equipment and infrastructure, have been predominantly resolved, often with the support of external donor assistance. However, weak mechanisms for inter-ministerial coordination, a rule-oriented,

risk-averse administrative culture, and strong centralisation of decision-making authority still remain as problems which need to be addressed (Eriksen 2005, p.6). The overly legalistic culture of the Serbian administration, according to Eriksen, makes civil service rigid and hard to change. Nevertheless, legalism can also be considered as a basis for integrity and rule of law. One might say that the younger generations of civil servants, especially those dealing with EU integration and similar tasks, are agents of change in the Serbian civil service, which could, in the years to come, help extract the best from the legalistic tradition, while decreasing rigidity and resistance to change.

Conclusion

To conclude, the Serbian administration as prescribed in the new legislation largely corresponds to the Weberian style administration, as most elements of the classical, predominantly career-based system have been introduced. However, the real picture of the administration does not entirely correspond to the image created by the laws and regulations, as the implementation of a law always depends on the political culture and traditions of a country. This means that the creation of a civil service based on merit and strong integrity will require the passing of some years and thus creating a continuity and tradition of democracy and strengthening of the integrity of the whole society. Introducing these important elements of a classical administration should then serve as good foundation for successfully implementing some of the principles of good governance structures as prescribed by the NPM school.

Influenced by the principal-agent theory, the NPM approach to public administration reform would provide a favourable environment for creating incentives to bureaucrats to behave in the best interest of their principals – the citizens. That is to say, if applied, NPM would be dedicated to the creation of citizen-oriented public services. Knowing that the principal-agency theory views the government from the perspective of the market, dedication to this particular approach would mean the use of market-type mechanisms in the design of the internal management of government programs. No less important, from the perspective of NPM, would be the introduction of personalised contracts and pay based on performance, thus rendering public servants more alike to private sector employees. Thus, in years to come, the orientation toward efficiency and productivity in public administration reforms is to be expected if Serbia successfully completes the road to a stable democratic society. Given that the Serbian Public Administration Reform Strategy already defines “creation of a citizen-oriented public administration, capable of offering high quality services to the citizens and private sector, against payment of reasonable costs” as one of the two main long term goals of public administration reform, one may assume that future reforms will be more directed towards the principal-agent based model (Government of the Republic of Serbia, 2005). The current economic crisis and the every growing need for overall cost reduction might additionally impact an increased focus on such a model in administrative reform.

References

- Ahrens, Joachim, 2002, *Governance and Economic Development: A comparative Institutional Approach*. Edward Elgar, Cheltenham, UK
- Bendor, Jonathan and Moe, Terry, 1985, An Adaptive Model of Bureaucratic Politics. *The American Political Science Review*, Vol.79, 755-774
- Brans, Marlen, 2003, “Comparative Public Administration: From General Theory to General Framework,” in *Handbook of Public Administration* eds. B. Guy Peters and Jon Pierre, SAGE, London
- Dimitrova, Antoaneta, 2002, “Enlargement, Institution-Building and the EU’s Administrative Capacity Requirement,” *West European Politics* 25, no.4: pp.171–190.
- Eriksen, Svein, 2005, Unfinished Transition – Public Administration Reform in Serbia 2001-2004. Paper presented to the 13th NISPAcee Annual Conference Democratic Governance for the XXI Century: Challenges and Responses in CEE Countries, Moscow, May 19 – May 21
<<http://unpan1.un.org/intradoc/groups/public/documents/NISPAcee/UNPAN021452.pdf>>

- Government of the Republic of Serbia, 2005, Strategy of Public Administration Reform in the Republic of Serbia, Belgrade.
- Holstrom, Bengt, 1982, Moral hazard in Teams, *Bell Journal of Economics*, Vol.13, 324-340
- Kavran, Dragoljub and Rakic,Vojin, 2001, *Funkcionalna analiza: Ponovna izgradnja strukture države-Metodi i pristupi*. UNDP, Biblioteka: Reforma ržavne uprave, Kjn 3, Beograd
- Kaufmann, Daniel, 2004, Governance Matters III, *Policy Research Working Paper* No. 2312, World Bank, Washington DC
- Klaus H. Goetz, 2001, "Making sense of post-communist central administration: modernization, Europeanization or Latinization." *Journal of European Public Policy* 8. no.6: 1032-3
- Knack, Stephen and Keefer, Philip, 1994, Institutions and Economic Performance: Cross Country Tests Using Alternative Institutional Measures, *IRIS Working Paper* No. 109, University of Maryland
- Löffler, Elke, 2003, "The Administrative State in Western Democracies," in *Handbook of Public Administration*, eds. B. Guy Peters and Jon Pierre, SAGE, London
- Moe, Terry, 1984, The New Economics of Organization. *American Journal of political Science*, Vol. 28, 739-777
- Mueller, Dennis, 2003, *Public Choice III*. Cambridge University Press, Cambridge
- Niskanen, William, 1971, *A Bureaucracy and Representative Government*. Aldine-Atherton
- Nunberg, Barbara, 1998, *The State after Communism: Administrative Transitions in Central and Eastern Europe*, World Bank, Washington DC
- Peters, Guy, 2001, *The Politics of Bureaucracy*, 5th ed., Routledge, London
- Peters, Guy and Pierre, John, 2003, "Introduction: The Role of Public Administration in Governing," in *Handbook of Public Administration*, eds. B. Guy Peters and Jon Pierre, SAGE, London
- Rauch, James and Evans, Peter,1999, Bureaucracy and Growth: A Cross-National Analysis of the Effects of "Weberian" State Structures on Economic Growth. *American Sociological Review*, Vol. 64, 748-765
- Rodrik, Dani, 1999, Institutions for High-Quality Growth: What they are and how to acquire them, <<http://ksghome.harvard.edu/~drodrik/institutions.pdf>>
- Sevic, Zoran, 2001, Politico-Administrative relations inYugoslavia. In Tony Verheijen, ed., *Politico-Administrative Relations: Who Rules?*. NISPAcee, Slovakia, 295-324
- SIGMA, 2008, Serbia : Public Service Assesmnet, SIGMA/OECD
- Verheijen, Tony and Rabrenovic, Aleksandra, 2001, The Evolution of Politico-Administrative Relations in Post-Communist States: Main Directions. In Tony Verheijen, ed., *Politico-Administrative Relations: Who Rules?*. NISPAcee, 410-426
- World Bank (2004) Serbia and Montenegro Public Administration Development: Creating the Conditions for Effective Economic and Social Reform, *Policy Note*, Report No. 28553-YU

Economic and Political Cooperation in the Region of Southeastern Europe Within the Framework of the CEFTA Agreement

Mina Zirojević, Sanja Jelisavac¹

ABSTRACT – CEFTA is an all-encompassing, modern, ambitious agreement appropriate to the current situation, and its goal is the formation of a regional free trade zone by 2010. This agreement can be an instrument of economic and, subsequently, political stabilization. CEFTA is an agreement resulted from compromise, which means that it has both advantages and drawbacks. Nevertheless, it is expected that it will strongly influence the mutual trade of the countries of Southeastern Europe and promote their process of integration into the European Union.

KEY WORDS: CEFTA, European Union, regionalization, free trade, international trade

Regionalization in Southeastern Europe

In the process of the globalization and general interdependence of the modern world, protectionist measures (tariff and non-tariff barriers) represent an obstacle to the modern development of economy and trade. Hence, the process of the liberalization of the flows of goods, capital, services and people is the only logical path of accelerated development. Seeing the advantages of removing trade barriers, certain countries have established regional organizations, within which they have gradually liberalized their mutual trade. In this way they additionally developed their economies and became an example of successful cooperation. The essence of regionalization lies precisely in the liberalization of mutual economic relations, which assumes the existence of markets for goods and services, the mobility of capital, technology and knowledge, possibilities for population migrations and the prominent role of organizations and institutions.² On the other hand, countries that have retained closed economies for fear of being exposed to foreign competition, have lagged further and further behind and, comparatively speaking, have become increasingly impoverished.

According to the recommendations of the EU, countries seeking membership in the Union are encouraged to create free trade zones on their territories. All the CEFTA member-states had previously signed Stabilization and Association Agreements with the EU; thus, CEFTA actually has the role of preparing countries for full-fledged membership in the Union.³ What is especially important is that the majority of CEFTA's foreign trade is conducted with EU countries.

As one of the blocs with the smallest territorial scope, CEFTA has a relatively high gross domestic product (GDP) and could, in that sense, represent a relatively important bloc. Still, since this alliance is only a transitional step toward the EU, its short-term character limits it in the political sense.

¹ Sanja Jelisavac, M.Sc., Mina Zirojević, M.A., Research Associates, Institute for International Politics and Economics, Belgrade. The paper represents the results of authors' exploration in project: "Serbia and modern world: the perspectives and consolidation models foreign political, security and economic position of Serbia in contemporary processes in international community", financed by Ministry of Science of Republic of Serbia, no. 149902D, during 2006-2010.

² D. Đukanović (prir.), S. Jelisavac, "Ekonomski aspekti saradnje međudržavnih foruma – uporedna analiza", Zbornik radova Međudržavni forumi za saradnju u Evropi: uporedni modeli, Institut za međunarodnu politiku i privredu, Beograd, p. 192.

³ Central European Free Trade Agreement (CEFTA).

The begining of a unified free trade zone

CEFTA is an agreement that presently defines a unified free trade zone in Southeastern Europe. As its very name says, the Agreement was initially formed between Central European states, i.e. the countries of the so-called Viszegrad Group: Poland, Hungary, and Czechoslovakia (later the Czech Republic and Slovakia). It was signed on December 21, 1992 in Kraków, Poland, and went into effect in July 1994.⁴

The member countries hoped that CEFTA would facilitate their more rapid preparation for and integration into the institutions of Western Europe and their accession to the political, economic, security and legal system of the EU (*acquis communautaire*). In the second round, the Agreement was joined by Slovenia in 1996, Romania in 1997, Bulgaria in 1998, Croatia in 2003, and Macedonia in 2006.⁵

All the state-signatories of the original Agreement, except for Croatia and Macedonia, have since joined the European Union and, thereby, left CEFTA. Under the patronage of the Stability Pact for Southeastern Europe, in the context of the Stabilization and Association Process, it was decided that the existing CEFTA was to be expanded with countries from Southeastern Europe. There was also talk of including Ukraine.⁶ In the Balkan region, a model of bilateral free trade agreements already existed within the framework of the Stability Pact for Southeastern Europe.

The new agreement, called CEFTA 2006, was initiated on November 9, 2006, in Brussels and signed on December 19, 2006, at the Southeast European prime ministers' meeting in Bucharest. The agreement was ratified on March 31, 2007, and went into force on May 1, 2007.

Changes that CEFTA 2006 brought

In order to better explain what CEFTA 2006 has brought, it is necessary to recall the characteristics of mutual trade between the agreement's signatory countries. Intra-regional trade as a share of total trade with the world differed from country to country – from 0.2% (Moldavia) to 35% (B-H). Also, there was a high convergence in the export supply (labor and resource-intensive goods, low added values, low growth rates of demand on the international market). Each individual CEFTA country already had a high share of trade with the EU, 50-80%, in which Italy and Germany were dominant.

With the intention of introducing rules of behavior in trade relations, CEFTA 2006 was supplemented by separate amendments that regulated certain areas and specific procedures, all toward the goal of its simplest possible implementation.⁷ The free trade regime encompassed all industrial products and 90% of agricultural products, while for the remaining 10% the member countries could retain certain protection measures until 2010, in accordance with the rules of the World Trade Organization (WTO). The free trade zone was to be formed by December 31, 2010.⁸ Certain areas were more precisely regulated and deadlines for harmonization were defined:

- technical trade barriers* – by 12/31/2010, the sides shall form an agreement on harmonization and mutual recognition of the procedure of harmonization assessment;
- competition* – as of 5/1/2010, principles of competition shall start applying to all companies, including state companies and those with special and exclusive rights, with the active participation of an independent regulatory body;
- public procurements* – by 5/1/2010, the sides shall secure non-discrimination and national treatment, which shall be subject to the review of the Joint Committee, which shall convene by 6/1/2008.

⁴ See CEFTA Agreement: <http://www.worldtradelaw.net/fta/agreements/cefta.pdf>, 22/11/2007.

⁵ For further information, see: <http://www.ukom.gov.si/cefta2003/eng/cefta/>, 22/11/2007.

⁶ <http://www.unian.net/eng/news/news-160543.html>, 22/11/2007.

⁷ Agreement on the Amendment of and Accession to the Central European Free Trade Agreement: <http://www.stabilitypact.org/trade/Cefta%20Agreement%20Amendment%20of%20and%20Accession%20to%20the%20Central%20European%20Free%20Trade%20Agreement%20-%20Preamble.pdf>, 22/11/2007.

⁸ See CEFTA 2006: <http://www.stabilitypact.org/trade/documents/tradeFINAL-joint%20declaration.pdf>, 22/11/2007.

intellectual property protection – by 5/1/2014, the sides shall, if they had not already done so, join the conventions in this area and begin with their implementation.⁹

The Agreement will lead to the harmonization of tariffs and other administrative regulations with the standards of the World Trade Organization (protection of intellectual property, public procurements, policies of contingents and limitations, protection of certain economic branches). Arbitration for the resolution of disputes shall be introduced, whose decisions shall be binding. Goods produced in one CEFTA member country will be considered as domestic, regardless of whether they were only partly or wholly produced in that country (rule of diagonal cumulation). Goods produced within the integration framework shall be labeled as Made in SEE, which will stimulate cooperation in intraregional production. This would make campaigns such as “let’s by Serbian (Croatian, Bosnian, Montenegrin...)” redundant.

One of the more important issues is the so-called diagonal cumulation of origin. In practice, this originally meant that all CEFTA countries could export their products to the EU market duty-free. However, under “own products” were classified only products in which the share of domestic added value was more than 50%. Thus, a product that had 40% Chinese, 45% Serbian, and 15% Macedonian added value was an essential expatriate, i.e. without a defined origin, which means that it did not have preferential treatment vis-à-vis the EU. From now on, however, with the advent of the CEFTA agreement, the cumulation of Serbian and Macedonian added value would be allowed. This is very important, especially for textile manufacturers, where, for example, the cotton is imported from Egypt, the fabric produced in Serbia, and the shirt sewn in Bosnia.

Trade in the region

Bilateral free trade agreements in Southeastern Europe that preceded CEFTA had already brought foreign trade growth to all the signatory countries. Since they are all now parties to the single, multilateral CEFTA 2006 agreement, it is expected that trade cooperation will continue and that its scope will grow. It is estimated that, thanks to that document, it will be easier for companies to do business in Southeastern Europe, since export and investment procedures will be additionally simplified. On the other hand, this will be a sort of a test of competitive ability, since CEFTA 2006 represents “Europe redux” and partly reflects the relations and ways of doing business on the European market. As the Western Balkans are attractive to many Western countries, the Agreement opens the way for the latter’s greater participation in our market. The exclusivity of the Serbian market lies in its current Free Trade Agreement with the Russian Federation, the only such agreement signed by Russia with a non-CIS country.

The European Union is the most important and the biggest trade partner of the countries of Southeastern Europe.¹⁰ It is also the main source of foreign direct investment into the region. Thus, the process of strengthening trade relations between the Southeastern European economies forms an important part of the EU’s broader strategy regarding economic growth and strengthening stability in the region. The experiences coming out of economic liberalization in Southeastern Europe represent an important step toward the countries’ economic cooperation, which brings them a step closer to EU membership. Regardless of the fact that it is not a party to the Central European Free Trade Area, the European Union has supported these negotiations and continues to extend consistent political, technical and financial support at every step toward the liberalization of Southeastern Europe.

⁹ See: <http://www.stabilitypact.org/wt2/TradeCEFTA2006.asp>, 22/11/2007.

¹⁰ The observed countries of the region were: Albania, Bosnia and Herzegovina, Bulgaria, FYRO Macedonia, Macedonia, Croatia, Moldavia, Romania and Serbia (including Kosovo).

Table 1. EU trade with SEE countries in billions of euros, in the 2000-2005 period

Country	EU exports			EU imports			Total trade (exports + imports)		
	2001	2005	Growth (%)	2001	2005	Growth (%)	2001	2005	Growth (%)
Albania	1.114	1.320	18%	336	459	37%	1.451	1.779	23%
B-H	2.047	2.703	32%	696	1.324	90%	2.743	4.027	47%
Bulgaria	4.436	7.133	61%	3.741	5.282	41%	8.177	12.415	52%
Croatia	7.042	10.371	47%	3.128	3.968	27%	10.169	14.340	41%
FYRO Macedonia	1.409	1.340	-5%	693	954	38%	2.102	2.294	9%
Moldavia	508	797	57%	258	363	41%	766	1.160	51%
Romania	12.103	21.789	80%	10.135	15.278	51%	22.238	37.067	67%
Serbia and Montenegro	3.179	4.945	56%	1.266	1.744	38%	4.444	6.688	50%
Western Balkans	14.791	20.679	40%	6.119	8.449	38%	20.909	29.128	39%
Total	31.838	50.398	58%	20.253	29.372	45%	52.090	79.770	53%

Source: Comext; Serbia and Montenegro: 2004 data.

In 2005, total trade between the EU and Southeastern Europe (SEE) equaled 79 billion euros, which represents a growth of 53% relative to 2001 (see Table 1). All the observed countries experienced growth in trade with the EU during the 2001-2005 period. The largest growth in trade with the EU was achieved by Romania (+67%) and Bulgaria (+52%), which leads to the conclusion that the effects of trade and economic integration carried out by these two countries within the process of accession to the European Union were positive.

The European Union offered free access to its market to the Western Balkan countries beginning with 2001 and, since then, these countries' exports to the EU have grown by more than a third.

Mutual trade between the Southeastern European countries has grown thanks to the forming of bilateral free trade agreements (see Table 2). In 2004, regional trade reached the sum of 3.5 billion euros, which represents a growth of 33% compared to the 2.6 billion euros in 2002. Croatia's exports to the countries in the region reached 227 million euros within two years (2002-2004), which is a growth of 27%. Even better results were achieved by Romania, whose exports to the countries in the region reached 244 million euros (47%). All the observed countries experienced growth in exports to other countries in the region of Southeastern Europe.¹¹

Table 2. Trade between the SEE countries in millions of euros, in the 2002-2004 period

Country	Exports to SEE			Exports to the world		
	2002	2004	Growth (%)	2002	2004	Growth (%)
Albania	13	15	15%	348	426	22%
B-H	164	267	63%	874	1.174	34%
Bulgaria	570	727	28%	5.942	7.204	21%
Croatia	839	1.066	27%	5.111	6.215	22%
FYRO Macedonia	421	512	22%	1.101	1.196	9%
Moldavia	65	98	51%	680	967	42%
Romania	519	763	47%	14.634	17.560	20%
Serbia and Montenegro	60	70	17%	1.519	1.673	10%
Total	2.651	3.518	33%	30.209	36.415	21%

Source: Commission calculations based on IMF (DOT) data.

¹¹ European Union, *A New Regional Agreement to Develop Trade in South Eastern Europe*, MEMO/06/502, Brussels, 19 December 2006, p. 1.

It is interesting to note that the countries that achieved the highest growth rates in bilateral trade with the EU are also those that have most developed their trade within the region. This fact shows us that greater trade in the region and greater trade with the EU are mutually complementary.

The creation of a Southeast European free trade area has turned the newly-formed trade zone into a quite respectable market and an attractive region for a greater engagement and inflow of foreign capital and investments. It is, thus, justified to expect that the implementation of the free trade agreement will expand and improve the structure of the exchange of goods and lead to the establishment of balanced trade between the region's countries, which would bring a gradual reduction and elimination of the current foreign trade deficit, as well as a reduction in the number of intermediaries in trade, which had resulted in increased margins and, thereby, unjustifiably high prices; in addition, this will contribute to higher levels of economic cooperation, to the overcoming of technological backwardness, an increased competitiveness of domestic products, a lowering of production costs and respect for international standards.

In the first place, each country expects that the new CEFTA agreement will result in greater exports into countries that have joined CEFTA, as well as a better position for domestic companies on those markets due to the obligation of all new members to apply the modern provisions that have been built into the agreement. A growth in visible trade between the region's countries can also be expected, due to their similar economic structures and complementary economies. Also to be expected is a greater attraction of foreign direct investments, due to the broader possibilities of placing goods onto the markets of the signatory countries as well as third markets. The new agreement allows for the development of higher forms of economic cooperation, such as, for example, the establishment of long-term production cooperations, the forming of joint-venture companies by residents of the signatory countries, etc.

Another advantage of forming a free trade zone is the possibility of a direct flow of goods and services, by reducing the number of middlemen in trade, which in the final instance leads to a reduction in margins as well as the end prices of goods and services. An eventual reduction in technological backwardness and dependence, and in production costs, along with respect for international standards, could lead to trade in goods of a higher level of technological processing and, thus, to greater competitiveness in third markets.

Serbia's place in regional trade

The Serbian parliament ratified CEFTA 2006 on September 25, 2007, with 137 MPs (out of 250) voting in favor. In practice, entry into the SEE free trade zone has allowed domestic businessmen to sell their goods duty-free to a market of 25 million people. Serbia readily awaited the signing of this free trade agreement. Experts predicted that the signing of CEFTA 2006 would increase competition on the Serbian market and allow the signatory countries the free placement of their products (except for agricultural products, which were to retain the quota regime). In this way, the Western Balkans would become significantly more attractive to foreign investment. This would also open the door for an eventually greater engagement on the part of businessmen from the EU as well as other investors.

It is believed that the CEFTA agreement will be good for Serbia and that it will lead to an increase in trade. Serbia is already profiting from Bulgaria's and Romania's entry into the EU, as the same trade regime now applies toward them as toward other countries of the Union, i.e. Serbia exports without any barriers while their exports to Serbia are tariffed, putting them in a relatively less favorable position.

Before CEFTA was implemented in Serbia, cigarette excise taxes were equalized, excise taxes on fruit juices were removed, mandatory buyout of tobacco was abolished, quantitative limitations on oil and oil derivatives were removed, as were export subsidies for agricultural products. The dispute regarding oil imports was resolved when all the signatory countries, including Croatia, accepted the continued monopoly of NIS (Naftna industrija Srbije – Serbian Oil Industry) on oil imports for an indefinite time (in accordance with WTO rules).

Also, some of the provisions from the bilateral free trade agreements, dealing with levels of liberalization, were taken over:

- total liberalization with B-H, Macedonia, Montenegro and UNMIK;
- 97% liberalization with Moldavia – with only 8 product groups on tariff quotas (wine, cigarettes, tobacco);
- partial liberalization with Croatia and Albania:
 - from 1/1/2007, total liberalization of trade in industrial products,
 - partial liberalization of trade in agricultural products (10% of tariff positions with Croatia and 24% with Albania), and further liberalization by 5/1/2009.

It should also be pointed out that the share of domestic exports to the region's countries has been falling. Since the signing of most of the bilateral agreements (middle of 2004), the significance of this part of the world has been falling, as exports to the region have grown more slowly than total exports.

The region's 2003 share of 36.2% of total exports fell for the first nine months of 2006 to 30.7%. In the same period, the share of imports grew slightly, from 6 to 7.7%. The reason for this is that the region's countries have technologically dated industries, compete with each other for exports to the EU and, in fact, do not have much to offer to each other. Serbia's trade with the countries in the region is primarily made up of food products, agricultural raw materials, electrical power, non-ferrous metals, textiles and chemical products, which resembles the trade profile of developing countries. The most frequent forms of cooperation are pure buy-sell transactions, while higher forms of business cooperation are negligible.

If we look at the results of Serbia's trade with the CEFTA countries in the 2004-2006 and 2006-2007 periods, we will observe great improvement in the field of exports.¹² Namely, the economic indicators for the 2004-2006 period are:

- after the EU, the second-ranked trade partner,
- growth of total trade by 37.5%,
- export growth rate is lower – 8.5% - than the import growth rate – 13.7%,
- a net trade surplus,
- surplus – with Albania, B-H, Macedonia,
- deficit – with Croatia and Moldavia.¹³

For 2006, the trade results were the following:

- ranked according to size of exports to CEFTA (as against total exports to the world):
 - B-H (2), Montenegro (4), Macedonia (6), Croatia (8), Albania, Moldavia – the highest export growth rate was toward Albania and Croatia;
- ranked according to size of imports:
 - B-H (8), Croatia (10), Macedonia (19), Montenegro, Moldavia and Albania;
- Share of CEFTA in Serbia's total exports is 30%, and in imports 8%.

In 2007, exports were twice the size of imports, and the export growth rate (44%) was slightly higher than that of imports (38%). The index of export growth relative to the same 2006 period is higher than the index of import growth in trade with Albania, Moldavia and Montenegro, while deficits were registered with Croatia and Moldavia. CEFTA's share in Serbia's total exports in 2007 was 32%, and 7.8% of total imports. The share of consumer goods was 40% of exports and 20% of imports vis-à-vis CEFTA.

Since, in the end, all the CEFTA 2006 countries will adjust to the standards and regulations of the EU, Serbia should choose the direction of harmonization within CEFTA 2006. The Republic of Serbia needs to continue working on the resolution of all open questions (the implementation of protective measures, Kosovo and Metohija, oil and oil derivatives, and the tobacco industry) through dialogue with interested parties and through compromise.

¹² Source: Ministry of Economy and Regional Development of the RS: www.merr.sr.gov.yu, 19/11/2007.

¹³ Source: *ibid.*

It would be advisable to expand the existing mechanisms of aid to domestic companies that are in accordance with WTO rules. In that sense, the experiences of the chamber of commerce and various non-governmental organizations in the implementation of such programs could prove quite valuable.

Conclusion

CEFTA is expected to contribute to increased regional trade, to allow the signatory countries to participate in a multilateral trade system under the same conditions for all producers, allow the expansion and modernization of the free trade domain and the opening of a larger market for investments (since investors will look at the attractiveness of a unified region, rather than that of small individual countries).

The CEFTA 2006 agreement contains modern regulations wholly harmonized with the rules of the World Trade Organization. Except for the usual provisions regarding free trade, the text of the Agreement also covers some new forms of cooperation, such as links in the area of trade in services, stimulation and protection of investments, etc. The Agreement also contains modern provisions on protecting competition in the marketplace and intellectual property. As an important novelty, the Agreement contains a detailed dispute-resolution mechanism, which includes arbitration, all with the purpose of ensuring the best possible implementation.

The goal of signing the agreement on the Central European Free Trade Area is the advancement and improvement of the overall trade and economic relations between the countries of Southeastern Europe. CEFTA 2006 is supposed to lead to a harmonization of the development of economic relations through the development of trade, faster development of commercial activities, rising standards of living and better employment opportunities. Other important effects of this agreement for each of its signatories are expected rises in productivity and the achievement of financial stability, all on the basis of principles of the market economy and trade liberalization, in accordance with the provisions of the General Agreement on Tariffs and Trade (GATT, 1994), and the agreement on the establishment of the World Trade Organization.

CEFTA 2006 secures:

- full accordance with the rules of the World Trade Organization;
- the free trade of all industrial products and a large number of agricultural products (up to 90%);
- modern trade-related regulations;
- innovative clauses regarding new trade issues (i.e. protection of intellectual property rights);
- mechanisms for a successful implementation of the agreement and dispute resolution;
- a step closer to accession to the European Union.

It is not unimportant that joint CEFTA products will appear not only on the regional market but on other markets as well, thus providing access to a large number of consumers. In addition, through cooperation, the countries of the region will strengthen and increase their efficiency and adopt international standards.

The Southeast European countries' trade deficits tell us that their competitiveness is still quite weak. Even though intra-SEE trade is still growing, most of the trade flows are still directed toward countries of the European Union. The establishment of a Southeast European free trade area is turning the region into a very respectable market, an attractive area for the greater engagement and inflow of foreign capital and investments. It is, thus, justified to expect that the implementation of the free trade agreement will result in the improvement in the structure of trade and the establishment of a balance in intraregional trade, which will open the way for a gradual reduction and removal of the existing foreign trade deficit, a reduction in the number of trade intermediaries, which have been responsible for higher margins and unjustifiably high prices, as well as the development of higher forms of economic cooperation, reduction in production costs and respect for international standards.

It is also necessary to take measures toward the removal of non-tariff barriers and a general improvement in the infrastructure necessary for strengthening regional ties. Paradoxically, the process of ac-

cession of the SEE countries to the European Union is creating short-term obstacles to trade but, in the long term, it is leading toward a unitary market. Advances in economic development, and the improvement of social and political conditions in Southeastern Europe are a function of cross-border cooperation, especially the cooperation of the business community.

The countries that have achieved the highest growth rates in bilateral trade with the European Union are also the ones that have most developed their trade within the region of Southeastern Europe. This tells us that greater trade in the region and greater trade with the EU are mutually complementary.

The processes of integration in the region of Southeastern Europe are very important for our country. Accession to CEFTA 2006 is one more step bringing Serbia closer to entry into the European Union. Serbia must be an active participant in these processes, must work on finding solutions to its own benefit in its relations with other countries, submit proposals to other countries, resolve open issues, participate in dialogues, develop good neighborly relations and, especially, develop economic relations. This is the best way for it to realize its own developmental goals and move a step closer to joining the European Union, as well as shedding the status of a developing country.

References

- Agreement on Amendment of and Accession to the Central European Free Trade Agreement
Božić, M.: *Ekonomika politika*, Pravni fakultet u Nišu, Niš, 2006.
- CEFTA's Aims, Objectives and Extent, Internet, <http://cefta.literal.si/eng/cefta/cilji/index.html-l2>.
- Consolidated Version of the Central European Free Trade Agreement (CEFTA 2006)
- Danas, *Trening za utakmicu na tržištu Evropske unije*, Internet, <http://www.jasatomic.org.yu/?postid=5554>.
- Dangerfield, M.: "CEFTA: Between the CMEA and the European Union", *European Integration*, Vol. 26, No. 3, 309-338, September 2004, University of Wolverhampton, UK.
- Dangerfield, M.: *Subregional Integration and EU Enlargement: Where Next for CEFTA?*, Blackwell Publishing Ltd, University of Wolverhampton, UK, 2006.
- Državni zavod za statistiku Republike Hrvatske, Internet, <http://www.mingorp.hr/>.
- Đukanović, D. (prir.) – Jelisavac, S.: "Ekonomski aspekti saradnje međudržavnih foruma – uporedna analiza", *Zbornik radova Međudržavni forumi za saradnju u Evropi: uporedni modeli*, Institut za međunarodnu politiku i privredu, Beograd.
- Eastern Europe economy: CEFTA expansion—trade block?*, Internet, http://www.viewswire.com/index.asp?layout=VWArticleVW3&article_id=1911575576&rf=0
- EU backs southeast Europe free-trade pact in 2006*, Internet, http://www.bilaterals.org/article.php3?id_article=4302.
- EU welcomes signing of new Central European Free Trade Agreement*, IP/06/1837, Brussels, 19. December 2006, Internet, <http://europa.eu.int/>.
- European Union, *A New Regional Agreement to Develop Trade in South Eastern Europe*, MEMO/06/502, Brussels, 19 December 2006.
- Source: B92, Beta, Tanjug.
- Jovović, D.: "Sporazumi o slobodnoj trgovini u regionu Jugoistočne Evrope", *Ekonomski anali*, no. XLVIII, Ekonomski fakultet, Beograd, 2004.
- McTaggart, A.: *EU Hails Balkan Free Trade Deal as Milestone*, Institute for War and Peace, Internet, http://www.bilaterals.org/article.php3?id_article=6353.
- Messerlin, P. A.: *CEFTA in the World Trade System*, Seminar for Parliamentarians from South Eastern Europe Stability Pact and Friedrich-Ebert-Stiftung, Brussels, April 19, 2007.
- Mitev-Šantek, G.: *Srbija i Bosna i Hercegovina se protive sporazumu CEFTA*, Southeast European Times, Internet, <http://www.setimes.com/>.
- Mukiza, D.: *Poor countries urged to strengthen regional blocs for better WTO deal*, Internet, <http://www.ippmedia.com/ipp/observer/2007/10/07/99920.html>.
- Nilsson, L.: *Regional trade agreements: An EU perspective*, European Commission, Internet, <http://europa.eu.int/>.

- O'Sullivan, A.: *The Economic Situation in South East Europe and the Role of Trade and Investment*, OECD, CEFTA 2006 – Expanding Trade and Investment in South Eastern Europe, A Seminar for Parliamentarians from South Eastern Europe, Brussels, 19. April 2007.
- Stability Pact for Southeastern Europe: <http://www.stabilitypact.org/>.
- Privredna komora Beograd, Udruženje trgovine, Sporazum CEFTA 2006, april 2007, Internet, www.kombeg.org.yu.
- Privredna komora Srbije, *Sporazum CEFTA 2006 – predvorje za poslovanje u EU*, Internet, <http://ino.komora.net/RegionJIE/CEFTA2006/>.
- “Proširenje CEFTA”, *Privredni vjesnik*, Internet, <http://www.privredni-vjesnik.hr/>.
- “Provedba Zakona o potvrđivanju Ugovora o izmjeni i dopuni i pristupanju Srednjoeuropskom ugovoru o slobodnoj trgovini – CEFTA 2006”, naputak no. 6/2007, Republika Hrvatska.
- Republički zavod za statistiku Srbije, Internet, www.statserb.sr.gov.yu.
- Wilhelmsson, F.: *Trade Creation, Diversion and Displacement of the EU Enlargement Process*, Department of Economics, Lund University, Sweden, June 2006.
- Wijkman, P. M.: *A Reader's Guide to 'CEFTA 2006', Expanding Trade and Investment in South Eastern Europe*, Friedrich Ebert Stiftung, Brussels, 18-21 April 2007.
- Zaključak o akcionom planu za implementaciju CEFTA sporazuma*, “Službeni glasnik RS”, no. 29/2007.

Organic Food Market Development – The Case of Serbia¹

Jovan Zubović, Ivana Domazet²

ABSTRACT – Serbia has in 2006 adopted a Law on “Organic production and organic products”. This was a first step towards improvement of this, very prosperous field of agriculture. Unfortunately, in the same year, the state has invested only 50 million dinars (600.000 €) for subvention of this production. This was mostly related to licensing of fields for organic production. Unlike that, in neighboring Croatia, which is trailing in organic production to Serbia government has adopted a regulation by which all organic manufacturers are subsidized by 400€ per hectare.

KEY WORDS: agricultural economics, organic food, regulations, food market

Industry overview

The global market for organic food & drink was valued at US\$ 27.8 billion in 2004 (19) and US\$ 30 billion in 2005. Although organic farming is practiced throughout the world, the most important markets are in North America and Europe, which together comprise 96% of global revenues. Such growth has led to a transformation in the organic foods industry. Firms that have been in the industry for many years not only face great pressure to expand; in some cases, they are struggling to keep up with demand for their products. They have also been confronting new competition in the form of firms that have recently entered the organic foods market. Some established firms welcome the changes: they are happy to grow and willing to tweak their production and marketing approaches to appeal to a new range of consumers. Overall, they would like to see an increase in the number of sizable organic producers, manufacturers, wholesalers and distributors. Their perspective is in contrast to that of others established in the business, who maintains that organic food should be grown, processed, distributed and retailed on a small, regional scale. The competition that comes with growth in the organic foods market may put small family farms at a disadvantage because it encourages large conventional corporations to enter the market, thereby decreasing opportunities for those that farm and ranch in rural areas. A major focus of this report is to determine how new and established firms are faring in this entrepreneurial climate.

Organic farming is practiced in approximately 100 countries throughout the world, with more than 24 million hectares (59 million acres) now under organic management. Australia leads with approximately 10 million hectares (24.6 million acres), followed by Argentina, with approximately 3 million hectares (7.4 million acres); both has extensive grazing land. Latin America has approximately 5.8 million hectares (14.3 million acres) under organic management, Europe has more than 5.5 million hectares (13.5 million acres), and North America has nearly 1.5 million hectares (3.7 million acres). (22, 2005).

The proportions of organic farmland are evenly split across the globe. About 31.5 million hectares of farmland were certified organic in 2005. Australasia leads with 12.2 million hectares followed by Latin America (6.4 million hectares) and Europe (6.3 million hectares). Important consuming countries with large areas of organic farmland are Italy, USA, Germany and the UK. Countries like China, Brazil and Uruguay are important producers of organic crops; however the majority of production is for export markets. The European market for organic food & drink was the largest in the world until it

¹ This paper is a part of researching project no.159004, financed by the Ministry of Science and Technological Development of Republic of Serbia, named: "The Integration of Serbian Economy into the EU - Planning and Financing of Regional and Rural Development and Enterprise Development Policy"

² Jovan Zubović, Ivana Domazet, Institute of Economic Sciences, Belgrade

was overtaken by North America in 2005. The European market was worth USD 13.7 billion in 2004 and sales are estimated to have reached USD 14.4 billion in 2005. Sales of organic products increased by about 5% in 2005, however some countries reported higher growth rates.

Germany has the largest market for organic foods in Europe, valued at about USD 4.5 billion in 2005. Sales are growing by 10-12% a year as the number of channels offering organic products expands. A growing number of conventional supermarkets are offering organic products and the number of organic supermarkets continues to increase with 40 new organic supermarkets opening in 2004 alone. The UK market is next largest, followed by the Italian and French markets; however growth rates have slowed in these two countries. Other important markets are in Switzerland, Austria, Sweden and the Netherlands.

Table 1. Land Area under Organic Management (SOEL-Survey February 2004)

Country / Organic Hectares					
Australia	1000000	New Zealand	46000	Japan	5083
Argentina	2960000	South Africa	45000	Israel	5030
Italy	1168212	Netherlands	42610	El Salvador	4900
USA	950000	Indonesia	40000	Papua New Guinea	4265
Brazil	841769	Romania	40000	Thailand	3993
Uruguay	760000	India	37050	Azerbaijan	2540
UK	724523	Kazakhstan	36882	Senegal	2500
Germany	696978	Colombia	33000	Pakistan	2009
Spain	665055	Norway	32546	Luxembourg	2004
France	509000	Estonia	30552	Philippines	2000
Canada	478700	Ireland	29850	Belize	1810
Bolivia	364100	Greece	28944	Honduras	1769
China	301295	Belgium	20.241	Jamaica	1332
Austria	297000	Zambia	20000	B&H	1113
Chile	285268	Ghana	19460	Liechtenstein	984
Ukraine	239542	Tunisia	18255	Rep.of Korea	902
Czech Rep.	235136	Egypt	17000	Bulgaria	500
Mexico	215843	Latvia	16934	Kenya	494
Sweden	187000	Sri Lanka	15215	Malawi	325
Denmark	178360	Serbia	15200	Lebanon	250
Bangladesh	177700	Slovenia	15000	Suriname	250
Finland	156692	Dominican Rep.	14963	Fiji	200
Peru	130246	Guatemala	14746	Benin	197
Uganda	122000	Costa Rica	13967	Mauritius	175
Switzerland	107000	Morocco	12500	Cyprus	166
Hungary	103672	Nicaragua	10750	Laos	150
Paraguay	91414	Cuba	10445	Madagascar	130
Portugal	85912	Lithuania	8780	Croatia	120
Ecuador	60000	Cameroon	7000	Guyana	109
Turkey	57001	Vietnam	6475	Syria	74
Tanzania	55867	Iceland	6000	Nepal	45
Poland	53515	Russia	5276	Zimbabwe	40
Slovakia	49999	Panama	5111	SUM	24070010

There is a small market for organic foods in Central & Eastern Europe (CEE) with the region comprising less than 3% of European revenues. Although the amount of organic farmland in CEE countries is rising, mostly primary products like grains, seeds and herbs are grown. There is a lack of organic food

processing in the region with high volume of the organic crops exported to Western Europe, although this is beginning to be addressed via joint ventures.

Rapid growth in consumer demand for an industry's products frequently triggers change throughout the supply chain. The expansion creates opportunities for existing firms to grow, for new firms to enter, and for market channels to reorganize with new links between producers, brokers, manufacturers, distributors, and retailers. Fast growth also poses risks for established firms and new entrants because of volatility and uncertainty.

Market development is a process composed of many decisions by the public sector and private firms. For example, the government may specify conditions to avoid excessive market power by a few companies. Private firms may agree upon industry-wide safety standards. Sound decisions depend on high quality information, and determine the extent to which the long-term interests of society are met. We often take for granted the public information for mature product markets, such as regular price and quantity reporting. These data enable buyers, sellers and government to make well-informed choices. Such information for small markets is often incomplete or entirely missing. Under such conditions, a variety of market inefficiencies may occur.

By all accounts, the small, but fast growing, U.S. organic food market is in the midst of dramatic change that will alter the industry yet, there is little public information to understand the nature and potential effects of this change. The lack of information may prevent researchers and policymakers from identifying problems and crafting possible solutions. Research can contribute vital intelligence on such emerging markets to shape their development in the long-term interests of private firms and consumers. We have assembled existing and new data to analyze the rapidly unfolding developments in the structure and operation of the organic foods market. Our principal contribution is to identify the most critical issues confronting the industry, develop potential approaches to resolve the issues, and outline a future research agenda.

Part of what makes the organic market unique is that the businesses and consumers it serves judge food not only by its taste, price and appearance, but also by the social and environmental benefits it represents. In this respect, it is a market that does not rely solely on economic factors in defining its products. Another difference is that, unlike the early growth of many conventional industries, the organic foods industry has grown in response to increased consumer demand, not increased supply. In other respects, however, the organic foods industry is behaving much like other industries for other agricultural commodities. As the industry has grown, it has lured new firms that are now actively competing with established businesses. This growth has led to two major challenges: ensuring product integrity and ensuring efficient production and distribution of organic products.

At this writing, both the industry and governments (state, federal and international) are still trying to establish a uniform definition for "organic" food - an effort that has thus far met with little success. Firms also have to combat the specter of fraud, which in this case translates to the marketing of conventionally grown products as organically grown. Meanwhile, industry firms are attempting to find more efficient ways to grow, manufacture and distribute enough organic products to meet consumer demand.

Although the dearth of data on the organic foods industry made it impossible for us to describe its structure and activities completely, the results of our research were revealing. We found that some large organic firms achieved success by emulating strategies used by mass market (that is, conventional) firms. For example, large natural foods retailers have developed their own "private labels" (house brands) and own wholesaling facilities.

World large organic companies have also been innovators in areas such as contracting and cooperative development. In contrast, smaller retailers, distributors and farmers have achieved success in large part through emphasizing customer service and developing strong personal relationships with both sellers and buyers.

It appears that the challenges of ensuring product integrity and adequate production and distribution of organic products will be ongoing. For instance, even though mass market supermarkets are likely to continue adding organic foods to their product lines, they may have weak or non-existent screens for

accepting organic products, perhaps making them more vulnerable to fraud. They may also place little value on products that meet the social and environmental sustainability aspects of organic farming, depending on whether and how their consumers want those values expressed in their organic food products.

There is also the question of when the Serbian government will approve a standard definition for the term “organic” - a decision that is slated to take place in 2000, but that has engendered a wealth of controversy in the interim. With regard to meeting demand, it is possible that market imperfections may have, through a variety of factors, ranging from lack of proper distribution channels to lack of credit, prevented the marketing of as many organic commodities as consumers would like. Although market imperfections are difficult to document in this case, it is consistent with these difficulties, which create incentives for manufacturers and retailers to conclude special contracting arrangements with farmers and ranchers.

Development of organic food industry

Modern organic farming began developing in the early 1920s and 1930s through the work of a few individuals. The first, Rudolf Steiner, laid the foundation of biodynamic farming, which embraces the relationship of philosophy, spirituality and the earth (18, 1924).

According to the Biodynamic Association, “biodynamic is a method of agriculture which seeks to actively work with the health-giving forces of nature.” Steiner’s composting methods have since been adopted by many organic farmers.

The Demeter Association, a biodynamic certification organization, began operating in the 1930s and continues to certify farms today. Sir Albert Howard and Lady Eve Balfour also contributed to early organic farming. They believed that “the soil’s microbial life helped turn organic matter into food for crops.” They began farming without chemicals and created a unique method of layered composting to develop organic matter in soil (9, 1994). The Rodale Institute, started in Pennsylvania by J. I. Rodale, was instrumental in promoting organic farming in the United States through research into building soil fertility (6, 1998). The Rodale Institute delivered its message to the public through many Rodale periodicals, including *Health Bulletin* and *Organic Farming*.

In the early days, people bought and grew organic food for purely philosophical reasons. But in the early 1960s Rachel Carson’s *Silent Spring* revealed in chilling detail some of the environmental and health consequences of intensive agriculture that relied on chemical pesticides

Demand for organic food increased, as did the number of organic farmers (9, 1994), and a genuine organic foods industry was born. Since then the industry has grown and it has encountered many of the traditional problems faced by any industry on the rise.

A key issue in today’s organic foods market is simply its size. When an industry is small, the participants know one another and may also share a common ideology, making it possible to attain and uphold a consensus about rules or quality standards. Reneging on a contract may give someone a reputation for dishonesty, and under certain circumstances, this threat keeps participants honest. As the number of participants increases, however, personal relationships are less common and the ideology of the group is likely to grow more heterogeneous. Consequently, it is difficult to reach a consensus when defining standards and ethical trading practices, or to enforce rules. And reputation, which works to preserve honesty- in a small industry, is not as effective in a large industry (10, 1990). This kind of problem often leads to institutional change, such as industry self-regulation or government intervention (11, 1990). For agricultural commodities, most kinds of institutional change are implemented to regulate the quality available in the market. Three ways to accomplish this goal are through imposing minimum quality standards (7, 1998), third party certification (21, 1999) and inspection.

An historical example serves to illustrate the point. In the early 1900s, rail transportation made it possible for agricultural commodities to be shipped over long distances. As a result, certain regions specialized in the production of certain commodities: grains were grown in the U.S. Midwest and fruit in

the Pacific for sale nationwide. However, many farmers experienced severe problems as they tried to sell their products in distant markets. Disputes over quality and price, as well as failures to pay for goods, contributed to general chaos in marketing. Farmers in certain regions (for example, Pacific apple growers) were able to overcome many of these problems; others (for example, Eastern apple growers) were not. To address these problems, the U.S. Department of Agriculture (USDA) designed and administered quality standards and inspection services. It defined trading practices for commodities as well (2, 1999). Like the early 20th century markets for agricultural commodities, today's organic foods industry is grappling with the problems of how to maintain quality during the trip from farm to market, how to describe quality and how to standardize the description of quality. How can buyers and sellers be sure that their business partners are honest and adhere to contract terms? What recourse do buyers and sellers have when partners renege on a contract? Manufacturers (both in today's organic market and in the early 20th century) have been concerned with procuring high quality foods and maintaining product quality during the manufacturing process. Their dilemmas are part of the universal experience of any agricultural industry: growth changes the relationships between sellers and buyers, introducing a range of new conflicts and challenges and often drastically altering institutional structure. Perhaps the most difficult challenges for today's organic foods market are how to secure and distribute sufficient supplies of organic food and how to ensure their integrity.

Ensuring integrity in turn means many things: how to market and manufacture the food while preserving its "organic" qualities, how to assure buyers that food is grown organically, knowing what type of processing is appropriate for organic foods, and being able to define exactly what "certified organic" means. A key problem has been that since the industry's inception, there has been no universally accepted definition for "organic," making it difficult for consumers and retailers to understand what they are getting when they purchase "organic" foods.

In 1973, 50 California farmers addressed the issue by forming the California Certified Organic Farmers, which defined standards for organically grown food and created a certification system (8, 1998). By 1980, a number of states had given authority for defining and enforcing standards to state departments of agriculture, and simultaneously, many private certifiers emerged. Currently, there are at least 44 different organic standards in the United States and at least 27 private certifiers (3, 1999).

Private and public policy battles about standards for other forms of sustainable agriculture are also ongoing throughout the world on local and regional levels. While the battles for standards rage on, the organic food industry must continue to focus on how to produce, manufacture and distribute the products that consumers want while maintaining their quality. To maintain quality, both buyers and sellers must want to do business with people who will honor agreements, which includes sending the agreed-upon product and paying the agreed-upon price.

Buyers and sellers must also ensure that the product is truly organic - in a generally accepted, if not governmentally mandated, sense of the word. Further, buyers and sellers must navigate successfully within the structure of their industry, which can be defined here as the number of firms in each link along the marketing chain and their relative bargaining positions.

Market structure affects both prices and quantities, and so determines whether firms on one end of the chain have market power over firms on the other. For example, there are a limited number of manufacturers of conventionally produced breakfast cereals. They sell their products to a small number of retailers, which makes it difficult for retailers to exert market power over them (1, 1999). On the other hand, there are many producers of iceberg lettuce and few retailers, making it possible for retailers to exert market power over lettuce growers during certain times of the year (17, 1996)

Not too long ago the only place you could find organic products was at a farmers market or natural foods store. But after watching sales of organic foods steadily grow at 15-20 percent for the past decade, these days everyone wants a piece of the organic pie. According to the 2005 Manufacturer's Survey from Organic Trade Assn. (OTA, www.ota.com), U.S. sales of organic products have surpassed \$14 billion a year, with processed foods (foods other than produce, dairy or meat) representing more than 42 percent of sales. Compared to the 2 percent annual growth of conventional groceries, organic offers an exciting opportunity. However, although the green organic seal has the potential to generate a lot of green, can the organic supply keep up with the ever growing demand? The answer from those in

the industry is an enthusiastic yes. But before you try to order 5 million pounds of organic flour, you must first understand the organic world and how it differs from the conventional food world. (2)

Marketing chain

Although we have a general idea of how and through whom organic goods make their way to market, we do not have in-depth knowledge of every player in the marketing chain. Here we examine (to the extent possible) the specific roles, concerns and strategies of retailers, distributors, manufacturers and farmers alike.

Lack of information makes it difficult to discern who holds the most power in the industry. Some industry analysts believe that manufacturers are the most powerful force in the food marketing channel, while others believe that retailers hold the bulk of the power. Indeed, retailers of natural foods appear to be doing exceptionally well in the current business climate.

Sharing in the profits of the burgeoning organic foods industry are manufacturers, who, some analysts believe, represent the industry's fastest growing group. Among the problems specific to organic manufacturers are ensuring that ingredients procured are organic and maintaining their organic status during the manufacturing process. Manufacturers can be sure of ingredient quality by purchasing those that are certified organic. By certifying their production process, manufacturers can assure both retailers and consumers that the final product is indeed organic.

The distribution link in the organic foods industry - brokers, handlers and wholesalers - is critically important, if poorly documented. According to the Thompson Food Industry Business List, there are about 3,000 natural foods distributors in the United States. Natural foods distributors are unsurprisingly, more likely to sell organic food products than are mass market distributors. This said there are many mass market distributors who have decided to integrate organic food items into their product mix.

Organic production is generally the best understood part of the organic foods market. The most comprehensive source of information on organic farmers comes from the Organic Farming Research Foundation (OFRF) National Organic Farmer's Survey. OFRF has been following the development of organic agricultural production in the United States through biennial surveys of organic farmers and ranchers conducted in 1993, 1995 and 1997.

In addition to surveying farmers about organic agricultural research and information sources, as well as organic on farm production and management methods, OFRF has also collected marketing data. According to these data, both the number of organic farmers and acres farmed organically grew steadily. Although they make up a very small percentage of farms, they are among a very few categories of farms that are growing in number rather than decreasing. Despite the fact that this knowledge base is good relative to those for other areas in the organic foods market, much remains unknown, in part because there is very little funding provided for organic production. Further, there are many serious information gaps in our understanding of the pricing and marketing of organic food products, which have not been as carefully studied and documented as the production side.

Manufacturers

Manufacturers convert raw agricultural products into prepared and processed foods such as canned and frozen vegetables, pasta, ice cream and cookies. Manufacturers of both conventional and organic foods must cope with the problems of how to produce a uniformly consistent product and how to secure shelf space in the supermarket. However, manufacturers of organic products face three additional challenges: how to secure a large enough and cheap enough supply of organic ingredients, how to verify that those ingredients are organic and how to maintain their organic integrity during processing. Manufacturers of conventional processed foods can overcome the supply problem by contracting directly with farmers or by establishing ongoing relationships with them. Recently, some large organic

manufacturers have begun contracting with farmers and also working closely with them to provide guidelines for what kinds of products are needed. Manufacturers of conventionally produced goods often pay fees to secure shelf space (called slotting fees). Although no definitive information is available, industry trends point to the possibility that organic food manufacturers are heading in the same direction.

Organic foods have traditionally been manufactured by small businesses that fit into a profitable niche in a region. Their success, like that of many organic and sustainable food businesses can be attributed in many cases to a blend of quality, taste, safety, environmental attributes, attributes of local production and artisanship (4, 2007). However, the market for organic foods was fairly small and specialized when many of these businesses first opened their doors. That market is much larger now and, as mass market food businesses enter it. In developed organic-food countries many long-time organic foods manufacturers must merge and grow to stay competitive. (Others, of course, remain small and serve regional niche markets.) Market growth presents opportunities for traditional organic manufacturers such as Cascadian Farm in USA, which has been able to increase the scale of its operations to meet growing demand. Nonetheless, market growth may also be threatening to other manufacturers, who may stand to lose market share to large businesses that create products similar to their own. In addition, increased competition and market size may mean that these manufacturers will lose the market premium that their product once commanded. Whether these changes are threatening depends in large part on whether the manufacturers can carve out and maintain their market shares through quality and price competitiveness.

Manufacturers of natural foods are increasingly interested in selling in mass market venues. Unfortunately, they lack the expertise and-experience of their competition (mass market distributors) when it comes to knowing what to offer customers (NFM). Like retailers and wholesalers of organic foods, as well as many small conventional industry members, they have been slow to adopt ECR techniques (box 1), which can be invaluable in streamlining and minimizing the costs incurred on the path from the assembly line to the consumers' shopping cart.

Many natural foods market manufacturers are interested in growth strategies. The great majority have been growing rapidly and plan to continue doing so for the foreseeable future (15, 2006). Supply chain management is increasingly complex for these businesses, and many are as yet unable to cope adequately with the problems this complexity brings. Many natural foods manufacturers have been growing swiftly without well-defined growth a plan, which means they have run into severe logistical problems. On the farm side, manufacturers are concerned with obtaining a supply of high quality inputs. On the retail side, manufacturers are concerned with finding and maintaining markets for their products. Many manufacturers of organic foods, natural foods or a mix of the two have not yet had to provide the services that their mass market counterparts provide to distributors and retailers. They have traditionally been involved in selling their products to distributors and retailers who cater to "the converted" - consumers who are already interested in natural foods and take the time to go to health foods stores. The failure to provide these services is becoming costly as manufacturers are increasingly working with mass market distributors and retailers.

Farmers

Marketing is a significant challenge for most farmers. They usually have little say in the prices they garner for their products in the marketplace. This is because most agricultural commodities are grown on a large number of farms and are sold to a small number of buyers (e.g. manufacturers or retailers). Farmers have developed a number of different strategies to get higher prices despite this imbalance of power. One strategy has been to market products collectively through marketing cooperatives. By pooling their output and acting as one selling agent, farmers are often able to meet buyers from a position of greater strength and command higher prices. But the process of forming a cooperative (and receiving the average price of the pooled output) makes one farmer's output indistinguishable from another's. This situation creates an incentive for some farmers to slack off and produce low quality

products, subsequently undermining the effectiveness of marketing as a group. Thus, marketing cooperatives are not always successful.

Another response has been for farmers to form marketing agreements and strategic alliances. Marketing agreements and strategic alliances can take many forms, but most are designed to help farmers (and shippers) draw on one another's inventories, thereby increasing their market share.

These strategically related farmers and shippers are able to provide a wider range of crops and varieties than they could independently, thereby gain an advantage over other farmers and shippers with limited offerings. These kinds of strategic alliances are beginning to occur between conventional and organic farmers.

Most marketing problems faced by organic farmers are the same as those faced by more conventional farmers: where to market their products and how to receive the highest possible prices for them. In addition, organic farmers must contend with the entry of large agribusiness firms that see organic production as a new, profitable area in which they can develop a high margin business (4, 2007). However, the viability of organic farms has not been seriously jeopardized by the entry of large firms. Small organic farmers do not seem to be experiencing difficulties as severe as those of conventional farmers, who are struggling to compete with large conglomerates.

Like some of their conventional counterparts, some small organic farmers are also turning to direct sales, either on their farms or in farmers' markets. Organic farmers have also relied on CSA - community supported agriculture - arrangements as an alternative marketing technique. In a CSA arrangement, consumers purchase "shares" from a farm for a fixed price, acting as creditors and bearing production risk. According to a survey conducted by the Organic Farming Research Foundation (12, 13, and 14) fruit, vegetable and livestock farmers use direct marketing most frequently; field crop farmers use it infrequently. Of the 28 percent of fruit, nuts and tree crops marketed directly to consumers, 40 percent of them were sold on the farm, 42 percent in farmers' markets and 15 percent through a CSA.

The market for foods grown by organic or sustainable agricultural methods has become significantly larger and more complex. For those who want to make the most of their businesses in this market, the two most critical factors are producing the right product and ensuring the quality of the product. For farmers, this means listening carefully to their buyers and getting correct and timely information about prices and markets available to them. Buyers by definition have more close contact with the consumer and therefore know more about what consumers want from the natural foods market, and what they are willing to pay for organic and other eco-labeled foods. Farmers of organic and sustainable produce want to be sure that the food they grow is handled and processed according to the standards necessary to garner adequate profits. They understand that they are responsible for producing products that consumers can buy with confidence - especially as they are paying a premium for benefits that are not immediately apparent. According to the OFRF survey, 56 percent of all organic farmers surveyed planned to increase the number of acres they had in organic production. Sixty-three percent planned to increase the number of markets and/or buyers and 74 percent planned to increase the volume of organic product they marketed (12, 1999).

Legislation

As said previously Serbia has adopted a Law on "Organic production and organic products" in 2006. This Law is just a beginning of regulations in organic food industry. If we look on developed countries we can observe over 15 years long experience of regulations improvement.

In 1991 the EU passed Regulation 2092/91 which lays down in detail how food must be produced, processed and packaged to qualify for the description 'organic'. The regulation also specifies detailed criteria for the inspection and subsequent certification of food producers and processors.

By harmonizing organic legislation throughout Europe the EU Regulation has established a level playing-field for manufacturers. This in turn has led to easier transfer of organic ingredients and finished organic foods within the EU. The Regulation also ensures that ingredients entering the EU must have

been produced to the same standards as ingredients produced within the EU. After some initial difficulties the Regulation has been welcomed by the Organic Food industry as it has enabled consumers to buy organic produce with confidence, and has reassured producers and processors that their market will not be contaminated by fraud.

A major amendment to the original EU Regulation was made in 1995. This amendment divides organic processed foods into two categories, depending on the proportion of organic ingredients present:

Category 1. Organic - Product contains a minimum of 95% organic ingredients by weight. Product can be labeled 'Organic' eg. Organic Cornflakes

Category 2. Special Emphasis - Product contains 70 - 95% organic ingredients by weight. Product can be labeled 'Made with Organic Ingredients' eg. Tomato Ketchup made with Organic Tomatoes.

In the USA organic regulations have been developed on a state-by-state basis - currently there is no national organic legislation. The US Department of Agriculture (USDA) attempted to bring in national organic standards. These standards would have permitted the use of GM ingredients, sewage sludge and irradiation in food labeled as 'organic'. The USDA received over 220,000 negative responses to these proposed standards, which have now been withdrawn for redrafting. It is possible the new USDA proposals will be based on the international standards drawn up by IFOAM, the International Federation of Organic Agricultural Movements.

The following guidelines are among some that are widely accepted in EU:

Organic products cannot be sold without a valid Certificate of Compliance issued by a registered Organic Certification Body

When a Certificate is issued it applies only to the products listed thereon

Records must be kept of all organic material purchased and all organic units produced

All organic ingredients must be produced by an organically certified supplier

Organic ingredients must be used unless a non-organic version is permitted by the Regulation

Organic raw materials and products must be clearly labeled and physically separated from non-organic products.

The system is subject to regular inspection. Every organic producer or processor is inspected at least once a year by the Certification Body with which they are registered. A further 10% are additionally inspected by special regulation body, to ensure that the organic inspection carried out by the Certification Body has been done to the appropriate standard.

Looking ahead

At this writing, no one can have a clear picture of exactly how the organic foods market is changing and what it will look like when the process is complete. Ultimately, however, we believe that as the organic foods industry continues to expand, new and established companies can coexist and prosper - provided that they squarely face the challenges posed by an immature distribution network and less than complete regulation. If they are successful, the organic foods industry has the potential to deliver significant market environmental and social benefits not only to its own suppliers and consumers, but also to society at large.

As we have seen, the structure and very nature of the organic foods industry are changing dramatically. Consumer demand for organic foods skyrockets - a trend that seems likely to continue into the next decade and possibly beyond - the range of firms that produces them has expanded dramatically. The organic market is no longer small and specialized, as it has traditionally been; it is becoming specialized but mainstream. Organic food is now sold in a wide variety of retail outlets: local health food stores, natural foods supermarkets and even mass marker supermarkets.

As the organic foods industry has grown, new and established firms have become ever more competitive. Large, national organic foods firms are adopting strategies used by mass market retailers, distributors and manufacturers to achieve success. Smaller, regional retailers, distributors and manufac-

turers have not used these strategies; rather, they rely on customer service and personal relationships to stay competitive. Among both groups, however, there has been significant uncertainty about whether all firms in the market can co-exist and prosper.

The uncertainty stems from a variety of concerns, among them a lack of basic data about the market. Although there are more people buying organic products and more products to buy, there are not enough data available at this writing to assess how much growth is due to new consumers versus traditional consumers of organic products. Similarly, data shortages make it impossible to assess how many manufacturers are new to the organic foods industry, how many are expanding their product lines and, among the latter, how they are expanding their lines. Farmers' responses to increased consumer demand are also difficult to gauge accurately without data on how many farmers are converting from conventional to organic farming methods.

The current lack of uniform organic food standards is a key problem. Although the industry has been successful in creating certification systems, there are currently too many; what the industry needs is standardization, particularly in light of the fact that European buyers do not accept all of Serbian certification systems (which effectively eliminates exports). In the long term, uniform standards will be essential for Serbian producers and manufacturers of organic foods who want to enter international markets.

Whether or not the rule is established in near future, it is clear that organic food will continue to be sold in mass market supermarkets, natural foods retail stores and smaller regional outlets, all targeting different groups of consumers. Although large firms, be they producers, distributors, or retailers have nearly eliminated small firms in conventional markets, we do not think that the organic food industry will follow suit. Instead, we believe that the future organic foods market may become highly specialized. Smaller regional outlets will likely target the consumer who buys organic food for philosophical reasons; mass market supermarkets will likely target new consumers of organic foods who are more concerned about health issues. Conventional stores may be more likely to carry organic products manufactured by conventional firms that have only recently entered the organic and natural foods industry. These firms are more likely to be the ones with which they are familiar, and which have not traditionally operated with a particular deference to the social and environmental aspects of organic farming.

However organic food is marketed in the future, a continuing concern will be to distribute a consistent supply of commodities along the marketing chain. Anecdotal information in trade literature, survey results and case studies provides documentation of small natural foods retailers that cannot provide enough commodities, at prevailing market prices, to meet market demand.

There is no hard evidence on out-of-stocks or other supply problems. Some question whether retail prices are failing to respond quickly enough to equalize supply and demand or whether prices farmers receive are failing to raise enough to provide incentives for increased production. Others believe that an immature distribution system is the problem. In any case, manufacturers seem to be responding by entering creative contracting arrangements with farmers to secure their needed supplies. We identify this as a possible area for public policy intervention.

References

- Cotterill, R.W. (1999), "Jawboning cereal: The campaign to lower cereal prices" *Agribusiness* 15(2):197-205 Demeter Association. 1999. *Certification Pack*. Aurora, NY.
- Dimitri, C. (1999), "Order out of chaos: Evolution of marketing institutions" *Choices* 14(4):49-53.
- Fetter, T.R. (1999), *Economic Impacts of Alternative Scenarios of Organic Products Regulation*; Honors thesis. University of Massachusetts, Amherst, MA.
- IATP (Institute for Agriculture and Trade Policy). 2007. Viewed at: <http://www.iatp.org/foodsec/>
- IFOAM, (2006), "Revision of the Organic Regulation 2092/91", *IFOAM EU Group Newsletter No. 12*.

- Klonsky, K., and L. Tourte. (1998), "Organic agricultural production in the United States: Debates and directions" *American Journal of Agricultural Economics* 80(8):1119-1124, 1130-1133.
- Leland, H.E. (1998), "Quacks, lemons and licensing: A theory of minimum quality standards" *Journal of Political Economy* No.87: 1328-1346.
- Lipson, E. (1998), "Twenty-five years of organic growth" *The Natural Foods Merchandiser* (May): 66-68.
- Mergentime, K. (1994), "Organic industry roots run deep" *The Natural Foods Merchandiser*. XV(9):62-64, 66.
- Milgrom, P.R., D.C. North, and B.R. Weingast, (1990), "The role of institutions in the revival of trade: The law merchant, private judges, and the champagne fairs" *Economics and Politics* 2(1): 1-23.
- North, D.C. (1990), *Institutions, Institutional Change, and Economic Performance*, Cambridge University Press, New York North, D.C. 1991. "Institutions" *Journal of Economic Perspectives* 5(1): 97- 112.
- OFRF (Organic Farming Research Council), (1997), *Third Biennial National Organic Farmer's Survey*, Santa Cruz, California.
- OFRF (Organic Farming Research Council), (1995), *Second Biennial National Organic Farmer's Survey*, Santa Cruz, California.
- OFRF (Organic Farming Research Council), (1993), *First Biennial National Organic Farmer's Survey*, Santa Cruz, California.
- OTA (Organic Trade Association), (2006), *OTA's Manufacturers' Market Survey*. Greenfield, Massachusetts.
- Sahota, A. (2007), "The International Market for Organic and Fair Trade Food & Drink", *Handbook of Organic and Fair Trade Food Marketing*, Blackie Academic.
- Sexton, Richard J; Zhang, Mingxia, (1996), "A Model of Price Determination for Fresh Produce with Application to California Iceberg Lettuce" *American Journal of Agricultural Economics* 78(4): 924-34.
- Steiner, R. (1924), *Agriculture*, Anthroposophic Press, New York Thompson, G.D. 1998a. "Consumer demand for organic foods: What we know and what we need to know" *American Journal of Agricultural Economics* 80(5): 1113- 1118, 1130- 1133.
- The Soil Association, (2006), *Organic Market Report 2006*.
- The World of Organic Agriculture, (2004), *Statistics and Future Prospects*, February 2004. www.soel.de/inahlte/publikationen/s/s_74.pdf.
- Viscusi, K.M. (1999), "A note on 'lemons' markets with quality certification" *Bell Journal of Economics* 9(1): 277-279 Vandeman, A.M. 1997. "New law paves way for expanding organic market." *Food Review* 20(2): 28-32.
- <http://www.foodprocessing.com/articles/2007/074.html?page=1>
- Zubović J, Domazet I, (2008) "Organic Food – Experience from EU and USA", International Scientific Meeting: *Rural Area Sustainable and Complex Development*, Academy of Economic Studies Bucharest Faculty of Agro-Food and Environmental Economics, Bucharest.

SECTION II
ENTREPRENEURSHIP AND
SME ACTIVITIES

Entrepreneurship Dynamics Conceptualized Through Regional Economic Systems

Marika Basheska-Gjorgjieska¹, Aleksandar Gjuroski²

ABSTRACT – Like in many facets of modern society, the economic system is dynamic, turbulent and sensitive to endogenous and exogenous elements. There is a wide and burgeoning empirical literature concerning the flexibility of the entrepreneurship and SMEs functioning in post-transitional economies, influenced by the regional, political, economic, demographic and socio-cultural factors. These factors represent the crucial elements of the business climate that generates opportunities for SMEs that require integration of dispersed experiences and technologies to be recognized and exploited.

This paper has as objective to show the relationship between the Entrepreneurship and Economics on a regional base and in this work we have the opportunity to verify the impact of entrepreneurial activity on competitiveness of the selected countries in the Balkan region.

In our approach, resources used to make conclusions are the data produced by the Global Entrepreneurship Monitor and Doing Business 2009, through which will be represented the entrepreneurs' envision of the new ways of using assets to produce final goods.

Though they developed in isolation, the theory of entrepreneurship and the economic theory of the firm can be usefully integrated. The boundaries of the firm, as well as aspects of internal organization, may also be understood as responses to entrepreneurial processes of experimentation.

KEY WORDS: entrepreneurship, economic theory of the firm, regional development, SMEs

Theoretic postulates on entrepreneurship

Two reasons are considered as being essential for the reasons why there was no economic theory of the entrepreneur, which are connected with the limitations of the two main schools of the economic thought. Firstly, the neoclassical economy made very extreme assumptions about access to information. Simple neoclassical models assume that everyone has free access to all the information they require for making decisions. This assumption reduces decision making to the mechanical application of mathematical rules for optimization. It trivializes decision making, and makes it impossible to analyze the role of entrepreneurs in making decisions of a particular kind. Secondly, the Austrian school of economics, which takes the entrepreneur more seriously, is committed to extreme subjectivism – a philosophical standpoint which makes a predictive theory of the entrepreneur impossible. Austrians argue that anyone who has the sort of information necessary to predict the behavior of entrepreneurs has a strong incentive to stop theorizing and become an entrepreneur himself. They suggest, furthermore, that by entering the system himself, the theorist might well generate a behavioral response which would falsify his/her own prediction. This argument, however, really applies only to the prediction of entrepreneurial success; it may be much easier to predict entrepreneurial failures. The argument also fails to recognize that many economic laws refer to the aggregate behavior of populations of individuals, and that it may be possible to predict the behavior of a population of entrepreneurs even if it is

¹ Prof. Marika Basheska-Gjorgjieska, PhD, full time professor, University 'St. Kliment Ohridski' - Bitola, Faculty of Economics, Republic of Macedonia

² Aleksandar Gjuroski, MSc, faculty collaborator, University 'St. Kliment Ohridski' - Bitola, Faculty of Economics, Republic of Macedonia

impossible to predict the individual behavior of any one of them. In any case, the inability to predict individual behavior depends crucially on the absence of barriers to entry into entrepreneurship.

The historical evaluation of the concept of entrepreneurship manifests its multidimensional nature and explains why this concept is defined from different perspectives as for example the entrepreneurship as a function, mostly as an innovation that springs from the new firms (Shumpeter, 1934), or from the large, already incorporated companies (Nelson & Winter, 1982); the entrepreneurship as a process of creating new businesses (Gartner, 1989). Based on this review, the entrepreneurship might be conceptualized as a discovery of opportunities and creation of new economic activities (Shumpeter, 1934).

If we get insight the entrepreneurship at a microeconomic level, we can conclude that the entrepreneur obviously is significant factor in the process of establishing and development of SME by recognizing the opportunities, allocation of the resources and absorption of financial assets. Schumpeter (1911) discussing the role of entrepreneur in the economic development apostrophize that he is “a creative individual who invents new combinations (factors) of production to create new product, new market or design new technology”. Even though the economic theory has little to say in this area, the intuition implies that there is close relation among the personal qualities of the entrepreneur and the economic success of the business measured through its growth rate and the profitability.

Entrepreneurs motives

The push and pull approach are widely recognized as one of the most pragmatic in determination of the model of entrepreneurship and their motives as well. Some persons are pulled into entrepreneurship. They have ability to identify the opportunities for satisfying the needs of some people. Others are pushed into entrepreneurial activities because the necessity to survive pushes them to start whatever business activity to make their living. For those who are pulled into entrepreneurship, two major drivers of opportunity entrepreneurship might be identified: those who are pulled primarily because they desire independence, and those who are primarily pulled to entrepreneurship because they want to increase their income as compared to being an employee. The remaining share includes people who mention that they have no other way of earning a living (necessity-motivated entrepreneurs) and people who became involved in entrepreneurial activity primarily to maintain their income. According to the GEM, in the high income countries the entrepreneurship is developing primarily because the entrepreneurs in a great sense are using the opportunities motivated from the potential progress. In these countries, the opportunities are plenty, while the individuals have much more alternatives for improving the quality of their life. In the same time, in these countries, being independent is the crucial motive for entrepreneurial undertakings, which suggest that there is also an evidence of alternative ways for generating income. However, there could be other reasons that make the frequency of the motives in these countries to be volatile. The differences of the tax system and the attitudes toward the individual way for creation of the wealth are among the soundest reasons. Notwithstanding, in the low and middle income countries, the primary objective and the general motive for involving into the entrepreneurial community is maintaining or increasing the income, much more than practicing independent working.

SMEs sector promotion

Small and medium-sized enterprises (SMEs) potentially constitute the most dynamic firms in an emerging economy. They are the ones most likely to move into areas of comparative advantage and high value added, though they often face economic, institutional and legal obstacles. Obstacles include limited access to working capital and long-term credit, legal and regulatory restrictions, inadequate infrastructure, high transaction costs, and limited managerial and technical expertise.

SMEs could be seen as production entities with highest growth rates in the developing economies, opposite on the big companies, due to the lower organizational costs and wider opportunities for the young entrepreneurs. However, the probability for success of SMEs might significantly be improved

through creation of clusters, since that is optimal way for indirect utilization of the benefits of the scale economy. The concept of clusters include a number of different business structures, national, regional, cross-country clusters, competitive clusters, industrial or production systems, and innovative systems and they can be used for satisfying different number of objectives: to increase the competitiveness of SMEs, to support common research, to rationalize the overall industry, and to implement corporative socially responsible management system.

The lack of strategy and market perspectives affects SME's pace of their adapting to the new challenges in the economic environment. However, on long-run, this is what they really need. In fact, this is the reason why the long-term competitiveness of SME depends primarily on intangible factors which cause SME to be in position to manage with unpredictable events. These factors are the investments in human capital, the availability of technology and innovation, the organization of the company, the availability of information the ability to process the information etc. this is why the clusters and networks, mainly the technology networks³ are represented as important tools for SME which alleviate their access to the technology and other resources and services necessary for being more competitive in the ever changing global economy.

Table 1. Different types of structural initiatives in the entrepreneurship development and improvement

Type	Mission	Aspects	Pro Contra
Service Agencies	Advice on projects and selected initiatives	Scarce utility in a non competitive environment . Service's quality inclines to the environmental low level	Use flexibility
Science and Technology Parks	Institutional cooperation for research and innovation.	To be employed in countries with a visible entrepreneurial take off in progress Efficacy and synergy in the resources exploitation International relevance	Global improvement of local system
Enterprise and Innovation centres	Advice and logistic services for new initiatives.	To be employed in countries with a visible entrepreneurial take off in progress	
Job creation Interventions	Public-private cooperation (especially large companies) to encourage selected new activities	Immediate positive employment results Frustration in the expectation of stable employment that in the middle term can't be satisfied	
Training courses	Promotion of corporate and professional culture	Strong impact on the individual culture and empowerment of personal achievement Creation of expectations that at the end of training can't be satisfied	

Source: Massimo Bianchi: Managerial and evaluation problems in development projects of transition countries. International Symposium on Learning Management and Technology Development in the Information and Internet Age. University of Bologna, November 2002

³ According to the OECD definition, a cluster or network of companies that maintain close cooperative relations with technology centers and facilitate the transfer of technologies to the companies, are seen as technology networks.

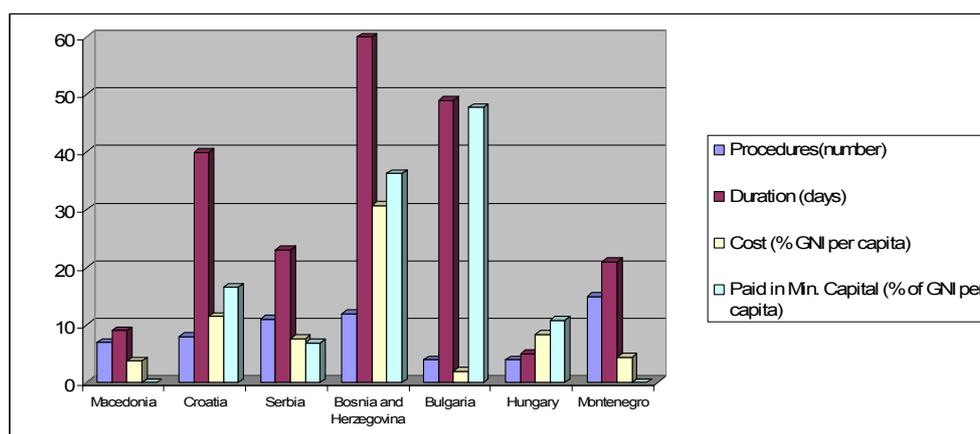
The elements of the business climate: the degree of linearity with the development of the entrepreneurship

The economies highly differentiate between them in the way they regulate the newly established businesses. In some of them, the regulatory processes are simple and affordable, while in others, the procedures, according their form, are rigid, non-adequately dispersed through locations and consume excessive quantum of time, motivating the entrepreneurs to manifest corruptive behavior in behalf of acceleration of the processes or, they choose to operate informally. The ways for obtaining the necessary licenses, and the ways for completing all required inscriptions, verifications and notifications with authorities to enable the company to formally operate, together with the time, costs and minimum capital needed for completion of the procedures, are valuable represents of the real picture of what a company has to done to operate legally, assuming that the information are non-asymmetric and all governmental and non-governmental entities are working regularly. Using the data form globally recognized magazine DoingBusiness issued form the World Bank, through systematic analysis, we will depict the conditions in the key business categories of the investment climate in R. of Macedonia.

Table 2.

Good Practice Economies	Procedures (number)	Duration (days)	Cost (% GNI per capita)	Paid in Min. Capital (% of GNI per capita)
R. of Macedonia	7	9	3,8	0,0
Croatia	8	40	11,5	16,6
Serbia	11	23	7,6	6,9
Bosnia and Herzegovina	12	60	30,8	36,3
Bulgaria	4	49	2,0	47,8
Hungary	4	5	8,4	10,8
Montenegro	15	21	4,4	0,0

Exhibit 1.



It is obvious that R. of Macedonia for 2009, is ranked at the 12th place in this category and has achieved significant progress by reducing the procedures for starting a business, progressing for 11 positions in comparison with 2008 and considerably easing the conditions for creating an innovative entrepreneurial climate for implementing the entrepreneurial ideas. So, in 2009, to start a business, the entrepreneur has to complete 7 procedures in 9 days (far more less than the average time in the region, which is 26,1 days, and, identical with the average time in the OECD countries), the minimum capital is 0,0% of the GDP per capita, which makes R. of Macedonia, taking into consideration this compo-

ment, attractive destination for investing, even from the OECD countries. The total costs take 3,8% of GDP per capita, and are far lower than those in the region.

Each of the economies has established set of institutions for protection of the rights of employees and they guarantee minimum standard of living. This kind of system encompasses four bodies of law: employment, industrial relations, social security and occupational health and safety laws. The thorough examination of the governmental regulative in the area of employment and social security is implemented by calculation of three key indexes, each of them ranging from 0 to 100, where the higher the index is, the higher the rigidity is present. The data for R. of Macedonia are presented in Table 3.

Rigidity of employment index. This index is calculated as an average value of three sub-indexes: the index of employment complexity (expressed by the flexibility of the contracts and the ratio minimum wage against added value per worker); the index of rigidity of the working hours (covers the restrictions from overwork and night-shift work, and the requirements associated with the working time and working week, as well); and the index of dismissal (refers to the legal protection, the basis and the procedures for dismissal).

The measuring of the non-wage labor cost is completed by measuring the part of the gross wage that refers to the taxes and payments of the social contributions expressed as a percent of the worker's wage.

The firing index covers workers' legal protections against dismissal, including the grounds permitted for dismissal and procedures for dismissal.

Table 3.

Employing workers data	2007	2008	2009
Rank		130	125
Rigidity of employment index	50	50	47
Nonwage labor cost (% of salary)	33	33	33
Firing costs (weeks of salary)	26	26	26

The great number of employment regulations are approved in response to the rigidity and failures of the labor market mechanisms to equilibrate the specific demand and nonadequate supply in case of anticipated changes of the internal and external economic environment; that doesn't make today's regulative optimal. Analysis across countries shows that while employment regulation generally increases the tenure and wages of incumbent workers, rigid regulations have many undesirable side effects. These include less job creation, smaller company size, less investment in research and development, and longer spells of unemployment and thus the obsolescence of skills—all of which may reduce productivity growth. Many countries err on the side of excessive rigidity, to the detriment of businesses and workers alike.

Table 4.

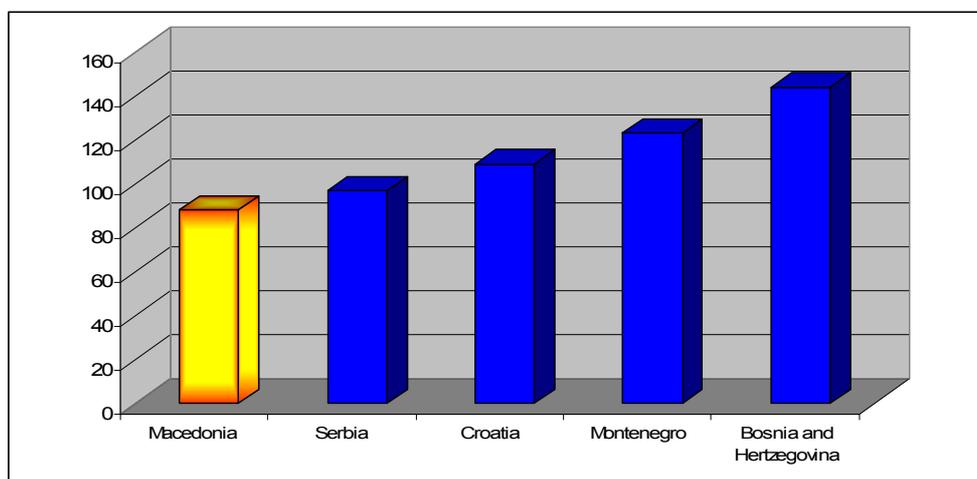
Indicator	R. of Macedonia	Region	OECD
Procedures (number)	6	6.2	4.9
Duration (days)	66	92.4	28.0
Cost (% of property value)	3.4	2.4	4.6

The property is one of the key factors that secure free market functionality. The easy or difficulty of ensuring this kind of right might be analyzed by several indices: number of procedures needed for transfer of the property from the seller to the buyer, the time and the costs expressed as a percent of the value of the property.

If the registration of property is efficient, than the property titles would be formalized and the transaction costs reduced. In R. of Macedonia 6 procedures are necessary to be completed in order the entre-

preneur be able to register the property. For this to be done, he would spend 66 days, 32 less in comparison to 2008, and should take out 3,4 percent from the value of the property. It is obvious, according the previous exhibit, that R. of Macedonia for this stage of a business's life, has better global rank in comparison to other Balkan economies with tendention to become EU member.

Exhibit 2.



A huge number of entrepreneurs tend to increase their own capital fund, a process extensively recognized as an investment. Additionally, the entrepreneurs coming from foreign economies are likely “to achieve long-term interest in the company which operate in an economy from which the investor does not have an origin”⁴, a process widely recognized as foreign direct investments. Unrelated with the type, the degree of protection of investors has major influence on the degree of safety of investments, and so, on the degree of attractiveness of the economy as a cardle for development of new, innovative, entrepreneurial ideas. The extent of disclosure index, the extent of director's liability index and the ease of shareholder suits index which range between 1 and 10 represents the three key indices that compose the investor protection index, which value for R. of Macedonia is 5 ranking the economy at 88 position.

According to Table 5, R. of Macedonia, corresponding to the previously stated indices regarding the category protection of investors, is positioned at an equivalent level as the countries of the region are. The challenge that R. of Macedonia should face is increasing the openness of the economy and extending the freedom of investors to suit. That would contribute R. of Macedonia to reach the level of OECD countries. The greater the degree of protection of investors, the greater the capital invested in the economy, the lower the concentration of property, the greater the confidence in the business sector, and the easier the access to cash for entrepreneurs.

Table 5.

Indicator	R. of Macedonia	Region	OECD
The extent of disclosure index	5	4.9	6.4
extent of director liability index	6	3.8	5.1
ease of shareholder suits index	4	6.3	6.5
investor protection index.	5.0	5.0	6.0

⁴ More information at: *Economic Growth and Development*, Petreski G. Faculty of Economics, Skopje (p.814)

Final remarks

Taking into consideration the flexibility of the indicators and their value, it can be made a comparative analysis of the regional economies in order to be discovered the degree of attractiveness of the investment climate.

Table 6.

Indicator	BUG	ROM	MKD	ALB	MTG	SRB	CRO	BIH
Starting a Business	81	26	12	67	105	106	117	161
Dealing With Construction Permits	117	88	152	170	167	171	163	137
Employing Workers	60	143	125	108	104	91	146	117
Registering Property	59	114	88	62	123	97	109	144
Getting Credit	5	12	43	12	43	28	68	59
Protecting Investors	38	38	88	14	24	70	126	88
Paying Taxes	94	146	27	143	139	126	33	154
Trading Across Borders	102	40	64	77	125	62	97	55
Enforcing Contracts	86	31	70	89	130	96	44	123
Closing a Business	75	85	129	181	42	99	79	60
Global Rank	45	47	71	86	90	94	106	119

The table represents a summed review of all indicators indispensable for successfully doing a business in the economies in the region in which R. of Macedonian is located too. Two of the economies are fully integrated in the EU (Bulgaria and Romania), while one of them (Croatia) builds an image of successful economy that identifies itself with the European business values. However, R. of Macedonia forms the entire SEE economies possess the best global rank for 2009, being at 71st position, progressing for 4 positions in comparison with 2008.

R. of Macedonian economy is recognized as one of the most reform mostly because of the deduction of the taxes, mainly the corporate tax that has been reduced for 5 percent points. Actually, the corporate tax, the procedures for starting a business and the labor regulative are the three key factors that influence on the opportunity for entrance of new businesses in the industry, de facto, for dynamic development of the entrepreneurship. Djankov⁵ (2008) in his research of the effects of the previous stated factors on the entrance of new companies in the industry and concludes: “10% increase of the rate of the effective corporative taxes in the first year, reduces the density of the business for 1,9 firms on 100 people, and the average entrance rate for 1,4%”. Therefore, it is evident the effect caused by the tax reduction on the degree of growth of the entrepreneurial action identified by creation of new markets and new customers, application of new management concepts and techniques, product standardization and design of new processes. Due to the resource, competence, limits of SME regarding the available resources, competences and environmental awareness, there is strong need for institutional support that will enhance their entrepreneurial spirit and competitiveness. Thus, as an innovative model that justifies its economic meaning, the model of science parks is being popularized.

References

- Casson, M. (1982) *The Entrepreneur*, Edward Elgar: Oxford.
- Djankov S, Ganser T., McLiesh C., Ramalho R, Shleifer A. (2008). “*The Effect of Corporate Taxes on Investment and Entrepreneurship*,” National Bureau for Economic Research, Cambridge, Massachusetts.
- Djankov S., Yingyi Q., Gérard R., Zhuravskaya E. (2008). “*What Makes an Entrepreneur?*”

⁵ Djankov S, Ganser T, McLiesh C, Ramalho R, Shleifer A. (2008) “The Effect of Corporate Taxes on Investment and Entrepreneurship”, National Bureau for Economic Research, Cambridge, Massachusetts.

- Global Entrepreneurship Monitor (2007), Executive Report, Editors: Niels Bosma, Kent Jones, Erkki Autio and Jonathan Levie
- Lazear, E. (2002) “*Entrepreneurship*” Working paper 9109, National Bureau of Economic Research, Cambridge, Massachusetts.
- Bianchi M. (2002). “*Managerial and evaluation problems in development projects of transition countries*”, International Symposium on Learning Management and Technology Development in the Information and Internet Age, Bologna University.
- OECD (1998), Fostering Entrepreneurship.
- Петрески Г. (2002). “*Економски Раст и Развој*”, Економски Факултет Скопје.
- Schumpeter, J. (1911) “*Theory of Economic Development*”, Cambridge University Press
- World Bank, IFC, Doing Business 2008 R. of Macedonia

Women Entrepreneurship in Science and Technology: Impetus for Female Participation in National Development in Nigeria

J.B. Bilesanmi-Awoderu, O.O. Kalesanwo¹

***ABSTRACT** – This paper examined Women Entrepreneurship in Science and Technology: Impetus for Female Participation in National Development in Nigeria. Teething Factors against Women Scientists' Entrepreneurship in Nigeria were documented. The authors submitted that if women are actively involved in the mainstream of the National economy, such economy becomes more stable and buoyant and consequently reduce the current economic crises of the nation.*

Based on the documented teething factors, some suggestions were made. Amongst are promotion of female education in Science and Technology, encouragement of female socio-cultural prospects and proper networking of successful women nationally and globally in order to serve as mentors and incentives to others

Introduction

The role of women in National development cannot be over-emphasized. Also, the place of science and technology is central to National advancement. No doubt, a country's level of Scientific and Technological advancement dictates the life style and future of her citizenry. This assertion made Wambusu (2005) to opine that science-led development is one of the major strategies in the war against what seems to be the African region's endless hunger, poverty and ill-health. In addition, increased focus on formal and informal education, new technology, empowerment of women, gender and sustainable development will undoubtedly bring the developing world closer to the developed world and reduce the huge economic gap (Naugah 2003).

The role of Science in the advancement of human beings on issues relating to public health, water, infrastructure, energy, food, security, environment and development is a prominent one. It stands to reason therefore that as the world's development becomes increasingly driven by and the pace also dictated by Science and Technology, no country can afford to be passive.

It therefore becomes imperative that women - a formidable group be fully integrated in the moving wheel of high technology as submitted by Bilesanmi-Awoderu (2005). The focus of the society then should involve development that would take into consideration all segments of the population, women inclusive.

Women as a person and also as an agent of development has as much right to Science and Technology as the man. In line with this, UNESCO (1995) has documented the paramount and urgent need for education girls/women in African Countries. It is in this context that promoting women's role in Science and Technology with a view to empowering them and promoting entrepreneurial development for women scientists, engineers and technologists becomes a big issue. The UNIDO's regional typology studies on the role of women in manufacturing have revealed empirical evidence that women's paid employment and, in particular, their participation in Industrial department, improves their quality of life, literacy and life expectancy, while decreasing their fertility rate. Remunerative employment opportunities as well as entrepreneurship also enable women to fight poverty. (UNIDO, 2001).

¹ Dr. J.B. Bilesanmi-Awoderu, Dr. O.O. Kalesanwo, Faculty of Education, Olabisi Onabanjo University, Ago-Iwoye, Ogun State, Nigeria

The concept of entrepreneurship

Entrepreneurship is the practice of starting new organizations, particularly new businesses. Entrepreneurship is often a difficult undertaking, as a majority of new business fail. Entrepreneurial activities are substantially different depending on the type of organization that is being started. (en.wikipedia.org/wiki/Entrepreneurship). Entrepreneurship can also be shortly defined as the willingness to take the risks involved in starting and managing a business. www.turnerlearning.com/efts/bball/econglos.htm. In the same vein, an excerpt from the web page: <http://bus.colorado.edu/faculty/meyer/6700syl.htm>, documents that the Entrepreneurship Center at Miami University of Ohio defines Entrepreneurship as the process of identifying, developing, and bringing a vision to life. The vision in this context may be an innovative idea, an opportunity or simply a better way to do something. The end result of this process is therefore the creation of a new venture, formed under conditions of risk and considerable uncertainty.

According to Di-Masi (2002), considerable effort has gone into trying to understand the psychological and sociological wellsprings of entrepreneurship. These studies noted some common characteristics among entrepreneurs with respect to need for achievement, perceived locus of control, orientation toward intuitive rather than sensate thinking, and risk-taking propensity. In addition, many have commented upon the common, but not universal, thread of childhood deprivation, minority group membership and early adolescent economic experiences as typifying the entrepreneur.

Still on the uniqueness/qualities of entrepreneurs, Di-Masi (2002) listed the following as characteristics of the entrepreneurs:

- Self-confident and multi-skilled. The person who can 'make the product, market it and count the money, but above all they have the confidence that lets them move comfortably through unchartered water'.

- Confident in the face of difficulties and discouraging circumstances.

- Innovative skills. Not an "inventor" in the traditional sense but one who is able to carve out a new niche in the market place, often invisible to others.

- Result-oriented. To be successful requires the drive that only comes from setting goals and targets and getting pleasure from achieving them.

- A risk-taker. To succeed means taking measured risks. Often the successful entrepreneur exhibits and increment approach to risk taking, at each stage exposing him/herself to only a limited, measured amount of personal risk and moving from one stage to another as each decision is proved.

- Total commitment. Hard work, energy and single-mindedness are essential elements in the entrepreneurial profile.

Women entrepreneurship in science and technology

Women entrepreneurship is a contemporary issue of international concern. This is borne out of the fact that women empowerment is central to human development and National advancement. Ensuring or enhancing women empowerment is the business of everybody in the society. Empowerment of women entails a process of building their resource capability and skills for leadership-rights and meaningful participation in all spheres of the society (Erinosho 2005). Women entrepreneurs represent a group of women who have broken away from the beaten track and are exploring new avenues of economic participation (Dhameja, 2002). He further advanced reasoning for women to run organized enterprises as their skill and knowledge, their talents and abilities in business and compelling desire of wanting to do something positive. Hence, if women are not marginalized and as much are actively involved in the mainstream of the National economy, it is likely that the economy becomes more stable and buoyant and consequently reduces much witnessed current economic problems.

The need to develop women's entrepreneurship was emphasized in Beijing (1995) at the fourth World Conference on Women. The objectives are to:

- Increase the participation of women in Industry and all other sectors, particularly in the non-traditional areas, through access to advanced technologies.
- Promote, support and strengthen female entrepreneurship development.
- Encourage investments in environmentally safe products and in environmentally sound and productive agricultural, fisheries commercial and industrial activities and technologies; and
- Strengthen training opportunities for women.

However, United Nations Economic Commission for Europe (2003) reported that women entrepreneurs are less numerous than men. That is, only 9% of employed women are entrepreneur, in the Czech Republic as compared to 8.8% of men. The situation is similar in Hungary (women 9.6% and men 18%) as well as Romania, through the proportion of self-employed women is higher due to the larger share of self-employed in agriculture (women – 17.4% and men – 32.6%). The gender gap in entrepreneurship is even higher in Slovakia and Slovenia where women's share is respectively 4.1% (men – 10.9%) and 6.5% (men – 15.3%). ([http://westorg/aboutWEST/Women Entrepreneurs in Science and Technology \(WEST\) organization](http://westorg/aboutWEST/Women%20Entrepreneurs%20in%20Science%20and%20Technology), an organization for women in science and technology documents the following as its vision:

- Women in science and technology should become influential role models and learn to improve the worldwide problems of poverty, health and economic growth.
- Women have demonstrated their competence in science and technology but lack recognition and influence proportional to their talents and achievements.
- West provides women and men an opportunity to leave a legacy by connecting others who are invested in sharing their expertise to improve the status of women create a more egalitarian world.

The mission of Women Entrepreneurs in Science and Technology is to advance women in science and technology to achieve successful recognition as contributors and leaders through entrepreneurial thinking. This is clearly stated as:

- Women who develop entrepreneurial skills are better suited to positions of leadership and impact.
- Women in science and technology who develop entrepreneurial thinking will be to better align their talents with business requirements to improve business performance.
- Women can apply entrepreneurial thinking to the company environment to become intrapreneurial leader (who increase business, profits, revenue and the creation of products).
- Women who think entrepreneurially can become better scientists and engineers.

The focus of the paper centres on Women Entrepreneurship in Science and Technology: Impetus for Female Participation in National Development in Nigeria with a view to making it an impetus for female participation in National development can be said to be worthwhile. This is borne out of the fact that females could better be encouraged right from the primary through their secondary school education so that proper monitoring, mentoring and mainstreaming could be done with a resultant effect of more females being involved in women entrepreneurship in Science and Technology. This is our thesis.

Factors discouraging women scientists' entrepreneurship

These factors are discussed in this paper as they relate to societal norms, funding, lack of information, low skill acquisition, lack of mentors, lack of supporting networks and low level of encouragement from spouses and families. These factors include:

- Socio-cultural factor:** A major point to note here is the fact that in Nigeria, many women during the socialization process were not given enough opportunity, freedom and wherewithal to develop adequate and appropriate skills that can enable them have entrepreneurial competency. This is essentially inherent in the much created gender-related limitations which has the tendency to relegate women/females to the background.
- Finance:** Poor finances and lack of adequate funds for starting enterprises are a serious problem to

women entrepreneurs. Women generally are poor for lack of funds and as such do not have enough financial backing to start a good business or sustain an existing one. In this context, Carter (2000) in the web page: <http://curopa.eu.int/comm/enterprise/entrepreneurship/craft/craft-studies/documents/womenentrepreneurs.pdf> identified four areas of financing that previous researches have noted can pose particular problem for women to be that women are disadvantaged in their ability to raise start-up finance: guarantees required for external finance may be beyond the scope of most women's personal assets and credit track record, once a business is established, finance may be more difficult for female entrepreneurs to raise than for their male counterparts, because of the greater difficulties that women face in penetrating informal financial networks and the relationship between female entrepreneurs and bankers may suffer from sexual stereotyping and discrimination. As such, majority of women business owners rely to a significant extent on self-generated finance during the start up period of their business.

Lack/Poor Access to Market Information: Usually educated women are not many in Nigeria. Literacy level is still at the low rate in the country. As such, many market information that could have been beneficial and in essence enhance better productivity elude the women. Most are ignorant of market trends concerning costing, pricing etc and consequently could not benefit maximally from readings of price movements and fluctuations.

Lack/Poor Technological Know-how: Low educational status of most women does not allow very many of them to have the opportunity of being technologically sound. Many technical skills that could hitherto have assisted to ensure successful enterprise and appropriate production techniques and product diversification are not possessed by many women. For this reason, it is almost impossible for them to be relevant in the current technological changes and the globalization of production.

Poor Networking/Linkage: Women are not properly connected. Many as noted earlier are poor, uneducated and unconnected. As such, good networking or linkage for support services even when available may be beyond the reach of the women.

Mainstreaming into Arts-related courses/paucity of Women Scientists Entrepreneurs: During schooling, many girls were not encouraged into the sciences for reasons ranging from perception of sciences as male's domain, teachers attitude, societal belief and students' lack of interest. As such, not many of Women Scientists' could be produced. This consequently would in turn decrease the number of Women Scientists engaging in establishing business/enterprises as entrepreneurs.

Fear of losing out: In Nigeria, women are largely responsible for household keeps such as food, water, clothing and often times their children's education. As such they are usually afraid to invest their hard earned and much needed income into businesses or enterprises for fear of failure.

Unfavourable conditions/policies: It is obvious that many of the conditions for obtaining loans do not necessarily favour women. The conditions are usually stricter for women than for men. This indicates gender discrimination in possession of capital for establishing enterprises/businesses. Even when policies are formulated to disabuse this gender differences, the effect in practice is yet to be noticed. This view is documented by UNIDO 2001 where it was recorded that even in Mali, women entrepreneurs are faced with strong barriers to enterprise development in the prevailing laws and regulations. It further noted that obtaining licenses, registering the business in their own name, and applying for loans were nightmares they had to live with.

Lack of Mentors: It is pertinent to note that women have not gotten many mentors that they could look up to in the area of entrepreneurship. As such, they have constraints venturing into areas that they do not know familiar females that have succeeded along that line. In the words of WEST, Woman Scientists lack business issues in their industries and also they do not have easy access to mentors and role models.

Lack/Low level of encouragement from spouses: Men, generally enjoy to be the breadwinner of the household. They most of the time would not want their wives to be economically buoyant and independent. As such, they are not likely to encourage their wives to start businesses/enterprises that may make them economically buoyant.

Suggestions for encouraging or promoting women scientists' entrepreneurship

In order to overcome the challenges of women scientists' entrepreneurship, the paper offers suggestions with a view to enhancing female participation in National development. These are presented based on previous report, research findings, and suggestions of notable researchers. Specifically, UNIDO 2001 and ILO (2002) documented essential suggestions for encouraging women entrepreneurs. The investigators contend that all things being equal, the suggestions could be of great importance in the Nigerian context. Therefore, we are adopting some of the suggestions as presented:

Socio-cultural Prospects: Male and female alike should be given the opportunity to acquire needed skills for entrepreneurial competency.

Female Awareness Campaign and Sensitization Workshops/Seminars: There is an urgent need for awareness and sensitization workshops to be organized by Women organizations, Associations, Government Gender Agencies and Units, Non-governmental Agencies and Allied organizations to educate the Women Scientists' entrepreneurs of the new opportunities/developments at hand that could enable them overcome constraints and enhance the starting business/enterprise.

Improvement in the Policy/legal frame-work: There is the urgent need to improve on the existing policies and legal framework in a manner that would practically reach a satisfactory level so as to encourage the female entrepreneurs. For instance, The UNIDO (2001) teams have observed that although most governments have been introducing new gender-specific laws of a general nature, gender issues were not considered in all the other laws of relevance to women's entrepreneurship development. It has also been observed that many support institutions were not aware of the gender-specific constraints of women entrepreneurs and therefore unable to address them adequately when providing the necessary services.

Encouraging Female Education in Science and Technology: More females should be encouraged to study Science and Technology in Schools and Colleges. With this, they could gain access to know-how, technologies, appropriate and adequate skills, training to upgrade their technical capabilities and their entrepreneurial and business skills whether in artisan production or in high-tech industries.

Encouraging Women Scientists' Networking: Women Scientists have to be encouraged to be appropriately connected. Networking is vital to the women's ability to access information, technology, markets and raw materials relevant to the development, sustainability or expansion of their business. As such, women networking Nationality and Internationally should be adequately facilitated.

Successful Women Scientists' entrepreneurs should be encouraged to share their experiences, counsel on problems and encourage on prospects with up-coming women scientists.

Fund/Finance: The Federal Government of Nigeria should provide adequate funds in form of soft loans for prospective Women Scientists' entrepreneurs to start-up business/enterprises and or progress in their business. She can borrow a leaf from what obtains in Sweden who created a regional resources centres for women finance by the Swedish Business, Development, Agency, which is a ProWomen Member. The Centre aim to make women's competence more visible in society, to help them set up business and in particular to increase their participation in the labour force in non-traditional, high-tech fields. <http://90i.cordis.in/article.cfm?article=1039&lang=En>.

Conclusion

In this paper, an attempt has been made to highlight the need for women entrepreneurs in Science and Technology in Nigeria. It has been documented that if women are not marginalized and as such are actively involved in the mainstream of the National economy, it is likely that the economy becomes more stable and buoyant and consequently reduce much witnessed current problems. However, the factors discouraging women entrepreneurship in Nigeria are discussed. These factors include socio-cultural factor, finance, lack/poor access to market information; lack/poor technological know how, poor networking/linkage. Other are mainstreaming into arts related courses, fear of losing out, unfavourable conditions, lack of mentors and lack/low level of encouragement from spouses.

Against this backdrop, this paper offers some suggestions for encouraging and promoting Women Scientists' entrepreneurship. These include socio-cultural prospect, female awareness campaign and sensitization workshops, improvement in the policy/legal framework, encouraging female education in Science and Technology and provision of adequate fund. In addition, networking should be encouraged where in successful Women Scientists' entrepreneurs could share their experiences, counsel on problems and encourage on prospects.

References

- Bilesanmi-Awoderu, J. B. (2005). What do Nigerian Female Professionals do with the Computer? *Proceedings of the 13th International Conference of Women Engineers and Scientists (ICWES)* held in Seoul, South Korea from August 26th – 29th, 2005.
- Carter C. (2000). *Young Women, Ethnic Minority and Co-Entrepreneurs CEEDR*, Middlesex University: Final Report. Available at: <http://europa.eu.int/comm/enterprise/entrepreneurship/craft/craftstudies/documents/womenentrepreneurs.pdf>.
- Definition of Entrepreneurship (2002). Available at: <http://bus.colorado.edu/faculty/meyer/6700syl.htm>.
- Definition of Entrepreneurship (2002). Available at: en.wikipedia.org/wiki/Entrepreneurship.
- Definition of Entrepreneurship (2002). Available at: www.turnerlearning.com/efts/bbill/econglos.htm.
- Dhameja, S. K. (2002) *Women Entrepreneurs: Opportunities, Performance and Problems*. New Delhi: Vedams Books from India.
- Di-Masi, P. (2002) Defining Entrepreneurship. Available at: <http://www.gdrc.org/icm/micro/define-micro.html>.
- Erionsho, S. Y. (2005). Women and Science 36th Inaugural lecture, Olabisi Onabanjo University, Ago-Iwoye.
- European Innovation (2003) [HTTP:90i.Cordis.lu/article.cfm?article=1039&lay=EN](http://90i.Cordis.lu/article.cfm?article=1039&lay=EN).
- International Labour Organisation (ILO) (2002): Entrepreneurship Development for Women. Available at: <http://www.ilo.org/public/english/region/asro/bangkok/paper/manutia.htm>.
- Nauga, J. (2003). Speech for the opening ceremony at the 11th International Conference of Gender And Science And Technology (GASAT) held in Mauritius from 6th – 11th, 2003.
- UNICEF, (1998) Nigeria: *Gender and Development and Sensitization in Nigeria* Afro-Orbs Publications Ltd. Usukka.
- United Nations Economic Commission for Europe (2003). Bridging the gender gap in entrepreneurship in Eastern Europe and CIs. <http://www.unece.org/press/pr2003/03ireedd p/oe.htm>.
- United Nations Industrial Development Organisation (UNIDO) (2001). *Women Entrepreneurship Development In Selected African Countries*: Private Sector Development Branch. Investment Promotion and Institutional Capacity-Building Division.
- Women Entrepreneurs in Science and Technology (WEST) <http://westorg.org/about WEST>.

The Necessity of a New Legal Framework for the Reorganisation of the Cooperatives

Sonja Bunčić¹

ABSTRACT – *In this paper, the author discusses the possibility of creating the competitiveness of the village as a challenge to the new legal framework of reorganisation of the cooperatives. Historically, the cooperative has always been related to the country and the agricultural production. Making the market economy requires creating a market concept of the new cooperative.*

A Bill on cooperative associations is the legal framework for a new concept of organising the cooperatives in the republic of Serbia. It is suggested that the cooperatives be organised on the principles of for-profit corporations, which has its advantages, but the author also points out its possible shortcomings.

The market orientation of the cooperatives is impossible without a simultaneous work on the three directions of development. According to the author, those are: a new status of the cooperative, merging of land and the meeting of conditions for starting the futures trade in agricultural products. The author analyses the existence of the mentioned courses of development by analysing the Bill on public warehousing of the agricultural products as well as the Bill on agricultural land.

KEY WORDS: *cooperatives, agriculture, village, reorganisation, competitiveness, futures trade, warehousing*

Introduction

The long-standing inadequate attitude of the state towards the agricultural cooperatives, as well as bad legal solutions are the reasons behind the unfavourable conditions in the village, particularly in the cooperative movement.

The basic demands of a new social system that began to form as Serbia gained independence have brought new priorities. The entire industry (along with agriculture) has been changing in the direction of the implementation of the basic goals: The introduction of the private ownership, entrepreneurial and market freedoms and the introduction of the democratic standards. It has required changes in legislation, laws on ownership and in the concept of industrial development (including agriculture and cooperative movement).

Being founded and having operated in the period of socialism, cooperatives have introduced cooperative ownership as a distinct type of ownership to which the law on privatisation did not apply. Since they have been the bearers of cooperative ownership, in the full swing of privatisation of socially-owned and state-owned capital², cooperatives did not take part in the process. Thus marginalised, in the process of transition cooperatives have been left to their fate of the differing viewpoints. Some of those are based on an animosity towards the cooperatives of the near past, but also on the ignorance of the cooperative and its organisational and industrial advantages in the countries with the fragmented industrial structure.

¹ Sonja Bunčić, PhD, Associated Professor, Faculty of Technical Sciences, University of Novi Sad, Serbia

² At the same time, factory-farms were caught in the process of privatisation and privatised as socially-owned and, partly, state-owned property, with great problems that additionally aggravated the question of ownership on agricultural land and the unsolved question of denationalisation.

As a pretence of solution to that situation, a law on cooperatives was passed in 1995. (Sl. list SRJ no. 101/2005). It accepted cooperatives as an existing industrial subject, but it did not accept their market orientation.

In the following ten years, no significant progress has been made. It was only in the recent several years that a serious work on the creation of a new legal framework has begun. It would direct the agricultural development, including the cooperatives, as well.

With this paper, we shall try to open certain issues to be considered in the making of a new legal framework for the reorganisation of the cooperatives, in the context of the Serbian integration with the EU. We will focus on the question of the possibility of change of the legal position of cooperatives by analyzing the "Bill on cooperative associations".

Cooperative and a new form of organising

Transitional period of the agricultural cooperatives - Cooperatives, as forms of social organising, are among the oldest and the most lasting organisations created by a man. They are most often related to the patriarchal way of life in the village. Historically, for many centuries the cooperatives have existed as family cooperatives. In the more recent times, cooperative began to expand outside the family basis, on the economic principles and with the support of the institutions brought by the new economic order. Cooperatives were expected to become a part of the social changes. From these cooperatives and on the basis of the positive achievements they carried in their organisation, modern cooperative movement developed in the world.

In the strategy of development of the EU, pertaining to the form of organising the cooperatives, a basic market demand has been made – competitiveness.

A change in the the form of organising of the cooperatives can be made with the development of different measures that would be applied so as to obtain a new concept of cooperative. Those measures are:

- The advancement of the human potential (vocational training and diffusion of information to those working in the agriculture, giving support to the young farmers in taking over the farms)
- Restructuring of the physical potential (modernising the farms, raising the economic performances, investing in micro- and small enterprises)
- The advancement of quality in the production of agricultural products (adoption of the standards of the Union, expenses of the farmers in relation to the quality of the food)
- Transitional support in the search for a new form of organising the market-orientated production

Hence it is necessary we take a look at the way cooperative is organised in the surrounding countries and subsequently analyse the way it is organised in Serbia.

Different legal definitions of the notion of "cooperative" - It is not simple to define the notion of the "cooperative", seeing as cooperative is perceived in different ways, mostly in the negative context. The clearest definition seems to be the one from the German law: "Cooperative is an association with an unlimited number of members whose aim is to expedite, through the common entrepreneurship, the economic activities of its members".

According to the Slovenian law, cooperative is not a social institution, but an enterprise, albeit with a specific ownership.

Bosnian-Herzegovinian "Law on cooperatives" defines the cooperative as "a form of organising voluntarily associated members with the aim to fulfill their own or common economical, social or cultural needs and aims through common ownership and democratically controlled acquisition".

According to these definitions, the business function of the cooperative to the benefit of its members is the basis of existence of the cooperative, with the said function being realised and implemented through the common business activity.

In Serbia, the law on cooperatives was brought in 1995. It defines cooperative as an independent, self-governing organisation of working people and citizens (hereinafter: members of cooperative) who freely associate their work and resources (or either of those) into a craftsmen's guild, housing association, youth cooperative, savings-credit and consumer cooperative, a cooperative for intellectual services, as well as other cooperatives for productional or service activities.

Thus, the legislator failed to create a legal framework which would allow for market orientation in the development of the cooperative in these parts. As defined by the still valid 1995 law³, a cooperative is a self-governing organisation of people and is, therefore, completely inadequately organised and inadequately legally defined. The new establishment of the state does not affirm the attitude towards the cooperative movement, but identifies the cooperatives with the institutions of the former socialist system. As a consequence of such attitude towards the cooperatives, the situation in the cooperatives themselves is becoming increasingly unfavourable. A large number of cooperatives have either completely died off or exist on a verge of a break even.

Members of the cooperatives are mostly workers employed in the cooperative. The number of cooperative farmers today is a symbolic one and they are not a key factor in the ownership structure of a cooperative. Agricultural farms, as well as various industrial associations have partnership contracts with the agricultural cooperatives. They do not, however, make for good economical prospects, as the members of cooperatives are not in position to decide on important matters of business, development and distribution, due to their weak economic position.

The aforementioned position of the cooperatives is no longer sustainable and it is necessary to organise the cooperatives in the direction of market industry and modernisation, which is bound to give them a new identity.⁴ This need is further affirmed by the legal definition of the cooperative in the surrounding countries, from which it is obvious that the cooperative is, in their respective legislations, market-orientated.

A new concept of organisation of the cooperative

A new position of the cooperatives can be realised only through a synchronised package of measures, radical enough to enable a complete market turnaround in their organisation. It would contribute to the competitiveness of the village as a centre of development of the cooperative movement.

I am of the opinion that it is necessary to direct the market orientation of the cooperatives in three basic directions. It is possible in the first place by creating a new regulation for each of the three directions, through setting:

A new legal position or status of the cooperatives as a significant industrial subject.

A new attitude towards the agricultural land

Making the market instruments which are to enable easier and safer marketing of the goods characterised by a high standardisation of the agricultural products.

In Serbia, as a country in which the agricultural production has, historically, had a major role in the economic development of the country, in accordance with the new market changes, positive changes have also been noticed.

New bills have been made, with the possibility of creating a new framework of a market-orientated cooperative.

A Bill on cooperative association - In the package of measures which includes an entire array of new bills, it is particularly important to change the former legal stand of the cooperative. It has been done with the passing of the Bill on cooperative association.

³ In the meantime, several amendments and alterations have been made, though not radical enough for the new organisation of the cooperative.

⁴ In the European Union, there are about 300,000 active cooperatives that employ about 4.8 million people. They operate in all the candidate countries that have tendency towards membership.

From the aforementioned analyses, it has been noted that the former legal position of the cooperative according to the currently valid law on cooperatives must be obsoleted. It is necessary that the current law be replaced with the one that brings an entirely new concept of organisation of the cooperatives.

By comparing the organisation and the legal position of the cooperative in the surrounding countries, we must notice the tendency of the need to integrate the cooperatives into the goods market and the capital market.

Contemplating and analysing the possible course in reorganising the legal position of the cooperative, with respect to the course of reorganisation of the cooperatives in the surrounding countries, a single conclusion is imposed. Equalising cooperatives and for-profit corporations regarding the application of the same principles of business dealings, is one of the possible incentives that would give a market impulse to this form of organisation of the cooperative.

Such an attitude is shared by a proposer of the Bill on the cooperative associations, as well.

In the article no. 1. of this bill, *cooperative association is being introduced instead of the cooperative* and is defined as a body corporate based on the voluntary association of natural and legal persons whose aim is the advancement of business and the expedition of growth and development of the cooperative society and the members of the cooperative.

A member of the cooperative is defined as a natural or legal person whose primary activity is the industrial activity, who participates in the cooperative association with the obligatory deposit and does their business entirely or partly through the cooperative union.

In the concept of a new Bill on cooperatives, the principles of cooperative have been retained as a part of the statute of cooperative association. Those are: free entry and leave, equality, solidarity, immediate governing and democratic decision by the members.

The object of business of a cooperative society is any industrial activity not prohibited by the law.

A critical review of the Bill on cooperative associations - Analysing the Bill, we can notice that a very significant progress has been made in creating a new legal framework for cooperatives in the direction of their organisation on the principles of for-profit corporations. Drafting of the Bill on cooperative associations points to the firm orientation of the current politics and government towards the reorganisation and recovery of the village. The draft of this bill affirms the market orientation of the cooperative by creating the cooperative associations, which certainly has its advantages, but it has flaws, as well.

The **advantages** of a cooperative association lie in:

Strengthening of the entrepreneurial initiative through the impulse given by the legal persons as members of cooperative with their entire infrastructure.

The possibility of a cooperative union to become an equal industrial subject coloured by distinct specificities of the cooperative principles.

The possibility of a faster market development and openness towards the entry of the capital into the cooperatives. That is possible by bringing in legal persons as members of the cooperative, introducing the cooperative participation.

At the same time, it can pose an array of **threats** on the road to the modernisation of the cooperative.

First of all, the concept of organising cooperatives as for-profit corporations could lead to the business equality of the cooperative and for-profit corporations, without legal consequences, which would completely destroy and erase cooperatives as the industrial subjects.

Second, outvoting and abuse of the cooperative principles by the legal persons participating in the cooperative can occur.

The third danger lies in the possible lobbying of the “experts” of the for-profit corporations (major shareholders) and their influence on the strategical development of the business future of the cooperative organisation.

Fourth, a possibility of existence of a psychological syndrome which a new concept can bring. It is an occurrence of belief on the part of an individual that by the means of their cooperative participation they would gain rapid business success through the cooperative. That could be very dangerous, seeing as the cooperatives are currently in a very difficult and marginalised position. This possibility has a certain weight in the light of the experience of the members of cooperative, regarding the cooperative principles and the way a cooperative does its business.

Despite the aforementioned considerations, a summarised attitude towards the cooperatives can be made. A major slowness and indifference of the competent bodies towards this problem can be noted. It is required that steps be taken towards passing the law, instead of merely drafting the bills and amendments.

A Law on agricultural land

Passing the Law on agricultural land (Sl glasnik 62/2006 and 65/2008), a step has been made towards the organisation, planning, protection and use of the agricultural land. It also regulates the implementation of the law as well as other questions pertaining to the protection, organisation and use of the agricultural land as the property of the general interest.

Its primary weakness stems from the organisational-technological and economically anachronistic possibility to fragmentise the large, organised complexes of state-owned land. The weakness is also mirrored in the devastation of extremely important resources invested in the programmes of organisation and protection of the state-owned agricultural land in the past five decades. As opposed to the fragmentation of the organised land complexes, virtually nothing has been done on the organisation and cultivation of hundreds of thousands of hectares of the uncultivated land in the recent years. Hence the volume of the agricultural production (especially in the stockbreeding) is still significantly below the level that we had in the distant '80-s, and today we keep falling further behind compared to the results of the neighbouring countries (Hungary, Bulgaria, etc.), which were, back at that time, far behind Serbia.

We believe that the law on agricultural land should be urgently altered and amended, so that the state-owned land is retained by the non-privatised agricultural enterprises for use, until privatised, as well as by the agricultural cooperatives until the new law on cooperatives is passed.

A Bill on public warehousing of the agricultural products

Market orientation of the development of the cooperatives cannot be implemented in its entirety, unless the change of the legal position of the cooperative and the merging of land is followed by an advance in creating the market instruments that allow for the safe marketing.

Bill on warehousing of the agricultural products plans forming of the public warehouses as legal persons that would perform the activity of public warehousing of the agricultural products. Performing these activities enables these legal persons to issue commodity notes. They appear as papers of value to be used in the marketing.

If this draft were to be presented to the parliament as a legal text and if it were to be passed, it would expedite the development of the production of agricultural products.

Namely, by creating the agricultural warehouse, conditions would be met for the futures marketing. As we have seen, the warehouseers' primary activity pertains to storing the goods and having the right to issue commodity notes for the stored goods. Thus, the goods would have adequate storage, a guarantee of even supply during the entire year and that it would, via the issued commodity note, be available to the owner without the expense of potential transport or preparation for the sale. The warehouseer would be entrusted with all of those duties (turnover, transport, security, etc.)

At the same time, with the new law on cooperatives, individual manufacturers associated into a new concept of organisation via the cooperative associations would, more easily, participate in both the

foreign and the domestic markets through the warehouse. It would mean that the only currently operating commodity market in the country, "Produktna berza Novi Sad", could develop its futures market. Namely, in this moment it deals only in prompt trade, which prevents the genuine continual stock trading. It is unable to reach the other stock trades with its assortment of commodities, as it lacks papers of value to trade with.

The existence of commodity notes that would be included in the stock would pave the way to the introduction of the futures market in the stock market. This form of trade, long-present on the stock markets developed through a form of the forward contract. These contracts are financial instruments thorough which a time in future is fixed (different from the time of contracting) in which a commodity of certain sort, quantity and quality is delivered to a certain place at a previously (today) determined price.

Thus perfected model of trade would help both the purchasers and the retailers (who are, for the most part, also the manufacturers) to plan their business at the long-term. At the same time, commodities from these parts would, via the product stock, be marketed to the neighbouring countries.

Conclusion

Cooperatives and cooperatives organising in the agriculture is a complex system process. It is partly related to the biological specificities of the resources and the manufacture in the agriculture and partly to the ownership and consumer structure.

The motive for cooperative reorganisations should be the current, as well as the upcoming production/market globalisation, the individual lack of resources, their effect on the individual production and agriculture as an entire branch of industry.

If the concept of a cooperative is systematically conceptualised and united into the entire market system, it will be a factor of the production-market and developmental stability. Currently, cooperative is a form of organisation based on the primary agricultural production without vertical integration and without its own capabilities to invest in the production and market refining of their final products.

Productional and business power of the cooperative cannot be provided just by working on one single segment, so the mere merging of the productional resources does not bring adequate results. It means that the competitiveness of the village can be brought about only through the common effect of all the measures, new business organisation, merging of the productional resources and creation of new market instruments.

References

- Bunčić, S.: Exchange Law, Poslovni biro SB, Novi Sad, 2008., p. 65
Conference About the Law on Agricultural Land, 2008, Faculty of Agriculture Zemun, Conclusion, p. 5
General Law on Cooperatives, Službeni glasnik BiH 18/03 p.381
Mataga, Ž.: History and strategy of cooperatives, in Croatia, Compendium of papers of international cooperatives conference, Poreč, 2000, p. 21-25, (1995)
Popović V., Nikolić M.: Sustainable development of mountain regions of Serbia in the light of recent experience in EU rural development policy, Beograd, 2005, p. 214
Šoljić K., Pavličić J., Milas Z.: Cooperatives in Bosnia and Herzegovina a step closer to Europe, Agronomski glasnik, 572005, p. 396
Toplak N., General Law on Cooperatives with comments, 1992, p. 16
Tratnik M. i dr.: Cooperatives in Croatia: Challenges to stability of farms, Agronomski glasnik 1/2007, p. 70.

Accountant Analysis Tools in Function of Qualitative Company Management

Rifet Đogić¹

ABSTRACT – *The primary objective of each profit oriented organization (company) is increase of its net value i.e. ownership capital from long term operations. This is achieved with satisfactory return on total investments (assets) and net assets (capital) of owners in the long term. It is about company profitability which need to be carefully managed on strategic, and at the tactical and operational level. In accomplishing this objective reports are made on periodical basis (usually one year) for external stakeholder's (first of all shareholders, bonds buyers, creditors), so that they or their financial analysts could get information about the contributory position and company prosperity. Management must have a certain tools that will direct the operations in the desired direction to successfully accomplish expected business objectives.*

One of the main tools is the analysis of enterprise business, especially the accounting analysis, which must include analysis of financial results, conditions of financing, financial structures and changes in financial structure. This work aims to draw attention to the basic instruments and methods of accounting analysis (tools) which help manager to analyse achievements of the set objectives. In the work, close attention is given to the profitability analysis as the most powerful managing tool in the enterprise business.

KEY WORDS: *capital owners, net assets, contributory force, accounting analysis, accounting analysis tools*

Introduction

In order for an enterprise to survive in the market, its management needs to provide growth and development. That can be achieved provided that the management redefines the mission of an enterprise by constantly adjusting it to the circumstances of the environment in terms of continuing increase of its efficiency. An enterprise is effective if it provides proper products, i.e. the ones demanded by the market. The efficiency of an enterprise is reflected in furnishing the market with suitable products in a suitable manner. The aim of efficiency is to provide the lowest input per output unit. The importance of the accounting analysis is noticed in terms of the above said. Accounting analysis, as a component of the accounting system, is oriented towards the analysis of elements of financial reports, and is thus in professional literature very often denoted by terms such as “balance-sheet analysis, financial analysis, accounting analysis, analysis of financial reports”.

Accounting or financial analysis is a comprehensive examination of financial and economic state and results of running a unit of an accounting coverage which is based on its accounting reports. The importance of the accounting analysis is reflected in the fact that it provides a quality business management and development for a company. It precedes the planning process as the first phase of the managing process. The task of the accountant analysis is to detect the qualities of a company in order to put them to use, as well as to recognize the company's weaknesses and correct them.

There are several criteria in identifying the types of the accounting analysis (balance-sheet analysis, financial analysis), but what we should be focusing on is the classification of the accounting analysis according to the instruments (methods and procedures) of the balance-sheet analysis: 1) visual or gen-

¹ Rifet Đogić, assistant professor in Faculty of Economy in Zenica.

eral balance-sheet analysis, 2) balance-sheet analysis by using deposit account, 3) ratio analysis or indicators of analysis of financial reports, 4) balance-sheet analysis by net capital, 5) 'Cash Flow' analysis, 6) 'Funds Flow' analysis.

Out of the six mentioned accounting analyses the most present in management is the ratio analysis or indicators of analysis of financial reports in which the following is included: 1) liquidity analysis – short-term financial security, 2) solvency and indebtedness analysis – long-term financial indebtedness, 3) the analysis of the efficacy of using the assets and its sources – activity analysis, 4) the analysis of the cost-effectiveness, 5) the analysis of profitability.

Considering the fact that profitability is the global indicator of success of a business, and that it contains the results of the achievements accomplished by productivity and cost-effectiveness at the same time, it may well be said that the profitability analysis is the most powerful management tool in directing a company towards the accomplishing the tasks of a financial policy.²

The profitability principle in terms of the earning power analysis

The primary objective of each profit oriented organization (company) is the increase of its net value i.e. ownership capital from long term operations. This is achieved by satisfactory return on total investments (assets) and net assets (capital) of owners in the long term. It is about a company's profitability which is measured by certain indicators that we have called the profitability ratio. The profitability ratios identify the efficacy of a company, i.e. they define its earning ability within the relevant time frame. The earning power is the best indicator of profitability. This indicator shows the level of the ability of a given investment to increase a certain income.

In terms of economics, the importance of profitability principle lies in achieving the maximum gain on minimum asset engagement. In economic theory and practice, a strong emphasis is placed on profitability as the point of reference for the quality of economy, which emerges from the significance of profit as the result of reproduction and assets engagement for the reproduction process. Profitability measured by the relationship between gain and employed assets is an indicator of a reproductive ability of a concrete company.

Profitability is the global indicator of a business success and it contains the results of an achieved productivity and economical quality at the same time. It is the final, balanced expression of a definitive financial result which indicates the entire success of a company. *It is the crucial criterion of the assets usage efficacy; the crucial criterion of the earning activity success and of running a company.* It is an expression of a final financial effect of assets investments, i.e. the expression of the entire success of a company. In other words, profitability is a synthetic indicator of the economic quality on the whole.

Profitability is not normally perceived as an absolute and is not only measured by the rate of an achieved business result as the balance between incomes and expenditures. It is a lot more competent success indicator (earning ability indicator) as the relation of an achieved goal and engaged assets (entire investments) in realisation of that result.

The process of strengthening the profitability gained from the used assets, that is maximizing of the income rate of the entire assets, signifies the realization of the following two demands: a) the increase of the profit share from the sales and services, b) shortening the duration of tying the assets (maximizing the turnover of entire assets).

The goal of every business policy is to maximize the long-term profit. That implies that maximizing the short-term profit has to be strived for as well, because the sum of short-term periodical earnings equals a long-term earning. On the other hand, in the scope of the aim of a financial policy, financial strength, is the profitability aim as a demand for the increase of own capital. Simultaneously, there is a demand for a permanent financing ability, which cannot be established only by maximizing the net

² The main goal of the financial policy is the financial strength of a company which implies: 1) permanent payment abilities, 2) permanent financing abilities, 3) permanent investing abilities, 4) permanent abilities of increasing the owners' assets, 5) permanent abilities of meeting the financial interests of all the stakeholders of the company

profit, but by its distribution as well. Maximizing the net profit in absolute amount is in accordance with the financial stability principle, but maximizing the income rate of own capital is calculated from the relationship between the net profit and own capital which may be in contradiction with the financial stability principle in terms of the relation between own and long-term loan. While the financial stability principle requires the strengthening of own capital, maximizing the income rate requires the strengthening of long-term loan, provided that the interest rate is lower than the income rate of the whole capital, in which process the income rate on the whole capital is calculated from the relation between business gain and the whole capital.

Hypothetical example:

	Alternative	
	A	B
1. own capital	60.000	30.000
2. loan capital	40.000	70.000
3. entire capital, that is invested assets (1+2)	100.000	100.000
4. sales income	200.000	200.000
5. variable expenditures	130.000	130.000
6. safety margin (4-5)	70.000	70.000
7. fixed expenditures without financing expenditures	50.000	50.000
8. business gain (6-7)	20.000	20.000
9. financing expenditures (interests)	4.800	8.400
10. gross profit (8-9)	15.200	11.600
11. income taxes (10%)	1.520	1.160
12. net profit (10-11)	13.680	10.440
13. income rate of the entire capital (8/3x100)	20%	20%
14. average interest rate (9/2x100)	12%	12%
15. profit rate on own capital (12/1x100)	22,8%	34,8%

Thanks to the change of the capital structure to the benefit of the loan, alternative **B** launches the higher income rate of the proper capital for 52,6% ($34,8 / 22,8 \times 100$) as against the alternative **A**, in which process the net profit in absolute amount is lower for 23,7% [$1 - (10.440/13.680) \times 100$]. From the position of maximizing the income rate of the own capital, the structure of the capital from the **B** alternative is acceptable, but from the position of the absolute amount of the net profit the structure of the net capital from the **A** alternative is more acceptable. From the owner of the capital's point of view the alternative **B** should be chosen.

Nevertheless, from the point of view of the company and the financial stability, the structure of the capital from the **A** alternative is more favorable for the following reasons:

The loan capital is lower thus is easier to substitute by proper capital from the financial result, even more because the net profit in absolute amount is higher in the **A** alternative than in the **B** alternative. Under the assumption that the entire net profit is assigned to proper capital and that it is stable, according to the **A** alternative the loan capital could be substituted in approximately 2,9 years ($40.000 / 13.680$), and according to the **B** alternative it takes 6,7 years ($70.000 / 10.440$) for substitution of the loan capital.

Sustaining the long-term financial balance is gets easier as the own capital grows.

If the profit from the entire capital plunges due to the market limitations, to that level that the profit rate from the entire capital gets lower than the average interest rate, the income rate of the proper capital and the net profit will be as low as the amount of the loan capital is high. Such a situation would require an early loan payment, which is hardly viable if the loan is too high.

Profitability principle is not confronted with the financial stability principle only if the maximizing of the net profit in absolute amount is prioritized.

In terms of the analysis of a company's profitability a very important question rises: the question of the profitability ratio. Normally, in theory and practice the profitability measurement and analysis is

performed from the following position: *profit gain* and *investment and capital gain*. That is why we classified the profitability indicators in following groups: *a)* ratio of the income profitability, *b)* ratio of the investment and capital profitability, *c)* ratio of profitability in connection with shares, *d)* profitability indicators in connection with the financial result from the loan capital analysis.

Profitability measurement and analysis from the position of the income gain

If we are approaching the profitability measurement and analysis from the income position we are using the ratio of the income profitability which expresses the income gain ability. In contemporary theory and practice, we use the following ratio of the income profitability:

1) *The rate of business gain*³ from the sales income emerges from the relation between the business gain (gain from a business activity) and sales income, and shows the gaining ability of a running procedure in a company, that is the process of ‘establishing the necessary factors of production – producing of the appropriate products and services – selling the products and services’ completely independently from the way of financing the process. This indicator is calculated as following:

$$\text{The rate of the sales income} = (\text{business gain} / \text{sales income}) \times 100$$

This indicator has a great significance as the experiential informational basis in formulating the aimed income rate for the needs of forming selling prices, by the method ‘expenses plus’ according to which the ‘expenses’ are referring to operational expenditures, and ‘plus’ refers to the earnings which are by products and services, as bases of success, charged for. Besides that, this indicator helps management decide about the financing of the business process from the loans. Thus, for example, if the sales income rate is 10% and interest rate is lower (e.g. 9%) it is good to take loans because they are in function of the increase of the business, and by all means sales income. This especially stands if we know that in the process the interest free financing sources, such as obligation to suppliers will bring additional financial sources. Nevertheless, in determining the structure of the financing sources we must not rely on the rate of business gain only. Those decisions have to be based on the profitability rate analysis and the analysis of its relation to the market interest rate.

2) The rate of the net profit in sales income follows from the relation of the gross profit (after the expenditure coverage) and sales income shows the income earning ability before the income tax., that is,

$$\text{The rate of the gross profit in the sales income} = (\text{gross profit} / \text{sales income}) \times 100$$

The rate of the gross profit in the sales income is the result of the entire business assets, financed in the way showed in balance-sheet liabilities, that is, it is the result of not only a business process but the way of financing a company, as well as the non-business activities (occasional activities such as the sales of the surplus material, superfluous or deducted permanent assets, attuning of the accounting values of the assets with the fair value) and unexpected events (unexpected incomes and expenditures).

3) The rate of the net profit in the sales income emerges form the relation of the net profit (after the expenditure coverage) with the sales income and it shows the gaining ability of the income after the income taxes:

$$\text{The rate of the net profit in the sales income} = (\text{net profit} / \text{sales income}) \times 100$$

Net profit is the profit which remains at the owners’ and the company’s management disposal after they had set aside a share of the profit for community needs as the income taxes.

³ Business gain is the gain which followed from a business activity of a company, and it emerges as the balance form the sales income and business expenditures.

The net profit rate should not be connected with the entire investments (assets), but only with the own capital, the product of which it is. Only if the capital turnover is 1, the net profit rate equals the income rate of a company's own capital. Every value of the capital turnover ratio above 1 results in a higher capital income rate from the net profit rate.

Measurement and analysis of the profitability from the position of investing and capital

If we approach the measurement and analysis of the profitability from the position of investing and capital we are using the investment (assets) and capital profitability ratios which express the ability of return of the investments (entire assets), own and invested capital. In modern theory and practice we use the following investment and capital profitability ratios:

1) *The return rate on actual business investments (actual asset)* is a comprehensive indicator of a company's performance in its operational sphere which expresses the return of the net investments (actual asset),

$$\text{the return rate on actual business investments (actual asset)} = (\text{business gain} / \text{average actual business asset}) \times 100$$

Average actual business asset is the assets cleared of the positions which are not included in actual business process « provide the necessary production factors – produce the products and services». It is a narrow term in the entire assets for the following positions: recorded not paid in capital, long-term and short-term financial activities which are conditioned by the investing, not running activities of a company. Due to additional analytic information (making all the factors which affect this profitability ratio evident), this ratio is frequently expounded in the following manner:

$$\begin{aligned} \text{the return rate on actual business investments (actual asset)} &= \\ \text{the rate of sales return} \times \text{the capital assets turnover} &= \\ (\text{business gains} / \text{sales income}) \times 100 \times (\text{sales income} / \text{average actual business asset}) & \end{aligned}$$

The return rate on actual business investments (actual asset) is widely used as useful information for making decisions in planning and controlling. For instance, depending on the rate of this profitability ratio in comparison to the interest rate of the loan capital, a company's management determines the rate of the leverage, that is the level of the aimed ratio – debts/ own capital. Stock buyers, creditors and other shareholders, who expect their interests and assets return, see the safety of their equity investment and their share of return on equity (interests) only if the creditor is gaining a higher rate of return on net investments from possible market interest rate. Besides the above mentioned, this ratio has its application in setting the selling prices following the *return rate method* because this indicator leads us to a product or a group of products that have to be calculated by assessed amount of the sale of the product..

Aside from the mentioned roles, the return rate on actual business investments has an important informational basis for determining and allocating the aimed profit of a company in organizational spheres, programs, products, etc.

2) *Return rate on financial assets* expresses the earning ability of investing into the financial assets, that is,

$$\begin{aligned} \text{return rate on financial assets} &= \\ \text{the return from investing into the financial assets} \times 100 / \text{average investing into} & \\ \text{the financial assets} & \end{aligned}$$

The income from investing into the financial assets is achieved on the basis of dividends on bought shares, income from capital participation based on shares in other companies and banks, returns on interests from someone else's bonds, returns on interests on given goods or financial loans (long-term or short-term), accumulated dividends from the net income from buying in own shares.

3) *The return rate on entire investment (entire assets)* represents a relative relation between net profit increased for financing losses which are decreased for tax saving which they bring as a deductible item in determining the taxable return and average whole assets of a company engaged in an observe period of time regardless of the way in which they are financed. It shows the percent of periodical gain of the entire assets of a company it is used for measuring the efficacy of using of entire assets. This indicator is calculated as following:

$$\begin{aligned} & \text{the return rate on entire investment (entire assets) =} \\ & [(net\ income + financing\ losses) \times (1 - rate\ of\ the\ income\ tax)] \times 100 / \\ & \quad \quad \quad average\ entire\ assets \end{aligned}$$

What is the point of correcting the financing losses for tax saving before they are even included into calculating the income rate on the entire investment? It has already been stated that that in the basis of calculating and using this profitability ratio stands an idea about the earning strength of the overall investments regardless of how they are financed, and what is the relation between own capital and loan capital. Thus focus is on the income arising from business, investing and some other activities of a company. Financing losses are the expenses of providing the sources of assets, not the expenses of using those assets which is why they have to be included into net profit at calculating the income rate on the entire investments, but not in full amount but adjusted for tax saving according to their provisions. Their adjustment is made because the taxable income is decreased by the amount of financing losses in their tax balance-sheet, which also decreases the capital gains tax. Therefore, that saving emerges from financing activities of a company, not from its business and investing activities.

For the purposes of additional analytic information (making all the factors which affect this profitability ratio evident), this ratio is often expounded as follows:

$$\begin{aligned} & \text{the return rate on entire investment (entire assets) =} \\ & \text{the rate of business sales return} \times \text{the capital assets turnover ratio} = \\ & \quad \quad \quad (business\ gains / sales\ income) \times 100 \\ & \quad \quad \quad \times (sales\ income / average\ actual\ business\ asset) \end{aligned}$$

4) *The return rate on own capital (or the return rate on the assets financed from own resources)* is a relative relation of the net income and the average own capital or the product of the net income rate and the own capital turnover coefficient. It expresses relative (percentagewise) increase of own capital and is used to measure the efficacy of the usage of the assets financed from the own sources. This indicator is calculated as follows:

$$\text{the return rate on own capital} = (net\ income / average\ own\ capital) \times 100$$

For the sake of a precise calculation of the return rate on own capital, the part of the capital that refers to recorded but not paid in capital has to be removed from the denominator, because it was not the part of gaining the net profit.

For the purpose of additional analytic information (making all the factors which affect this profitability ratio evident), the return rate on own capital, is often expounded as follows:

$$\begin{aligned} & \text{the return rate on own capital =} \\ & \text{net income} \times \text{the capital assets turnover ratio} = \\ & (net\ income / sales\ income) \times 100 \times (sales\ income / average\ own\ capital) \end{aligned}$$

It is evident from the above that the maximizing of this rate implies strengthening of efficacy of using the financing assets from own sources, and that is achieved: *a)* by increasing the participation of the net profit in sales and services income (maximizing the net profit rate) and *b)* by decreasing the duration of the capital assets turnover (maximizing the coefficient of the capital assets turnover).

In analyzing the profitability of own capital we have to distinguish: profitability of the entire own capital and the profitability of shareholding capital.

The profitability of shareholding capital is calculated in two ways: by net profit rate on shareholding capital and by absolute amount of the net profit per share, that is

$$\begin{aligned} \text{profitability rate of shareholding capital} &= (\text{net profit} / \text{average shareholding capital}) \times 100 \\ \text{or} \\ \text{net profit per share} &= \text{net profit} / \text{weighed number of the shares outside the company} \end{aligned}$$

Weighed number of the shares outside the company is determined as follows:

the number of shares by balance-sheet x the number of days in a year

the number of the sold shares during the year x the number of days from the day of the sale to the end of the year

the number of bought off shares during the year x the number of days from buying them off till the end of the year

weighed number of shares outside the company = (1+2-3)

In shareholding companies the profitability rate of the shareholding capital is higher than the profitability rate of the own capital because the own capital contains, besides shareholding capital and reserves, the accumulated gains from the previous years and unassigned gains (if any) from the current year and maybe a shareholding premium (public offering gain, agio).

It is very important to point to the differences between the return rate on entire investments (entire assets) and the return rate on own capital. The return rate on entire investments indicates the improvement of the entire assets by a gain which comprises of net profit for the owners (e.g. shareholders) and creditors' interests adjusted for the tax saving based on their provisions, and the return rate on own capital indicates an improvement of own capital by net profit, thus from their difference emerges the effect of financial leverage - seeking the best relation between own and loan capital.

5) *The income rate on the invested capital* is a relative relation of the net profit increased by interests of long-term loans and the average invested capital. Invested capital is the sum of own capital and long-term loans. The income rate on invested capital can be set without the exclusion of the influence of the tax saving on financial results based on long-term loan interests. When the influence of the tax saving on the income tax is not excluded, the return on the invested capital is calculated as follows:

$$\begin{aligned} \text{the rate of the return on the invested capital} &= \\ &= (\text{net profit} + \text{interests on long-term loans}) \times 100 \\ & / \text{average invested capital} \end{aligned}$$

When the influence of the tax saving on the income tax is excluded, the rate of profit on invested capital is calculated as follows:

$$\begin{aligned} \text{the rate of profit on invested capital} &= (\text{net profit} + \text{interests on long-term} \\ & \text{loans}) \times (1 - \text{tax rate in decimal number}) \times 100 \end{aligned}$$

Conclusion

Good company running implies the achievement of financial policy goals. The main aim of the financial policy is financial strength of the company which implies following: 1) permanent payment ability, 2) permanent financing abilities, 3) permanent investing abilities, 4) permanent ability to increase the owners' assets and 5) permanent abilities to meet the interests of all the stakeholders of the company.

In order to achieve the financial policy goals, the management has to apply following standards of principles in financing the activities of the company: 1) the principle of financial stability, 2) the profitability principle, 3) the liquidity principle, 4) the principle of financing the company in accordance with the risk, 5) the principle of financial elasticity, 6) the independence principle and 7) the principle of the optimal activation influence of the financial image. If the management of the company successfully uses the defined standards (principles) in financing the activities of the company directed towards the aims of the financial policy, then they are using following ratio analyses: *a*) liquidity analysis (short-term financial security), *b*) the solvency analysis and indebtedness (long-term financial security), *c*) the analysis of the efficacy of using the assets (activity analysis), *d*) the analysis of the cost-effectiveness, and *e*) the profitability analysis.

Considering the fact that profitability is the global indicator of success of a business, and that it contains the results of the achievements accomplished by productivity and cost-effectiveness at the same time, it may well be said that the profitability analysis is the most powerful management tool in directing a company towards the accomplishing the tasks of a financial policy and in measuring the quality of economy on the whole. This is because profitability is the global indicator of a business success and it contains the results and the two partial indicators of the quality of economics (productivity and cost-effectiveness).

As you can see, in theory and practice, measurement and analysis of profitability is performed from the position of: earning ability of incomes and earning ability of investments and capital.

References

- Engler, C. (1988): *Managerial Accounting*, Irwin, Homewood, Illinois.
Flamholtz, E.G., Diamond, M.A., Flamholtz, D.T. (1986): *Financial Accounting*, Macmillan Publishing Company, New York.
Žager K., Žager L. (1999): *Analiza finansijskih izvještaja*, Masmedia, Zagreb.

Service Economy and Tourism with Special View on Rural Tourism in Bosnia and Herzegovina

Aleksandar Djurić¹, Tatjana Vujić², Ferhat Čejvanović³

ABSTRACT – This paper treats services, i.e. phenomenon of service economy, with regard to place and role of tourism. The gross national income is increasingly derived from utilization of services and there are more and more people being employed in this sector. Position of tourist services grows having in mind participation in incurred incomes.

Special part of this paper discusses the B&H rural tourism development possibility. Rural areas of B&H offer characteristics of trendy rural areas and can be attractive for starting tourist activities. The B&H rural areas make 81% of its territory and 61% of its population lives there. They are also a symbol of folklore, national costumes, customs, religious facilities, cultural and historic monuments, gastronomy, hospitality of the population etc. The areas are rich in natural resources, as well as in traditional values which are suitable for tourism, as one of the potential preconditions for their development. They also make space for new development approaches. In B&H the rural tourism can become additional activity of family-owned farms. In most places the family-owned farms, besides their regular farming duties, faithfully maintain tradition, gastronomy and interesting customs which need to be used in promotion of the B&H tourist potentials. Therefore, the main goal of the research is to emphasize the importance of the service economy, to portray tourism and rural tourism capacities in B&H as additional activities of the B&H rural areas, and to support their development and their farming activities at the same time.

KEY WORDS: services, service activities, service economy, tourism as part of the service economy, rural tourism

Introduction

Nowadays 70% of the gross national income is derived from the service economy. There is no developed country in the economy of which services do not occupy a significant portion. Services represent an important option for economies of low and medium developed countries and they offer them a chance to be more seriously involved in international division of work.

We can use data provided by the WTO to determine the position of tourism among other services. The data illustrate mass character of tourist travels which represent tourism in the light of social and economic effects and primarily in relation to number of travelers in both domestic and international proportion.

Our intention is to represent rural tourism as a part of the service economy and tourist offer which induces development of new tourist destinations and contributes in development of continental tourism. Rural family-owned farms are the main characteristic of this form of tourism. Their existence is based on agricultural production. In this way surplus of their products would be sold to visiting tourists and they would earn additional income. Also, renting accommodation, providing meals and other tourist services would supply even more additional income for the family-owned farms.

¹ Aleksandar Djurić, The BD of B&H Government

² Tatjana Vujić, The Municipality of Bijeljina

³ Ferhat Čejvanović, The BD of B&H Government

Role and importance of services in the international economy

In the last forty years the main structural change in the global economy can be primarily seen in growing quantity of services, i.e. in significant participation of the tertiary sector of economy (trade, tourism, insurance, transportation, banking, finances, education, engineering, etc.). As the economy develops the structure of services develops, too. In other words - participation of some sectors in the gross national product, national income and employment changes, too.

Nowadays 70% of the gross national income is derived from the service economy. There is no developed country in the economy of which services do not occupy a significant portion. Services represent an important option for economies of low and medium developed countries and they offer them a chance to be more seriously involved in international division of work.

In the last twenty years production growth of developed countries is getting faster. The average growth rate in services is 3.9%, which is above the average production growth rate achieved in agriculture (1.2%) and in industry (3.6%). In the economically developed countries the service sector employs up to 80% of the total number of employed people (Ljubojevic, 2002: 16-19).

All the service processes consist of two types of activities:

- operational activities (pertain to steps which need to be taken in order to deliver services to consumers); and
- consumers-service activities (refer to personal interaction between consumers and service providers during delivery of services).

The following best characteristics of service activities are (Ljubojevic, 1998: 17):

- both producer and user of services are more or less involved in the "situation change" and are present in the same place at the same time,
- the service users take part in its production, creating a unique service product,
- the service activities are labor intensive, with limited opportunities of the economies of scale, while the service product is under the strong influence of qualifications of employees,
- the service product as "a change of conditions" is fundamentally different comparing to a material product,
- a change in condition of persons and items is irreversible.

The basic differences between industrial products and services assume that process of production of services is simultaneous with the process of their consumption. Besides, intangibility of services means that they cannot be seen, felt or touched by their users. Heterogeneity of services assumes that there are a lot of participants in providing services. Also, the services may be used and realized but cannot be owned.

Thanks to the major significance of the services, as well as to their portion in the economy of developed countries, phrases such as tertiary society and tertiary economy are used more and more. According to leading theoreticians of economy the services are actuating force of the economic mechanism, and the tertiary sector is the main factor of modern economy. Consequently, one can conclude that the services significantly stimulate economic growth of the global economy.

Tourism as branch of service activity

As a mass social and economic phenomenon the tourism has developed in the last several decades. In this short period of time the tourism has developed in one of the most present and significant social legacies of the modern humankind. At the same time, it has become the most complex and significant economic category with extremely dynamic development, fast and deep qualitative and quantitative changes.

Having in mind its social and economic effects and primarily number of people on tourist travels we can say that tourism constantly changes.

After the WWII, due to improved standard of living and more free time, tourism became a mass phenomenon considering incurred turn-over, as well as a scale of activities in tourist areas. Implications of the development of tourism can be seen in economic, geographic, psychological, sociologic, behavioral and environmental spheres. As such, the phenomenon of tourism “enters every pore of economic and social life”. (Bakic, 1996:77)

During 1990's dimensions of the tourist market became large and significant taking a leading role compared to the car and oil industries.

Data provided by the WTO can be used to determine the position of tourism in service activities. According to WTO, 842 million arrivals of foreign tourists were recorded in 2006, which is 11% more than in 2004 (www.worldtouristorganization.org). Comparing this data with the 2000 situation, when participation of 697.6 million foreign tourists was recorded, one can notice prosperity in development of the international tourism (Unkovic, 2002: 11-104). During 2006 income of USD 735 billion was incurred from the international tourism, excluding traffic services. Comparing these indicators with the ones from 1950, when there were 25.5 million people in the international tourism, it can be concluded that in the last 50 years the international tourism has become a mass phenomenon. Its development in the last 50 years has been more prosperous than economic development and development of international economic relations. Average annual growth rate of tourism in this period has been 5.6% and tourist expenditure 11.4%. In the period between 1995 and 2000 the average annual growth rate of tourism turn over was 4% and tourist expenditure 3.2%. In the period from 2001 to 2003 stagnation of the international tourism took place due to non-economic reasons (the war in Iraq, terrorist attacks on tourists, epidemic of SARS in some SE Asia countries, air-traffic crisis, more strict safety and visa politics in a number of countries). Therefore, the average annual growth rate of number of tourists was 0.1% and of tourist expenditure it was 3.5%. In the period between 2000 and 2004 the average annual growth rate of tourist turn over increased to 2.6% and tourist expenditure to 7% (Unkovic, 2005: 243).

According to the WTO forecasts arrivals of foreign tourists will reach 1 billion in 2010 and 1.56 billion until 2020. The average annual growth rate will be 4.1% for the period between 1995 and 2020. For 2020 the WTO forecasts USD 2000 billion of tourist expenditure, i.e. the average annual growth rate of 7% for the mentioned period of time.

In the observed fifty years the development of the international tourism has been conditioned with more free time (shortened working week, duration of paid annual leave) and realistic growth of earnings.

Also, increased level of general education and culture of population has significantly influenced affirmation of the international tourism. Besides, tourism for health improvement purposes, better communication between populations of different countries (in economy, culture, sports, politics, education, science etc.) and for other purposes have had significant influence on increase of the international tourism.

Economic and tourist policy measures have also had special importance in affirmation of the international tourism. Those measures, undertaken by majority tourist countries, have been developing tourist offer elements (accommodation and food for tourists, roads, infrastructure, organizing t places for accommodating foreign tourists, organizing trade, sports, cultural and entertaining events).

Traffic, construction and modernization of roads and railroads, introduction of modern traffic means in railroad and air traffic, construction of airports, mass usage of private cars etc. have had significant influence on development of tourism. Role of major air-traffic companies and tour operators, which have introduced cost-effective package tours in the international tourism, has been noticed. Evaluations have shown that 1/3 of all international travels have been organized as package tours (The Encyclopedia of Economy, 1986).

Organized promotional activities have made influence on growth of the international tourism. Tourist countries have been organizing their national tourist branch offices. These offices provide various pieces of information about their countries. Tour operators, air companies, different carriers and other participants in tourism have been dealing with propaganda and information activities. Here one can

conclude that the tourist propaganda has strong influence on development of the international tourism in the world.

Furthermore, economic and tourist policy measures have had strong influence on development of the international tourism and have created suitable conditions for its growth. Those measures are loans and tax policies the purpose of which has been construction and modernization of accommodation.

Loans have been given under favorable conditions, with long pay-off periods and lower interest rates. Almost all developed tourist countries have been using the mentioned forms of stimulating tourist development. This has created developed and high quality tourist offer in some of the most popular tourist countries: Spain, Italy, Greece, Portugal, France, Austria and Switzerland.

Development of the international tourism can be seen in total economic development of both receiving and emitting tourist countries. The reference is primarily made to the influence on growth of the national product and income, balance of payment and employment rate.

End of the 20th and beginning of the 21st century has shown that tourism as a global economy branch has had primacy over other economy branches.

Development opportunity of rural tourism in Bosnia and Herzegovina

Rural tourism supports development of new tourist destinations giving especial contribution to development of the continental tourism. Basic characteristics of this type of tourism are family owned-farms, which mostly provide their own existence through agricultural production. In this manner, family-owned farms could sale surplus of their products to tourists in visiting. It is a way for family-owned farms to provide additional income by engagement of members of family. If we anticipate opportunities such as rent of accommodation, catering services and other kinds of services for tourists then possibility for family-owned farms to incur additional incomes is even larger.

Rural areas are not intended especially for agricultural-production activities. Long since, level of social-economic development of these areas is defined based on proportion of intensity of the agricultural production and management of forests in regard to utilization of rural are for other purposes (Cejvanovic and others, 2006). Role of agricultural production and utilization of forestry products is inversely proportional to the level of development. Nowadays, rural areas become main bearers of:

- housing needs of population,
- functions of agricultural and industrial production,
- infrastructural needs of urban areas,
- spaces for spending free time.

Regarding rural areas in B&H, there is a need to point out that 81% of total area and 61% of its population can be qualified as rural. According to the OECD criteria, areas with density of population lower than 150 citizens/km² are considered rural. There are 143 municipalities in B&H, out of which 114 can be qualified as rural, with population of 2.372.162 (Report on agriculture in B&H, 2007).

This definition indicates to one aspect of rural areas, but disregards important differences which exist between rural areas, as well as important contribution of rural resources to social, economic, tourist and cultural developing processes. Diversity of rural areas is significant element of the rural development policy, as well as development of agro-tourism.

The concept of rural tourism has an important role in sustainability and reconstruction of rural areas. Importance of the rural tourism in chain of the sustainable development happened due to capability to valorize natural characteristics and environment as an economic resource.

The following principles of rural tourism organized in this way are: rational relation toward resources of given area, monitored and planned development and sustainability of the system.

These principles are basic guiding principles in the process of planning and realization of development of rural tourism, and the reason for that is influence of the rural tourism on local population, their way of life, culture, tradition, etc.

Although besides the term “rural tourism” there are other terms in use, such as: eco-tourism, village tourism, agro-tourism, tourism at family-owned farms, eco-rural tourism and similar, it indeed means concept of tourism being practiced at family-owned farms and uses rural areas in the context of its tourist offer.

There is need to point out that the Federation of Rural Tourism held in Spain, in 2003, was the first European congress on rural tourism (Djuric, 2007). Potentials and basic characteristics of development of rural tourism in 23 European states were presented there. Participants pointed out (representatives of 35 countries were presented) that 200,000 business entities, which provide services in rural areas, were registered in Europe, which had over 2,000,000 million of beds at their disposal. Number of beds available in family-owned farms at that time was 1.5 times higher than the capacity in whole Spain, which is the second most important destination in Europe.

Experts say that accommodation linked with rural tourism attracts annual tourist consumption of about EUR 12 billion. If multiplicative effects of the tourist activity are built-in then the assessments reach the amount of about EUR 26 billion. Estimated number of directly and indirectly employed people is 500.000.

Evaluations of the World Tourist Organization have shown that demand for services at family-owned farms has been constantly growing in the last 15 years.

The highest growth rates have been noticed in some of the countries of the Southern and Eastern Europe. Since public is getting increasingly interested in its sustainability there is even more reason to contribute to the development of the rural tourism. Sustainability is its main component.

Bosnia and Herzegovina has unlimited capabilities to develop the rural tourism in its rural areas. There are potentials for self-development of the rural tourism along with development of agriculture in the B&H rural areas (Vujovic, 2007).

The rural tourism offer in B&H can be divided in several basic groups:

- recreational and educational events: visits to some agricultural households, organization of outdoor schools, youth education programs, activities on farms for specific groups of tourists,
- sports and recreational events: riding horses, paragliding, extreme sports, biking, hiking, running, different sport activities, hunting, fishing etc. can be organized on different rural localities;
- gastronomic offer: home made brandy, wine, juices, meat products (veal, pork, sheep, goat...), home made dairy products, home made cheeses, bread, grain products, fruits (plums, apples etc.)...

These are only basic tourist offers which can be organized in the BD of B&H rural areas. Certain combinations can make the quality of the offer even more attractive.

Conclusion

Dominant participation of services definitely characterizes the modern economy when it comes to creation of national product and income, as well as employment of population. Service sector covers approximately 70% of the gross national income of the global economy. Nowadays up to 80% of the total number of employed people works in the service sector.

The service economy is reality in highly developed countries. It is also a goal which less developed countries want to reach. Having in mind their basic characteristics (in which they differ from material products), managers who work in that sector need to pay more attention to planning, organizing and control of services than the managers working in production companies.

Tourism (as a part of the service economy) has become important social and economic phenomenon in the modern world. After the WWII, due to improved standard of living and more free time, tourism became a mass phenomenon considering incurred turn-over and number of participants.

Economically most developed countries, thanks to their developed economy, high living standard, measures of social and economic policy, level of education and culture of their population, level of

modernization and urbanization, have the most significant participation in the international tourism. Also, the measures tourist countries have undertaken to increase scope and quality of tourist offer to satisfy the needs of foreign tourists have made influence on mass popularity of the international tourism. This includes complex measures in tourist policy undertaken by foreign countries, too.

The international tourism has played an important role in economic development of a number of countries and has been one of the reasons for tourist countries to stimulate development of tourism due to economic reasons using different instruments of economic and tourist policy.

Analysis of the rural parts of B&H has shown that there exist great potentials for development of tourism and agriculture as well as for defining different and specific products which can be interesting not only for domestic but also for foreign tourists.

The main offers of the B&H rural tourism are reflected in: recreational and educational events, sports and recreational events and in gastronomic offer, as well as in other activities suitable for villages.

Agricultural products offer, as a part of the B&H rural tourism, opens possibility for selling agricultural products of different producers. The rural tourism as an additional activity of family-owned farms gives chance to growth of their incomes as well as to development of the B&H rural areas.

References

1. Bakić O. Ljubojević Č. Živković A. (1998): Menadžment usluga u savremenoj ekonomiji, Ekonomski fakultet Beograd
2. Čejvanović, F. et al. (2005), 'Uticaj primjenjenih mera agroekonomske politike na razvoj ruralnih područja Bosne i Hercegovine' (An Influence of Applied Measures of Agro economic Policy onto Development of Rural Areas in Bosnia and Herzegovina), in Thematic Proceedings Multifunkcionalna poljoprivreda i ruralni razvoj (Multifunctional Agriculture and Rural Development), IEP – Beograd.
3. Čejvanović F., Vasiljević Z., Mjere za poticaj poljoprivrednog i ruralnog razvoja u Bosni i Hercegovini. Ekonomika poljoprivrede, Beograd, Vol. LIII, br./No TB (13-667), 2006, str. 233-241
4. Đurić A., Čejvanović F., Grgić Z., »Ruralni turizam i poljoprivreda u Brčko distriktu Bosne i Hercegovine, Međunarodni naučni skup »Multifunkcionalna poljoprivreda i ruralni razvoj-očuvanje ruralnih vrednosti«, Beograd-Beočin, Tematski zbornik-knjiga I, str. 425-430, 06. i 07. 12. 2007. Institut za ekonomiku poljoprivrede Beograd, 2007, ISBN 978-86-82121-47-3, COBISS.SR-ID 145178124
5. Đurić A., Čejvanović F., Mogućnosti razvitka agroturizma u regiji Brčko distrikta Bosne i Hercegovine, 43. hrvatski i 3. međunarodni sompozij agronoma, Sveučiliste u Zagrebu, Agronomski fakultet, Opatija, 2008, str. 229-233. ISBN 978-953-6135-67-7
6. Unković S. Zečević B. (2005): Ekonomika turizma Drugo izdanje, Centar za izdavačku delatnost Ekonomskog fakulteta u Beogradu
7. Bakić O. Ljubojević Č. Živković A. (1998): Menadžment usluga u savremenoj ekonomiji, Ekonomski fakultet Beograd
8. Ljubojević Č. (2002): Marketing usluga, Stylos Novi Sad
9. Popesku J. (2002) Marketing u turizmu, Čigoja Beograd
10. Izveštaj iz oblasti poljoprivrede za BiH (2007), Ministrastvo vanjske trgovine i ekonomskih odnosa, Sarajevo

Female Entrepreneurship in Serbia*

Radmila Grozdanić¹, Mirjana Radović-Marković², Milanka Vučić³

ABSTRACT – Gender equality is a fundamental right, a common value of the EU, and a necessary condition for Serbia in achieving the EU's objectives of growth, employment and social cohesion. Equal participation of women and men in decision-making symbolises the level of political maturity of societies. The work analysis of the situation and trends contributes to the implementation of the Commission's Roadmap for Gender Equality (2006-2010), which has amongst its priorities promoting equal participation of women in decision-making, aiming to raise awareness of the situation. The majority of the data used in the work comes from the database on women which is managed by Serbian national statistics and UNDP's research data.

The work shows that even if the Serbia's efforts to increase women's participation in decision-making have been consistent and certain progress has been achieved, women are still under-represented in all spheres of power in Serbian Institutions, and in entrepreneurial activity. This remains a major challenge for democracy. If we believe in the values of democracy based on the representation and participation of citizens, then we cannot leave half of the population outside the structures of power. Gender equality is also an asset for business. Serbian economy must reap the potential of all human talent at our disposal if we are to be competitive in the face of globalization.

Alongside active policy measures, one of the actions could be identified as to support activities to raise awareness of equality issues in the decision-making process in Serbia and promote research based on comparable European data, and data on countries in transition process. There is a particular focus on indicators introduced by the Council of the European Union in 1999 and 2003 as a follow-up to the Beijing Platform for Action in 1995, which was adopted by 189 states and is considered as a milestone for the enforcement of women's rights across the world.

The work presents facts and figures covering education level of women /background characteristics/, decision-making in politics, economy and public service in Serbia.

KEY WORDS: women, entrepreneurs, employment, unemployment, self-employment, literacy, transition countries, Serbia

Introduction

Entrepreneurship can be read as a cultural and economic phenomenon. In recent times, gender has become an increasing influence on entrepreneurship. This groundbreaking new study considers both gender and entrepreneurship as symbolic forms, looking at their diverse patterns and social representation

The analysis of the World Economic Forum (WEF) by means of the Global Competitiveness Index over the past three years (85th ranking in 2007; 96th ranking in 2004; 85th in 2005; 87th in 2006) indicates a low level of competitiveness of the Serbian economy, due to worsening of the sub-index of basic market conditions – the Serbian economy is facing problems in the area of institutions, infrastructure, macroeconomics, health care, and primary education. Apart from obvious progress, the SME

* This paper is a part of researching project no. 159004, financed by the Ministry of Science and Technological Development of Republic of Serbia, named: "The Integration of Serbian Economy into the EU - Planning and Financing of Regional and Rural Development and Enterprise Development Policy"

¹ Prof. Radmila Grozdanić, PhD, Technical Faculty Čacak, University of Kragujevac, Serbia

² Prof. Mirjana Radović-Marković, Ph.D, Institute for Economic Sciences, Serbia

³ Milanka Vučić M.A, Serbian Chamber of Commerce

sector and female entrepreneurship is still not the mainstay of economic and overall development of the Republic

Rate of female literacy

Illiteracy as a problem of female inequality in Serbian society is indicated by the fact that in Serbia eight women out of ten are illiterate. According to the 1971 census, the share of illiterate women in female population aged above 10 stood at as much as 24.6% and of illiterate men at 6.7%, while in 2002 the share of illiterate women stood at 5.7% and of men at 1.1%. The tendency towards increasing relative risks is noticeable. While 30 years ago in Serbia there was four times as many illiterate women as men, in 2002 there were five times more illiterate women than men. This can be accounted for by still present traditional principles related to the position of women, but also by longer life expectancy of women and their prevalence among elderly population, in which the illiteracy of women is most prominent.

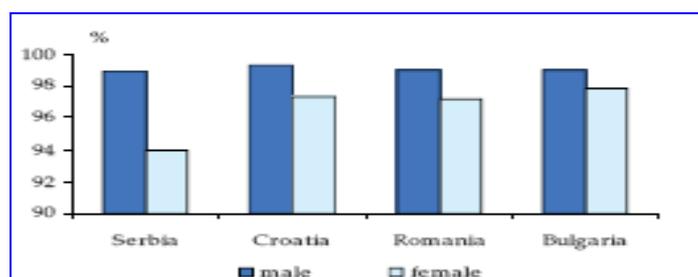
86.8% of all the illiterate accounted for by women. Despite an absolute decrease, the number of illiterate women in Serbia is five times larger than the number of illiterate men. In Serbia in all census years gender differences over the past 20 years they have been increasing in the direction of an increasing share of illiterate women.

By comparing Serbian data with the data on literacy in neighboring countries, it is noticeable that the proportion of illiterate population in Serbia in 2002 was still high. This primarily refers to the female population of Serbia, the rate of illiteracy of which (2002) was two and a half times larger than in Romania and Croatia and even three times as the one in Bulgaria. Although over the past 20 years the trend towards a declining illiteracy rate has been recorded, both in Serbia and neighboring countries, and the rates in these countries have continually been lower than in Serbia, the result is a substantially higher share of illiterate female population in Serbia in 2002. This especially refers to the illiteracy of female population of Central Serbia.

It is important to mention that in neither of the given European countries is the illiteracy of female population five times as that of male, as was the case of Serbia in 2002. Namely, in Bulgaria, Romania and Croatia the illiteracy rate of women is two to three times larger than that of men.

Illiteracy rate of women in Serbia substantially surpasses the European average

Chart 1. Adult literacy rate by gender, 2002



Employment of women

Accomplishing the highest possible employment rate has a special importance from the aspect of the achievement of the Lisbon Agenda (an overall employment rate of 70%, i.e. the rate of employment of women higher than 60%) that member countries must archive by 2010.

Table 1. Unemployment rate, 2004-2006, men/women

	Total			Women			Men		
	2004	2005	2006	2004	2005	2006	2004	2005	2006
EU-27	9.1	8.7	7.9	10.1	9.7	8.8	8.2	7.9	7.1
EU-25	9.1	8.7	7.9	10.3	9.8	8.9	8.1	7.9	7.0
EU-15	8.1	7.9	7.3	9.3	8.9	8.4	7.2	7.0	6.5
Euro-zone-13	8.8	8.6	7.8	10.5	10.0	9.2	7.6	7.4	6.7
Belgium	8.4	8.4	8.3	9.5	9.6	9.2	7.5	7.6	7.5
Czech Republic	8.3	7.9	7.2	9.9	9.8	9.0	7.1	6.5	5.8
Denmark	5.5	4.9	3.9	6.0	5.5	4.5	5.1	4.4	3.3
Germany	9.5	9.5	8.4	10.5	10.3	9.1	8.7	8.8	7.7
Estonia	9.7	7.8	5.6	8.9	7.0	5.4	10.4	8.8	5.7
Greece	10.5	10.0	-	16.2	15.5	-	6.6	6.2	-
Spain	11.0	9.2	8.6	14.3	12.2	11.6	8.1	7.1	6.4
France	9.6	9.5	9.0	10.6	10.6	10.0	8.7	8.8	8.2
Ireland	4.5	4.3	4.4	4.1	4.0	4.1	4.9	4.6	4.6
Italy	8.0	7.6	-	10.5	9.8	-	6.4	6.1	-
Latvia	10.4	8.9	6.8	10.2	8.7	6.2	10.6	9.1	7.4
Lithuania	11.4	8.3	5.9	11.8	8.3	5.6	11.0	8.2	6.2
Luxembourg	5.1	4.5	4.8	7.1	5.8	6.4	3.7	3.5	3.6
Hungary	6.1	7.2	7.5	6.1	7.4	7.8	6.1	7.0	7.2
Malta	7.4	7.3	7.4	9.0	9.8	9.2	6.6	6.5	6.5
The Netherlands	4.6	4.7	3.9	4.8	5.1	4.4	4.3	4.4	3.5
Austria	4.8	5.2	4.8	5.3	5.5	5.2	4.4	4.9	4.4
Poland	19.0	17.7	14.0	19.9	19.1	15.1	18.2	16.6	13.1
Portugal	6.7	7.6	7.7	7.6	8.7	9.0	5.9	6.7	6.5
Slovenia	6.3	6.5	6.0	6.8	7.0	7.2	5.8	6.1	5.0
Slovakia	18.2	16.3	13.3	19.2	17.2	14.7	17.4	15.5	12.3
Finland	8.8	8.4	7.7	8.9	8.6	8.1	8.7	8.2	7.4
Sweden	6.3	7.5	7.1	6.1	7.4	7.3	6.5	7.5	6.9
United Kingdom	4.7	4.8	5.3	4.2	4.3	4.9	5.0	5.1	5.7
Bulgaria	12.0	10.1	8.9	11.5	9.8	9.3	12.5	10.3	8.6
Croatia	13.6	12.6	-	15.6	13.8	-	12.0	11.6	-
Romania	8.1	7.2	7.4	6.9	6.4	6.3	9.1	7.8	8.3
Norway	4.4	4.6	3.5	4.0	4.4	3.4	4.8	4.8	3.6
Serbia	18.5	20.8	20.9	22.9	26.2	24.7	15.1	16.8	17.9

Source: Eurostat (data from Labor Force Survey), for Serbia RDB and RSO

The employment rate in Serbia in 2006 fell by 3.6% (49.9%) in relation to 2004 (53.5%), which was substantially below the Lisbon standard of 70%. Viewed by gender, the rate of female employment stood at 40.6% (2006) and was by 18.6% lower than the rate of male employment.

The ratio between the employment rate of men and women in working age is best illustrated by deviations from the regression line, on the 'diffusion diagram'. The largest deviation from the regression line is recorded with Bulgaria, which is caused by the smallest gap between the employment rate of men and that of women (8.2%) in relation to other given countries, while, on the other side, the largest gap is present in Serbia (18.6%). By comparing countries of the EU-15 and EU-27, one can notice that the deviation is at approximately the same level. On the basis of the determination coefficient, as an indicator of representation of the regression model ($R^2 = 0.72$), 72% of variations is explained through the given model ($0 \leq R^2 \leq 1$), from which justification of the model arises, i.e. the presence of the correlation of variables.

Serbia records the greatest gap between employment rates of men and women in the group of neighboring countries and the EU

In line with this, a high level of correlation between rates of employment of men and women is shown with the value of Pearson's correlation coefficient of 0.85. According to a UNDP study, women feel negatively discriminated when it comes to employment or career pursuit. Women are one of vulnerable groups (especially lone mothers) and are at risk of poverty. Unlike neighboring countries, rights related to maternity leave, child care leave and retirement are preserved in Serbia and positive policies to be implemented within these areas are defined.

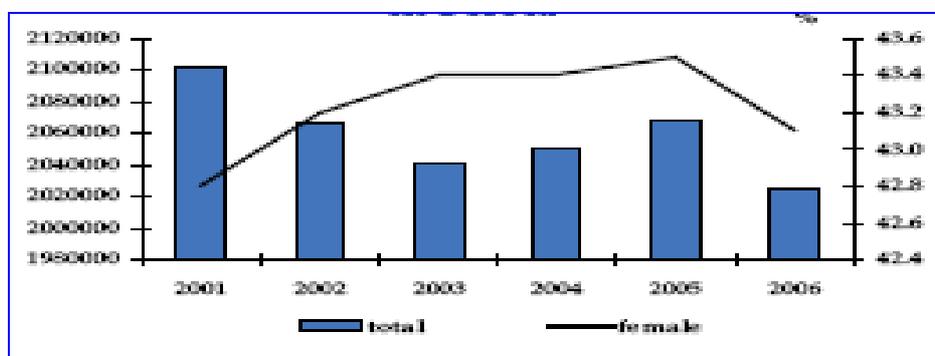
Some strategic documents are adopted (Poverty Reduction Strategy, Millennium Goals, National Employment Action Plan* for 2006-2008) that foster gender equality at the labor market and envisage positive actions.

Analyses show that in transition countries the economic position of women deteriorates, which is the consequence of coexistence of various factors: tradition and patriarchy being a general trend in soci-

ety; the fall in purchasing power, diminished role of the country, narrowing of the public sector, budget restrictions that affects women in particular since health care, education and other benefits decrease and their rights to maternity leave, child care and pensions shrink; the decrease in employment rates and the rise in unemployment rates; the rise in the share of women among the poor (feminization of poverty); growth of black economy, which stimulates exploitation and discrimination of women; insufficient transparency of the privatization process which shuts out most women; absence of the practice of gender budgeting that makes economic discrimination of women at a macroeconomic level invisible, conflict of roles (family and work) the burden of which is still dominantly on female shoulders.

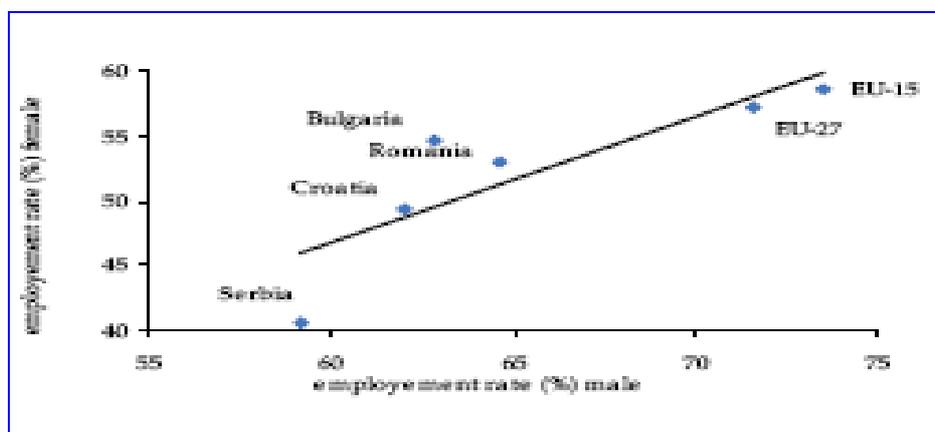
Macro- and micro-economic policies, including structural adjustment, most often do not take given factors and their negative impacts on women into account, especially on those that belong to marginal groups or those that are exposed to a larger poverty risk. The problem of employing women aged over 45 is especially marked, and women housewives, agriculture producers, young women and women from multiply discriminated groups. Major problems with employing women are as follows: inadequate qualification structure, age discrimination, pressures to delay marriage and parenthood.

Chart 2. Dynamics of the number of employees in Serbia



Obstacles to self-employment are: a lack of start-up capital, insecure economic environment, loan insolvency (a lack of real estate ownership), lack of knowledge and skills to undertake business, lack of self-confidence. Problems of employed women are reflected through: discrimination in performing managerial and best-paid jobs, segregation of professions to 'male', better paid and more prestigious and 'female', less paid and less prestigious, massive female 'black economy' work, a high concentration of female labour performing low-paid jobs, sexual harassment.

Chart 3. Employment rate by gender, 2006



Unionization lags behind market changes and women do not participate enough in the process of collective bargaining. Unemployment, low wages and job insecurity affect their adverse negotiating positions as well as delaying starting a family and childbearing, which extremely adversely. The value of

Pearson's correlation coefficient ranging from 0.71 to 0.90 represents a high correlation and extreme relatedness of variables.*

GDI, Gender-related Development Index

The Gender-related Development Index (GDI) is the HDI adjusted for gender inequality.

GDI 2004. The value of the GDI index in 2004 (0.800) does not deviate much from the value of the HDI index (0.810), which indicates the fact that in Serbia in 2004 the disparity between levels of human development of genders was not high. In 2004 the growth of GDI index continued, largely caused by the growth of GDP (PPP \$), while other parameters did not change significantly. GDI index value varies of 0.800 ranks Serbia 51st in the world.

Table 2. GDI in neighboring countries, 2004

Country	Life expectancy at birth (years)		Adult literacy rate (%)		Gross Enrolment Ratio (%)		Estimation of income per capita (PPP \$)		GDI	
	F	M	F	M	F	M	F	M	Value	Rank
Serbia	75.1	69.7	94.3	98.9	83	77	5,525	9,874	0.800	51
Albania	76.9	71.1	98.3	99.2	67	69	3,487	6,492	0.780	59
Bulgaria	75.8	69.1	97.7	98.7	81	81	6,406	9,855	0.814	44
Croatia	78.6	71.6	97.1	99.3	75	72	9,872	14,690	0.844	40
Greece	81.0	75.7	94.2	97.8	96	91	15,728	28,837	0.917	23
FYR Macedonia	76.5	71.5	94.1	98.2	71	69	4,286	8,943	0.791	54
Romania	75.2	68.0	96.3	98.4	77	73	6,723	10,325	0.804	49
Slovenia	80.2	79.2	-	-	100	91	15,992	26,129	0.908	24
B and H	77.0	71.5	94.4	99.0	-	-	5,568	8,582	-	-

Source: Report, UNDP 2007

Table 3. GDI structure in Serbia

	Life expectancy at birth (years)		Adult literacy rate (%)		Gross Enrolment Ratio (%)		Estimation of income per capita (PPP \$)		GDI	
	F	M	F	M	F	M	F	M	Value	Rank
2000	73.5	69.3	94.3	98.9	77	74	2,814	4,901	0.758	61
2001	74.2	70.1	94.3	98.9	79	76	2,853	5,285	0.766	61
2002	75.1	70.1	94.3	98.9	82	78	2,994	5,465	0.772	58
2003	75.1	69.7	94.3	98.9	81	76	4,478	8,235	0.792	50
2004	75.1	69.7	94.3	98.9	83	77	5,525	9,874	0.800	51
2005	75.4	70.0	94.3	98.9	81	76	5,766	10,722	0.808	-

Table 4. Comparison of GDI and HDI indexes, 2004

GDI as % of HDI	Life expectancy at birth (years) women/men (%)	Gross Enrolment Ratio women/men (%)	Estimation of income per capita and gender (PPP US\$) women/men (%)
1. Luxembourg (100.4)	1. Russia (122.4)	1. United Arab Emirates (126.0)	1. Kenya (83.5)
90. Mexico (98.9)	53. Chile (108.0)	27. Armenia (108.4)	71. Niger (56.6)
91. Cape Verde (98.89)	54. Italia (107.9)	28. Portugal (108.1)	72. Panama (56.1)
92. Serbia (98.89)	55. Serbia (107.7)	29. Serbia (107.8)	73. Serbia (56)
93. Nigeria (98.87)	56. B and H (107.7)	30. Libya (107.7)	74. Uruguay (55.3)
94. Bangladesh (98.87)	57. Germany (107.6)	31. Moldavia (107.4)	75. Zambia (55.1)
136. Yemen (94)	191. Kenya (95.8)	189. Afghanistan (40.9)	161. Saudi Arabia (15.4)

It is important to note that one of the items of the GDI index is the estimation of income (PPP US\$) per capita between genders, done in the Republic Development Bureau on the basis of a clearly defined UNDP methodology that is compatible with the estimation of the overall GDP (PPP US\$).

Serbia ranks 55 in the world according to the size of disparities in anticipated life expectancy between genders in favor of female sex and is at the same level as Chile, Italy, BiH, and Germany.

When it comes to combined measurement unit of school enrollment (primary school, secondary school and university enrollment), it can be inferred that Serbia ranks 29 in the world with the disproportion in favor of women (107.8%). A particularly interesting indicator of gender inequality is also the estimation of salary per capita. None of the countries in the world displays the ratio in favor of women, i.e. women earning on average more than men. Although almost all other indicators display the ratio in favor of the female gender, to a smaller or larger degree, this indicator is characterized by most drastic disproportions to the benefit of the male gender. It seems that countries with the lowest differences between salaries of women and men are the poorest ones.

In Serbia salaries of men are on average twice as the salaries of women. If the ratio of GDI as a % of HDI is closer to one, it can be inferred that the equality of achieved human development between genders is more balanced.

Table 5. GDI disparities, 2004

<i>Life expectancy at birth (years) women/men (%)</i>	<i>Gross Enrolment Ratio women/men (%)</i>	<i>Estimation of income per capita and gender (PPP US\$) women/men (%)</i>
1. Ukraine (120.0)	1. Latvia (115.5)	1. Sweden (80.7)
19. Albania (108.2)	9. Denmark (109.3)	26. Slovakia (58.3)
20. Italia (107.9)	10. Portugal (108.1)	27. Germany (57.7)
21. Serbia (107.7)	11. Serbia (107.8)	28. Serbia (56.0)
21. B and H (107.7)	12. Moldavia (107.4)	29. Greece (54.5)
22. Germany (107.6)	13. Finland (107.2)	30. Albania (53.7)
36. Iceland (104.6)	39. Turkey (84.0)	40. Turkey (35.4)

This indicator is based on determining the following indicators: the percentage of women in the parliament, percentage of women at leadership, managerial positions, percentage of women in overall employment and gender disparity in realized income.

GEM Gender Empowerment Measure

Women in decision making in 2007, Political Participation Index

In Republican Parliament of Serbia, out of 250 parliamentary seats, 35 of them were held by women (14.0% parliamentary share)* / just in 2008. there are 18% woman among ministries of new Serbian government/

$$I1 = (0.514 * (14,0) - 1 + 0,486 * (86,0) - 1) - 1 = 0,245$$

Then this initial result is indexed to an ideal value of 50%.

$$I1 = 0,245 / 0,50 = 0,489$$

Other national parliaments, some comparison:

The European Union performs better than average with the proportion of women members of parliament (single/lower house) rising from 16% in 1997 to 24% in 2007, though this is still well below the so-called critical mass of 30%, deemed to be the minimum necessary for women to exert meaningful influence on politics. The six priority areas for EU action on gender equality set out in the Roadmap are: equal economic independence for women and men; reconciling

professional life with private and family life; equal participation in decision-making; eradication of all forms of gender-based violence and trafficking; elimination of gender stereotypes; promotion of gender equality in external and development policies

Of the 20 countries worldwide • that have achieved the critical mass of 30%, eight are from within the EU - Sweden, Finland, the Netherlands, Denmark, Spain, Belgium, Germany, and Austria. The European Parliament (31% women) would also just make it into this select group

On the other hand, there remains a further seven EU countries where women account for less than 15% of members of parliament – the Czech Republic, Cyprus, Ireland, Slovenia, Hungary, Romania and Malta

Belgium showed the greatest improvement in the parliamentary gender balance over the last ten years (from 12% to 35% women) - a direct result of positive intervention by the government through legislation enforcing parity amongst candidates and equal visibility on ballot papers. International IDEA4 notes that most of the countries that have achieved the critical mass have an electoral system based on proportional representation and some form of quota system to proactively reduce the obstacles to women entering politics at national level

Turkey and Malta remain the only countries covered by the database where more than 90% of the members of parliament are men

At the time the Beijing Platform • for Action was launched in 1995, women accounted for only just over 10% of members of parliament worldwide. Since that time, there has been a steady, if slow, improvement so that by July 2007 women accounted for over 17% of members of national parliaments globally.

Regional assemblies. At regional level, women have a stronger political voice than at national level, with an average of 30% representation in regional assemblies. There is, however, significant variation between countries, from 48% women in both Sweden and France to below 15% in Slovakia, Hungary and Italy.

National governments. On average, men outnumber women in the cabinets of EU governments by around three to one (24% women, 76% men). • Although a commitment to balanced representation is evident in some countries - Spain (41% women), Sweden (46%), Norway (53%) and Finland (60%) – the cabinets of Slovakia, Greece and Turkey include just one woman each and that of Romania has no women members at all.

Only eight of the current twenty-seven EU Member States have ever had a woman prime minister (or equivalent position) - the United Kingdom, Portugal, Lithuania (twice), France, Poland, Bulgaria, Finland and Germany (current).

Central Banks. The central banks of all twenty-seven EU Member States are led by a male overnorn.

On average, the highest decision-making bodies of EU central banks include five men for every woman. Sweden and Norway lead the way, but they are the only two European central banks with more than one in three women in such senior positions

In seven EU Member States (Czech Republic, Germany, Greece, Italy, Cyprus, Portugal, and Slovenia) and in Turkey, the highest decision-making body of the central bank is comprised solely of men

At European level where all three of the financial institutions (European Central Bank, European Investment Bank and European Investment Fund) are led by men and there is an average of just below 16% women in positions of influence.

Amongst the central banks of EU Member States there is not a single woman governor – all 27 are men – and the proportion of female representatives in the highest decision-making body of the banks is also low at just 15%. Indeed, seven Member States have no women members of these powerful decision-making bodies and only in Sweden is the gender balance close to parity. The situation is even worse in the three European Financial institutions where there are again only male leaders and just 5% women members of the most senior bodies.

In the supreme courts of Member States the gender balance is better than in the central banks, with an average of 30% female and 70% male judges but the European courts again lag behind with just 22% women members.

Public administrations. There has been significant progress in promoting women within the central administrations of EU member states where they currently fill nearly 33% of positions in the top two levels of the hierarchy compared to around 17% in 1995. The proportion of women in similar positions within the European institutions has also improved from 14% to just under 20% over the same period but there remains much room for improvement.

The judiciary. Across Europe, the groups of judges presiding over each of the national supreme courts comprise an average of 70% men and 30% women but this balance is significantly influenced by high numbers of women in the courts of some of the countries that joined the EU in the last two accessions – in particular Bulgaria (76% women) and Romania (74%). In the EU-15 countries only 18% of judges are female – only a slight improvement from 15% in 1999.

Economic activity index

Of the total number of administrator and manager position, 27.9% are held by women. Likewise,

59.4% of women are professional or technical workers.

$$I211 = (0.504 * (27,9) - 1 + 0,496 * (72,1) - 1) - 1 = 40,000$$

$$I221 = (0.504 * (59,4) - 1 + 0,496 * (40,6) - 1) - 1 = 48,309$$

$$I21 = 40,000 / 50 = 0,800$$

$$I22 = 48,309 / 50 = 0,966$$

$$I2 = (0,800 + 0,966) / 2 = 0,883$$

Business leaders. Across Europe, women account for just over 44% of all workers but they are more likely to be employed in junior positions such that they comprise only 32% of those considered as heads of businesses (chief executives, directors and managers of small businesses), and only 11 percent of the membership of governing bodies such as boards of directors and supervisory boards, our research has found.

The under-representation of women at the top level is heightened in big business where men account for nearly 90% of the board members of leading companies (constituents of the blue-chip index in each country) and there has been very little improvement over recent years

A noteworthy exception is Norway, where the government has taken positive action to redress the imbalance by imposing gender parity on the board membership of both public and private companies (minimum 40% women). With sanctions possible in case of non-compliance, the legislation has already resulted in the level of female representation in the boardroom rising to 34%, which is 10 percentage points ahead of any other European country

In the United States, fewer than a third of the leading 1,500 companies had even a single woman among their top executives in 2006, according to research from Columbia University and the University of Maryland. The numbers are even more discouraging elsewhere: in South Korea, for example, 74 percent of the companies surveyed in 2007 had no female senior executives. We believe that such underrepresentation is untenable in the longer term—and not only because it's unfair

GDP Share Index

Women and men created per capita GDP to the amount of 3638 PPP US\$ and 6330 PPP

US\$ respectively, $GEM = (0,489 + 0,883 + 0,112) / 3 = 0,495$

Comparing GEM values for the group of selected developed and transition countries, it can be seen that Serbia lags behind in this index of human development as well, but less than with GDI.

Table 6. Value of GEM index

Sweden	0.854
Austria	0.770
Slovenia	0.584
Croatia	0.560
Hungary	0.529
Greece	0.523
Serbia	0.495
Romania	0.465

Table 7. GEM structure in Southeast Europe countries, 2004

Country	Seats in parliament held by women (%)	Female senior officials and managers (%)	Share of female employe in total employment (%)	Ratio of estimated female to male earned income	GEM	GEM. rank
Bulgaria	22.1	33	61	0.65	0.595	37
Croatia	21.7	23	52	0.67	0.602	33
Greece	13	27	49	0.55	0.614	29
FYR Macedonia	19.2	28	53	0.48	0.554	43
Romania	10.7	29	57	0.65	0.492	59
Slovenia	10.8	34	57	0.61	0.603	32
Serbia	19.6	25	43	0.56	0.556	43

Results presented quantitatively in the form of the GEM index are the extension of discussion of gender equality, partly presented in the form of the GDI index. On the basis of the GEM index, which differs from the GDI index since it measures various relevant dimensions in the social life only for the female sex, it is possible to arrive at several conclusions.

Firstly, Serbia ranks 5 in the Southeast Europe region, ahead of Macedonia and Romania. Compared to the GEM in 2003 (0.485), 2004 saw a substantial growth in the first place conditioned by the growth of the percentage of women in the parliament and income (PPP US\$) per capita, so that the value of the index is markedly increased (0.556).

When we talk about the percentage of women in the parliament, Serbia ranks third, behind Bulgaria and Croatia.

The indicator of percentage of women at leadership positions ranks Serbia at an ultimate position ahead of Croatia, while the indicator of women's share in overall employment (43%) ranks Serbia definitely last, which can partly be put down to adverse trends of the process of economic restructuring. The ratio of income disproportion (PPP US\$) per capita, which is in all countries in favor of men, ranks Serbia 5th, ahead of Greece and Macedonia.

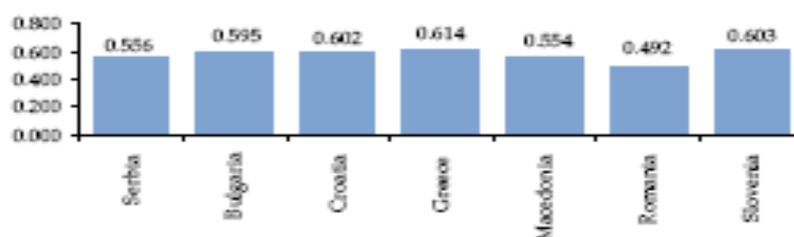
Chart 4. GEM in SEE, 2004

Table 8. GEM structure in European countries and Serbia, 2004

<i>Seats in parliament held by women (%)</i>	<i>Female senior officials and managers (%)</i>	<i>Share of female employe in total employment (%)</i>	<i>Per capita wages gender disparity (PPP LIS\$) women/men (%)</i>
1.Sweden (45.3)	1. Ukraine (43)	1. Lithuania (68)	1. Sweden (80.7)
17. Portugal (21.3)	25. Greece (27)	2. Estonia (67)	26. Slovakia (58.3)
18. Latvia (21.0)	26. Holland (26)	29. Italy(45)	27. Germany (57.7)
19. Serbia (0.556)	27. Serbia (26)	30. Cyprus (45)	28. Serbia (56.0)
20. FYR Macedonia (19.2)	28. Denmark (25)	31. Serbia (43)	29. Greece (54.5)
21.Poland (19.1)	29. Croatia(23)	32. Malta (39)	30. Albania (53.7)
38. Turkey (4.4)	33. Turkey (7)	33. Turkey (31)	40. Turkey (35.4)

By calculating Pearson's coefficients, it is possible to arrive at several conclusions:

Rankings of countries by GEM index values is highly correlated with the rankings by HDI index value, which is indicative of the fact that countries with a high level of human development boast marked and larger gender equality.

A close relation between the level of income (PPP US\$) and the GEM index also indicates that in countries where the standard of living is high, the role of female population in all segments of the social life is larger. This is exemplified by Scandinavian countries that all have high values of the GEM index, but also the standard of living measured with the income of purchasing power parity (PPP US\$). Finally, strong relations between the GEM index and enrollment rate of female population should be noted, which can be a road sign, but also leads to a conclusion that a higher degree of education of male and female gender creates solid basis for development of gender equality.

The low rate of business ownership among women permeates around the world.

Aggregate data from the OECD indicate that female self-employment rates are substantially lower than male rates in almost every reported country with an average ratio of 0.543 (OECD 2002). In the United States, the female business ownership rate is 6.6 percent, which is only 60 percent of the male rate (Fairlie 2006). In general, previous studies on differences in firm performance by gender have revealed that women-owned firms were more likely to close, and had lower levels of sales, profits, and employment (Rosa, Carter and Hamilton 1996; Robb 2002; Robb and Wolken 2002, Kalleberg and Leicht 1991). These studies find that financial capital, education, and work experience are important factors. Another line of research investigates whether women access different business and investment social networks than men, which could affect outcomes (Brush, et al. 2004). See Gatewood, et al. 2003 for a comprehensive review of the literature and Coleman (2001) for a discussion of constraints faced by women-owned firms.

Conclusions

Although gender mainstreaming—the “systematic incorporation of gender issues through all governmental institutions and policies in Serbia”¹—, its impact is difficult to measure. How much must gender-related programs, policies, and projects be gender-related to be considered in furtherance of gender mainstreaming? International organizations have focused more on their internal processes than on their operational outputs regarding gender issues. Indeed, international organizations favored an integrationist approach to gender mainstreaming instead of an “agenda-setting” framework. Their aim was to integrate “women and gender issues into specific policies rather than rethinking the fundamental aims of the organization from a gender perspective.”

The wide diversity of indices and datasets given in the work highlights underlying debate about the essence of gender and gender disparities in Serbia, and focus on issues concerning education, employment, income, and political participation.

According to new measures which have been developed to shift the focus to gender inequality, future studies in Serbia would have to consult them more to point out the level of improvement. This means first, activities of the Organization for Economic Co-operation and Development's (OECD) Gender, Institutions and Development Data Base (GID-DB) which does so by incorporating variables such as norms, laws, and traditions into the quantitative analysis of women's participation in the labor force. The World Economic Forum's Global Gender Gap Report focuses on measuring gaps (instead of mere levels) between men and women, and captures such gaps in outcome variables (instead of in means or input variables).

References

UNDP Report, 2007

National Report on SME Serbia 2006

http://ec.europa.eu/employment_social/gender_equality/gender_mainstreaming/roadmap_en.html

http://ec.europa.eu/employment_social/women_men_stats/index_en.htm

Allen, S. & Truman, C. (1993). Women and men entrepreneurs: Life strategies, business strategies. In S. Allen & C. Truman (Eds.), *Women in business: Perspectives on women entrepreneurs* (pp. 1-13). London: Routledge.

Association of Women in International Trade (WIIT). (1998). *Second annual survey of public opinion on international trade*. Washington, DC: Author.

Babaeva L. & Chirikova, A. (1997). Women in business. *Russian social science review*, 38(3), 81-91.

Moghadam (Ed.), *Democratic reform and the position of women in transitional economies* (pp. 181-196). Oxford: Clarendon Press.

Brush, C. (1998). A resource perspective on women's entrepreneurship: Research, relevance and recognition. *OECD's Women entrepreneurs in small and medium enterprises*, pp. 155-168. Paris: OECD.

Chun, J. (1995, August). Equal access: women business owners find their place in the world. *Entrepreneur* 23, 84-87.

Engel, B. A. (1991). Transformation versus tradition. In B. Clements, B. Engel, & C. Worobec (Eds.), *Russia's women* (pp. 135-147). Berkeley: University of California Press.

Estes, V. (1999, November 18). *Women & business development: promoting economic growth and job creation*. USAID/Europe & Eurasia Bureau: author.

The Different Form of Financing Small and Medium-Sized Enterprises in Bosnia and Herzegovina

Zijad Džafić¹, Adnan Rovčanin², Nermin Klopić³

ABSTRACT – It is historic proved that everything starts with small business and entrepreneurship, therefore, we will pay a lot of attention to small and medium enterprises (SMEs) in this work. Transition process in Bosnia and Herzegovina resulted in forming of significant number of small and medium enterprises (SMEs), which meet numerous limitations in its development. If all entrepreneurship were rich, the need for development in financing would not be such an important factor for newly opened companies and their development. However, this is the real world and newly opened companies (start-up) have to guarantee for their assets in order to have means for production or service, as well as for conquering new markets and development of new production capacities and distributing network. Exterior financing is not only required in the beginning of the operations of an newly opened company, but is also required in the time when development plans cannot be sponsored from inside funds. Stevenson and many other authors suggested that expanding existing financial sources and control of these sources should be done through leasing or renting, and not through owning them. In this work authors is giving that special attention to alternative strategies of entering in SMEs, like: buying of an existing business; buying a franchise; making parts of companies self standing, selling them etc. He then analyses different forms of financing SMEs, like financing through quarantied funds, leasing, factoring, business angels, risk funds etc.

KEY WORDS: entrepreneurship, small and medium enterprises (SMEs), financing of SMEs, limitations in financing

Introduction

Since the moment of independence of Bosnia and Herzegovina development of SMEs was limited by macroeconomic reasons and its specific problems. The most significant problem was financing. Therefore, the main goal of this work is to explore alternative and less known form of financing of SMEs in Bosnia and Herzegovina.

Warranty and investment development funds as a form of financing of SMEs

The main goal of the warranty fund is to improve financing of existing SMEs and giving warranties to newly established SMEs. The maximum of amount of given finance should not be higher than 50% of total value of investment. It is common that state establishes a warranty funds and to capitalizes it in the beginning. The fund should help in minimizing risks in finance SMEs sector through loans, since banks carefully and relatively in small amounts gives to SMEs.

The fund should take a role of warrantor in cases when SMEs have all good performance but not enough assets which could be given as mortgage to the bank. The fund would sign a contract with the bank and take a part of the risk, never the full risk. The amount of guarantee depends on various criteria on which a project presented is valued. For example, if the fund favorites increase of employment,

¹ Zijad Džafić, Faculty of Economics, Tuzla University

² Adnan Rovčanin, Faculty of Economics, Sarajevo University

³ Nermin Klopić, Uprava za indirektono oporezivanje, Tuzla

the criteria for the project are number of new open work places. Of course, The Warranty fund will not take the role of the bank but it will reduce risk to them, considering that large number of small entrepreneurs in the world bankrupt in first two years, and also large number establishes, because it the “nature” of this sector.

It is known that these funds exist in 130 countries world wide. They are present in developed and in countries in transition. They have a significant impact in countries which economy starts with serious structural changes, like in Bosnia and Herzegovina. In most cases payback period is not determinate what makes the main advantage compared to loans. However there are no warranties for charge of outstanding debts for risk investors like in cases of loans. In Croatia there are only few funds of risk capital like Questus Fond, SEAF and Copernicus Adriatic Venture Fond.

The main purpose of investment development funds is to finance large investment programs and projects. In establishment of the fond of this type it is necessary to have not only domestic but also participation of foreign financial and development institutions. It is common in the world to provide funds of at least 100 millions Convertible Marks. The investment would be approved for the period of 10 to 20 years with 50 years of grace period, and the rate should not be higher than LIBOR.

Leasing as form of financing of SMEs

The state should provide conditions for using of new technologies, tools and equipment by cutting the tax on leasing for SMEs. In that way the state would provide to entrepreneurs to use new technologies in which they are not interested to purchase for good and also to purchase that equipment after the termination of the leasing or to renew the contract. That all is achievable without loans.

Experiences of states with oversize increase of economy show that this is possible only with high levels and higher efficiency of investments. If we guide investments for increasing of capital, than investments have multiply meaning for the development⁴:

Investments create production capacities and impact on ability to produce.

The size of investment and technology development are in close connection. Achievements of technology development can be used by the economy that invests because the technology development is a part of investment goods.

The size of investment impact on rate of general mobilization of recourses in countries in transition. Investments increase number of work places and provide mobilization of labor that would otherwise stay unused.

Countries that manage to efficiently invest 30 % or more of GDP, year after year, have better management. In order to achieve 8-10 % growth of GDP yearly the state should realize appx 40% of investment in GDP and reach up efficiency of investment in faster growing countries (China, Korea, etc). To reach up developed countries is possible only with faster grow of GDP per capita in compare with average growth of GDP per capita in developed countries. When we talk about our country we have to underline that the country is faced with many problems: rest behind in education for decade in compare with developed countries which influence the rate of high structural and permanent unemployment, not enough qualified experts, very low technology level in industry, insufficient concurrency of the domestic economy, unfavorable age structure of citizenship and decreasing of its active share. There are 50.000 of registered enterprises⁵. According to David Birch's exploration of demography of enterprises in which he proves that 5% of all enterprises are fast growing – dynamic enterprises, in Bosnia and Herzegovina should be 2.500 fast growing enterprises. But the investigation in the sector of business shows that it would be hard to find only 100 enterprises that fit in the definition of fast growing enterprise: *over one million of euro income, more than 10 employees, exporting company, growth of 20%/year in last three years*. It is obvious that Bosnia and Herzegovina is on the be-

⁴ The rate of investments in GDP has its limits, decreasing of consumption affects negatively on labor. When we achieve rate of investments we can talk only about maximizing of efficiency of investment.

⁵ SME FACTS, News about World Bank group SME initiatives, Vol. 1, No. 13, September, 2004, p.6.

gining of the process of development of dynamic enterprises. These enterprises have almost major role in the growth of GDP and opening new work places, as well as in improvement of technology in industry. Bosnia and Herzegovina lacks investment in human development (education, research, development etc.). Considering that human capital (labor and knowledge) is the most important factor of development it is necessary that the whole macroeconomic environment should be guided on research and encouraging of creativity of human factor⁶.

Financing of SMEs with venture capital

Venture capital funds are used for start up of new enterprises, their development or restructuring if it is estimated that enterprises have better chances to develop and become significant economic factors that create profit⁷. These funds could function on regional and cantonal level. Therefore the goal of venture capital funds in Bosnia and Herzegovina is to finance start-up enterprises and independent stores⁸. The rate of interest has to be favorable not higher than 6%. The maximum size of investment shouldn't be larger than 30% of full value. In the world 40% of these finances are provided by retirement funds, 15% by private businesses, 15% by insurance companies, 6% by banks and also by different financial funds that deal only with this type of investment and some very large companies. Investments are mainly given to fast growing braches, and they chose 2 to 5 projects among 100 and invest in them, which means that investors are highly selective⁹. The main reason for that high selectivity is weak management according to research in the world. Companies with venture capital in Europe formed an association of venture capital EUCA. USAID established Warranty fund for support of SMEs in Bosnia and Herzegovina and it has 31 million of EURO. This fund can be used only by certain SMEs working in wood processing, food production and processing and tourism. Funds are placed through banks Privredna, Zagrebačka and Volksbank. SMEs that received support from Fund can take loans in these banks with 50% smaller mortgage in compare with common request for mortgage. Establishment of the Fund is shown as necessary and it funds are use in large amounts. So far, there are no negative examples of usage of these funds.

In their research authors: Amit, Brander and Zott, states the fact that it is relatively less known about industrial venture capital and they connect this problem with¹⁰:

There is no organized secondary exchange of investment of venture capital that would provide short review of information.

Direct estimation of portfolio of company's success is hard. Income taxes are good parameters.

Theoretical research with clearly stated assumptions and formal decisions are relatively weak.

Informative asymmetries can offer conclusion to the theoretic approach to financing by venture capital.

The Bank of England gives the definition of this kind of financing:¹¹ "...activities by which investor support entrepreneurs and their ideas in financial and business skills in order to achieve profit in long terms".

⁶ Final Raport of the Expert Group: Best Procedure, Project on Education and Training for Entrepreneurship, Novembar, 2003., str. 2.

⁷ The first investments of venture capital in developed countries were in 1950's and 1960's, and individuals had the main role. Today, company as a bearer of venture capital can be organized as d.o.o., d.d, etc. Large companies form funds for hiring of innovators and purchasing of innovations. Individuals now act as business angels.

⁸ Džafić, Z. Op. cit. str. 297.

⁹ Bovaird, C.: Introduction to Venture Capital Finance, Pitman, 1990.

¹⁰ Amit, R., Brander, J., i Zott, C.: Venture Capital Financing and Entrepreneurship: Theory, Empirical Evidence and Research, Washington, 2001., p. 129

¹¹ The Bank of England Quarterly Bulletin of 1984

General characteristics of this source of financing are as follows:¹²

- Finance original stock
- Have need for personal engagement of management
- Expects return of investment through capital income
- Patience.

Venture financing is part of any business either in start-up venture capital or in phase of development. Although research is well developed in sector of debt finances and there are quite a lot of information, there is insufficient information in sector of venture finances. There are even less information about informal market venture capital. European Venture Capital Association defines financing of idea as initial financing of product development or as a capital that is used by businessman as a proof of project profitability and quality enough for necessary initial capital for the next stage.¹³

Financing of SMEs by business angels

Business angels practice in highly developed countries is: in financing of SMEs participate rich individuals with higher level of education (mainly management, rarely in technical sciences) with similar goals and similar practice as venture capitalists in business that prefers individually than in companies. They call themselves “angels” because they are not interested in controlling of business that invest in, but more to invest and to act as advisors¹⁴. Business angels are often connected with the company staff personally (cousins, friend etc.). However, our environment is very risky and we cannot expect arrival of foreign business angels. Nevertheless, the current situation still improves which is indicated by the fact that World Bank gave to Bosnia and Herzegovina new rang since 1st of July 2004. Since this date Bosnia and Herzegovina is not considered as post-war country but as regular country in transition. The new status is proof of development achieved since 1996¹⁵. Business angels invest their own money compare to venture capital funds that invest someone’s’ else money. Business angels participate in the development of the company not only financial but also with their experience and knowledge. They do not have procedures and criteria as banks and venture capital funds. The decision about investment they make based on their own knowledge about market. Anyway it is hard to get them because they do not expose themselves publicly. Market of business angels is relatively invisible compared with other parts of venture capital market and it is mainly made of ex very successful businessmen, often millioners. It is estimated that 125 000 business angels are active in Europe, and number of potential business angels is around one million. It is also estimated that investments capital of business angels in Europe is between 10 and 20 billions of euro. Research shows that business angels are significant source of capital in most of European countries and because of that the network of business angels is created and developed (MPA). This network mobilizes pooling of capital that was invisible in the market before. That is result of stimulation of supply and demand of venture capital because the network getter investors and businessmen and make communication channels among business angels. Since 2001 there is one MPA in Slovenia, but there are 101 network in Great Britain, 48 in France, 40 in Germany, 28 in Sweden, 12 in Italy, 7 in Belgium, 2 in Czech Republic, 1 in Austria, etc¹⁶. Business angels and their networks were until recently relatively unknown in Europe although they were very important part of innovative system in USA. Development of “business angels” networks in Europe is presented in the following table:

¹² Bovaird, C.: "Venture Capital Finance", Pitman Publishing, London, 1990., str. 4.

¹³ P.De Vree, Proceedings of the EVCI No. 1, 1988.

¹⁴ The term „business angels“ was used in 18th century for private investors in theaters in Broadway that provided money, knowledge and connections for play in order to help it to succeed and share the profit at the end. <http://www.businessangels.com.su/about.html> (2004.)

¹⁵ Reinerman, D. – Director of World bank office in BiH, Oslobodenje, 1. 07. 2004., str. 9.

¹⁶ EBAN – European Business Angels Network, <http://www.eban.org/overview.htm>

Table 1. Business angels networks in Europe

Country	1999	2000	2001	2002	2003	2004
Austria	1	1	1	1	1	1
Belgium	4	6	7	7	7	5
Czech Republic	0	0	0	1	1	2
France	4	13	32	48	48	40
Germany	1	43	36	40	40	40
Greece	0	0	0	0	0	1
Hungary	0	0	0	0	0	1
Ireland	1	1	1	1	3	1
Island	0	1	1	1	2	2
Italy	2	5	12	11	10	12
Luxembourg	0	0	0	0	0	1
Norvegia	0	0	1	1	3	7
Poland	0	0	0	0	0	1
Portugal	0	0	1	1	1	1
Slovenia	0	0	1	1	1	1
Spain	0	1	1	2	3	11
Sweden	1	2	2	2	9	29
Switzerland	1	3	3	2	3	7
Netherlands	1	1	2	2	3	3
UK	49	52	48	48	51	101
Total	66	132	155	177	197	277

Source: EBEAN – European Business Angels Network,
www.ebean.org/doc/Statistic_Compendum_2004.doc

Based on presented facts we can see that the number of networks increases with each year, and that among countries of ex-Yugoslavia only in Slovenia exist one network of business angels that call themselves "Klub poslovnih angelov" (The Club of Business Angels). They work in cooperation with Slovenian Center for support of small enterprises (PCMG – Pospeševalni center za malo gospodarstvo), and it is established in 2001. The network is established by the magazine "Podjetni" (Businessman) and the Center for development of small enterprises with support of Slovenian government that provided part of finances from the state's funds. Besides that the Government stimulates starting of new projects by tax measures. It was identified 20 new business angels till the end of 2002 what represents a great success. There are around 120 business angels in the network today. Each angel is able and willing to invest certain amount of capital between 15.000 euro and 200.000 euro¹⁷. A payback period, the rate of interest and grace period depend on amount and purpose of the loan. Conditions for fulfilling of criteria would be seen from the Business plans that should be provided by enterprises interested in loan.

Factoring as a form of financing of SMEs

The definition of factoring is different from a book to book. The reason is in the fact that factoring is generic product that connects set of different services. Various authors give various importances to some services. Besides that, factoring changes in time and adapts to current business environment. As we stated before, factoring is banks (financial) deal, in which dept demand of the client from the third person, based on the factoring contract, transfers to specialized financial institution, that usually but not unconditionally takes risk of recovering of payment. Sometimes the factor does different other jobs for the client as accounting, sending invoices etc.

¹⁷ Gavran, A., Gregov, Z.: Mogućnosti osnivanja mreže poslovnih anđela za mala i srednja poduzeća u Hrvatskoj, Zbornik radova sa: International Conference: Entrepreneurship and Macroeconomic Management, 28-30 april, Pula, 2005., str. 326-338.

From these definitions we can see that factor is paid for his services, and that represents his provision which is determined in accordance with the value of certain service. It is used for purchasing of open short-term debt demands that came of current sales of goods and services (payback period for these demands factoring houses tolerate depends on their business policies).

Potočnik in his work says: „Factoring is defined quite different. Some people consider it as purchase of debt demands; others consider it as accounting of a person in debt with or without collect of the bill. In both cases it is underlined certain services that determinate factoring the most detailed. The essence of factoring is that the seller transfer to factor all his demands that really exists and will come to payment in the future.”¹⁸ Factoring contract is legal business which obligation should be fulfilled in the future, based on the fact that client in a period of contract transfers on factor larger number of certain demands in frame of so-called global or partial cession, so that factoring task can flow easily. It is necessary that client transfer certain minimal amount of demands to factor, and give to the factor possibility to estimate time and provision rationally. For example, German factoring house Procedo demands from its client's minimal yearly flow of approximately 2.500 euro to 5.000 euro, but French factoring house SOGE demands yearly flow of 200.000 USD. In the factoring contract a client has to obligate to the factoring house to transfer his demands. Based on previous forms of factoring we have seen that there are many differences there and there are no needs to contemplate them further.

Conclusion

Most of presented forms of financing of small business in Bosnia and Herzegovina are not affirmed enough. Implementation of modern methods of financing of SME sector should be speed up in order to use all possible sources of financing of development of SMEs and overall economy in Bosnia and Herzegovina. Unfortunately, businessmen in Bosnia and Herzegovina start their business without any support from the state or economy chambers and associations. There is only 2% of state budget provided for support of SMEs. Only in Federation of Bosnia and Herzegovina there are about 48.000 of crafts (Dnevni Avaz, 27th of July 2007). Authorities believe that it should support traditional production because it can give significant contribution to the development of tourism. It is similar situation in the Republic of Srpska, and the larger number of small enterprises is in the sector of trading. In the Republic of Srpska the Strategy for development of SMEs for the period 2006-2010 is accepted. It foresees fewer taxes for SMEs, improvement of business infrastructure, establishing of new associations and changes in business legislation. The special task for the Republic agency for development of SMEs in RS will be equal economic development of all regions of RS, based on example of Slovenia. In all these activities local community have to be involved actively.

References

1. Bovaird, C., (1990), Introduction to Venture Capital Finance, Pitman.
2. Burges R., (1992), Corporate Finance Law, Sweet and Maxwell, London.
3. Džafić, Z., (2007) Iskustva start-up centara u funkciji razvoja malih i srednjih preduzeća u Bosni i Hercegovini, Lider, Časopis za teoriju i praksu menadžmenta, preduzetništva i liderstva, Banja Luka, broj 1-2.
4. Džafić, Z., Rovčanin, A., Bejić, J.(2008), Governmental policies for development of Small and Medium Enterprises (SMEs) in Bosnia and Herzegovina and other countries in transition, International Conferences for Entrepreneurship, Innovation and Regional Development, Skopje & Ohrid, Macedonia, 8th-11th May.
5. EBAN – European Business Angels Network, (2003), <http://www.eban.org/overview.htm>
Final Report of the Expert Group: Best Procedure, Project on Education and Training for Entrepreneurship, Novembar,

¹⁸ Potočnik V., Komercijalno poslovanje z osnovami trženja, Ekonomski fakultet u Ljubljati, Ljubljana, 1992, str. 296

6. Gavran, A., Gregov, Z., (2005), Mogućnosti osnivanja mreže poslovnih anđela za mala i srednja poduzeća u Hrvatskoj, Zbornik radova sa: International Conference: Entrepreneurship and Macroeconomic Management, 28-30 april, Pula.
7. Potočnik V., (1992), Komercijalno poslovanje z osnovami trženja, Ekonomski fakultet u Ljubljati, Ljubljana, 1992,
9. Rovčanin, A., Džafić, Z., (2004), Franšizing – partnerstvo uz sinergetske efekte, Zbornik radova Ekonomskog fakulteta u Sarajevu, Sarajevo, broj 24.
10. SME FACTS, (2004), News about World Bank group SME initiatives, Vol. 1, No. 13, September.
12. www.promaturo.hr
13. www.vecernji-list.hr/poslovn/2003/03/26/Pages/fransizi.html

The Role of Small and Medium Enterprises for Economy Development

Miroslav Gveroski¹, Aneta Risteska²

ABSTRACT – Considering the fact that many of the countries are passing through transitional period the leaders of development should be small and medium enterprises. This paper will include the meaning and the role of the small and medium enterprises in processes of overcoming the causes of transition and recovering the competition, entrepreneurship and increasing the economy efficiency. In the end is the conclusion made to get information for perspectives and odds of founding the small and medium enterprises.

KEY WORDS: the small and medium enterprise, transition, economy development

Introduction

The significant appearance in period of 70th years of 20 centuries was decreasing the rate of GDP, increasing the unemployment, decreasing the investment activities est. The only way for enlarging the economics activities is bigger liberty on the market and decreasing the role of the state in the economy life. That is important for convalescence the competition, entrepreneurship and economy efficiently in the national economy. It helps for entrepreneurship's reconstitution, manifested by establishing the small and medium enterprises which lean on creativity, entrepreneurship spirit and individual innovation. On this way the economy structure have had more flexibility and the probabilities for productivity – technically reconstructions. The number of SMEs is increasing permanently in developed countries but also in developing countries. The growing of SMEs depends on character of social – economical development. The modification in the system is causing the change in position and the meaning on these enterprises.

Small and medium enterprises – definition and reasons for growth

SMEs are usually defined as independent firms which employ at the least 250 people³. There are a lot of definitions and criteria for dividing the SMEs. For example, in France German and Italy the criterion is 50 employees, in Great Britain – 200, Holland – 100 employees and in Belgium and Denmark- 70 employees.⁴

Beside this criteria in the same function are using and the other criteria's such as volume of production, the assets of the company, the participation in capital property est. In most economies, smaller enterprises are much greater in number than big enterprises. In the EU, SMEs comprise approximately 99% of all firms and employ between them about 65 million people. In many sectors, SMEs are also responsible for setting up innovation and competition. Globally SMEs account for 99% of business numbers and 40% to 50% of GDP. In India, the Micro and Small Enterprises (MSEs) sector plays the main role in the overall industrial economy of the country. It is estimated that in terms of value, the sector accounts for about 39 per cent of the manufacturing output and around 33 per cent of the total

¹ Miroslav Gveroski, PhD, Faculty of Economics – Prilep, Republic of Macedonia, mgveroski@yahoo.com

² Aneta Risteska, MSc, Faculty of Economics – Prilep, Republic of Macedonia, a_risteska@yahoo.com

³ Taki Fiti i Verica Haxi-Vasileva Markovska, (1994) "Pretpriemnistvo i pretpriemnicki menaxment", Ekonomski fakultet – Skopje, p. 60

⁴ Taki Fiti, Verica Haxi-Vasileva Markovska, Milford Bejtmen,(2007), Ekonomski fakultet, Skopje;

export of the country. Further, in recent years the MSE sector has consistently registered higher growth rate compared to the overall industrial sector. The major advantage of the sector is its employment potential at low capital cost. As per available statistics, this sector employs an estimated 31 million persons spread over 12.8 million enterprises and the labour intensity in the MSE sector is estimated to be almost 4 times higher than the large enterprises.⁵

In Republic of Macedonia by the Trade Companies Law the enterprises are divided on small and medium enterprises by using three criteria⁶: number of employees, annual turnover and value of assets.

Table 1.

Criteria's	Dimension of enterprises		
	small	medium	big
average of number of the employees	to 50 employees	to 250 employees	more than 250 employees
average incomes	< of 8.000 wages	< of 40.000 wages	> of 40.000 wages
average of assets	< of 6.000 wages	< of 30.000 wages	> of 30.000 wages

In developed countries the SMEs are attending in many sectors and they produce different goods and services. In traditional sector (handicraft, trade, catering industry) family businesses are dominate and they usually produce goods and services for supplying the local needs and there are low innovative. In manufacturing sector SMEs are usually establishing and working for big corporations. They produce raw materials to decrease the manufacturing costs of big enterprises. In utility sector the small enterprises are concentrating in technically intensive sectors and biotechnology.

Today almost 30-60% of SMEs in countries of OECD are considered like innovative firms.

Considering the growth of SMEs participation in the economy activities in the country, usually is appointing the question: What are the reasons and advantages of SMEs and why they are so important for country development?

SMEs are expected to boost efficiency and growth and lead to economic development because:

- SMEs constitute the most dynamic segment of many transition and developing economies
- engine of job creation
- boost the innovations and entrepreneurship
- competition and flexibility
- important role in promoting growth and development

The other advantages of SMEs establishment are:

- direct control of the costs;
- simplification adjustment of inputs with the economical performances of the production process;
- easier and cheaper function controlling;
- more liberal and free laws for entering a foreign capital;
- faster noticing of the direction for more successful investments, innovations and market participation;
- team working;
- bigger responsibilities in work organization, est.

Financing the SMEs is very important process considering the advantages of SMEs existing. That's why funding small and medium-sized enterprises is a major function of the general business finance market – in which capital for firms of types is supplied, acquired, and costed/priced. Capital is supplied through the business finance market in the form of e.g.:

- bank loans and overdrafts;
- leasing and hire-purchase arrangements;

⁵ www.wikipedia.com

⁶ Trade Companies Law, Official Gazzete of Republic of Macedonia, 28 / 96.

equity/corporate bond issues;
 venture capital or private equity; and
 asset-based finance such as factoring and invoice discounting.⁷

However, it should be noted that not all business finance is external/commercially supplied through the market. Much finance is internally generated by businesses out of their own earnings and/or supplied informally as trade credit (i.e., delays in paying for purchases of goods and services).

Small and medium enterprises in Republic of Macedonia

In the beginning of transition period there was no clear definition for SMEs. The classification was made just by one criteria – number of employees and so in the SMEs were classified those enterprises up to 250 employees. By the beginning of 2004 with the enforcement of Trade Companies Law, in which EU criteria were accepted and classification of enterprises is done not only by number of employees but also according to annual turnover and value of assets. The number of SMEs in Republic of Macedonia is increasing and that could be confirmed by the follow table:

Table 2. Number of active enterprises in 2005⁸

Towns in Macedonia	Small	Medium
Berovo	306	3
Bitola	3035	27
Makedonski brod	146	1
Valandovo	195	3
Vinica	322	4
Gevgelija	885	13
Gostivar	1342	7
Debar	132	3
Delcevo	339	4
Demir Hisar	145	2
Kavadarci	1124	13
Kicevo	887	5
Kocani	950	4
Kratovo	144	5
Kriva Palanka	225	2
Kumanovo	2130	22
Krusevo	182	1
Negotivo	488	6
Ohrid	19071	38
Prilep	2067	8
Probistip	159	0
Radovis	639	4
Resen	342	5
Sveti Nikole	329	7
Strumica	2020	20
Struga	1501	7
Tetovo	2144	21
Veles	771	12
Stip	2267	21
Skopje	16263	195
Total	43 877	463

⁷ www.wikipedia.com

⁸ www.crm.org.mk

According to property SMEs in Macedonia are classified on public, mixture, private, enterprises with foreign capital, cooperative. In 2005 most of MSEs were in private property and that can be confirmed in following table.

Table 3. Type of enterprises

Type of property	Small enterprises	Medium enterprises
Mixture	482	162
Public	210	46
Private	43073	254
foreign capital	0	0
cooperative	112	1
Total	43 877	463

SMEs have a huge role in international trade of Republic of Macedonia. But the data are not pleased, still there is a trade shortage and the main reason for low export is modest quality of Macedonian products. More of the products don't accomplish the standard of quality like HACCAP, ISO est. The other problems are that the SMEs are not enough informed about the advantages of participation on foreign markets, availability on new markets, possible barriers est.

Table 4. Countries in which Macedonia enterprises export in ⁹

Country	Export in thousand dollars in 2005
German	364 015
Serbian and Montenegro	459 544
Greece	312 931
Italy	196 606
Russia	21 419
Bulgaria	76 097
Sloven	31 807
Turkey	46 308
Croatia	81 054
France	19 914
USA	44 276
Netherlands	44 579
Great Britain	42 929
China	9 925
Austria	9 001
Ukraine	2043
Swiss	7518
Bosnia-Herzegovina	50 456
Poland	94 642
Britannia Islands	83 581
Total	1 998 645

In the period of 1990 -1993 were established 50 000 SMEs, in 1996 they covered 23% of the existing employment and participate with 34% in creating the national income, and with 40% in creating the GDP. In 2004 were established 49 123 small and 429 medium enterprises, and they covered 97,3 % of total number of active enterprises.

The economic power on the sector of SMEs can be measured by three indicators: participation of SMEs in creating employment, participation in creating added value and participation in GDP. In 2004 the number of employees in SMEs was 201 750 or 80,56% of total number of employees. The indica-

⁹ www.apprm.gov.mk

tor of added values shows that in 2003 SMEs have been creating 69% of added value. In 2003 the GDP of SMEs was 284 285 million denars actually 65,9% of total GDP.¹⁰

This data show the important role of SMEs for economical activities in the national economy that is why their number is permanently increasing.

Considering those facts SMEs take the main part in creating the GDP in the national economy and they boost the economics activities which contribute for increasing the employment and investment activities.

There are many resources for financing the SMEs in Republic of Macedonia but there is mainly need for.

- medium- and long term finance, especially for equipment purchase;
- working capital credit lines, including seasonal and sector specific;
- more complex products such as factoring, leasing and professional and affordable payment services;
- export financing, including reverse factoring, pre-order purchase finance.

And alternative financial instruments for small and medium sized companies are:

- real estate leasing
- long-term equipment purchase
- mortgages
- mezzanine finance
- private equity investment.

Considering the advantages of establishing and functioning the small and medium enterprises a lot of reforms should be taken to improve the business climate for establishing the new SMEs:

- financial support
- stimulative tax policy
- including the SMEs in the production processes
- consultant services to SMEs in area of low
- developing the management
- finishing the processes of privatizations and reconstruction of the economy
- establishing the business incubators
- forming the local agency for support the entrepreneurship.

In Macedonia are taken a lot of reforms for increasing the number of SMEs but the important thinks are enforcing the program for developing the entrepreneurship, competition and innovation, establishing the Agency for entrepreneurship support, the national strategy for developing the small and medium enterprises 2002-2012 est. These improve that the main aim of the country is developing entrepreneur spirit in way of national economy development and growth. The main aims of the strategy are:

- creating institutional infrastructure for promoting the entrepreneurship and competition;
- improving the business climate and the level of economic liberty;
- financial support for SMEs;
- enforcement the program for creating the competition.

Conclusion

The small and medium enterprises are the main factor for national economy development especially in developing countries where the processes of transitions are more and more frequent. The basic advantage of SMEs is the adaptation and the probability for transfer in the other sectors which is very important for realizing gain now a day in terms of quickly changes. The other advantage of SMEs is that the needed funding capital is smaller than the funding capital for the others enterprises, so many people

¹⁰ Taki Fiti, Verica Haxi-Vasileva Markovska, Milford Bejtmen, (2007), Ekonomski fakultet, Skopje, p.230-232;

can afford starting new business. SMEs participate in creating the GDP, they have an influence at the rate of employment, actually they engine job creation and they help for improving the life standard of the people, so they can have a better life in the national economy. Considering all this advantages of SMEs founding every national economy should take measures in way to improve the business climate for SMEs acting and to increase their number.

References

Taki Fiti i Verica Haxi-Vasileva Markovska, (1994), "Pretpriemnistvo i pretpriemnicki menaxment", Ekonomski fakultet – Skopje, p.60;

Taki Fiti , Verica Haxi-Vasileva Markovska, Milford Bejtmn, (2007) Ekonomski fakultet, Skopje; Trade Companies Law, Official Gazette of Republic of Macedonia, 28 / 96;

www.apprm.gov.mk/

www.crm.org.mk

www.finance.gov.mk

www.stat.gov.mk

www.wikipedia.com.

Using Free Software Solutions to Improve Micro – and Small Business Bottom-line

Aida Habul¹, Zoltan Milić²

ABSTRACT – *Until few years ago the software world was very prohibitive place. Large corporations charged a lot of money for procurement and use of their software. At the same time, free tools did not provide comparable capabilities while the open-source solutions were too complex for average user and were viewed as the domain of hard core geeks. However, this is no longer the case. The main benefits offered by open source are the lower equipment investment needs, lower cost of entry and lower total cost of ownership, rapid implementation, and no cost for software functionality. It is no longer necessary to pay premium for being able to keep track of what exactly goes on in a business. Therefore, small businesses should be encouraged to explore these options, preferably by concentrated efforts of governments to encourage use of tools of electronic age.*

KEY WORDS: *small and medium enterprise, open-source software, utilization*

Introduction

Small and medium businesses (SMEs) are a subject of numerous debates in both developed world and in the lesser – developed countries. Focus of many development agencies is placed on this category of businesses. After all, SMEs are significant part of the economy. In the U.S. alone, about 95% of all companies fall in this category and similarly high percent of SME participation can be found in other parts of the world.

Yet, the general consensus between the international institutions, governments, politicians, economists and small producer advocacy groups, emerging over the last decade, is that SMEs face numerous difficulties. Consequently, we had to ask ourselves a very important question- what exactly are those difficulties.

Difficulties SMEs are facing

Fundamental difficulties for the SMEs are caused by influence of two factors which often work hand-in-hand to conspire against the entrepreneur: the government of the country in which the SME operates being visible factor and the second being inconspicuous, well-disguised and rarely considered-details. Let's discuss the manifestations of each first.

Influence of a government on daily lives of each of us is undeniable. For bad or for worse, the government affects our lives so much that sometimes, whether the government is a “government of the people, for the people and by the people,” or a ruthless dictatorship, one feels like a subject of a feudal lord. After all, governments collect taxes, control the army and the police, pass laws, print money, engage into international agreements and engage in armed conflicts with other nations. Indeed, the theory states that those features of the government are the reason why we pay for it- to provide for common goods, specifically safety and security, which could not be efficiently provided by the private sector.

¹ Aida Habul, PhD, professor, Sarajevo Faculty of Economics

² Zoltan Milić, MPA, consultant, Chemonics International Inc.- USAID Streamlining Permits and Inspection Regimes Activity (SPIRA) project

On the other hand, in great number of countries of the world, and especially in the region of former Yugoslavia, governments are the single, greatest enemy of entrepreneurship. The World Bank's Doing Business report consistently ranks Croatia, Bosnia and Herzegovina, Serbia, Montenegro, and Macedonia in the lower half, or even lower third of all surveyed countries when it comes to ease of doing business. Indicators used by the World Bank are certainly not perfect, but even so, these are the best measure of the burden placed on small businesses by their governments. How is that burden manifested?

Government-imposed burdens

Simple answer is by regulation. Imposing new regulation automatically creates new sets of regulatory requirements that one has to comply with. Any change in the tax code (for instance) creates new and frequently complex, procedure to go through to comply with the law or a requirement to perform certain action far more frequently than what was the case in the past.

Now, the approval of the comprehensive piece of legislation may impose new requirements which require some, but not major adjustments. By far the worst-case scenario and common occurrence in Balkans is the adoption of the legislation which requires compliance with ill-defined or loosely defined set of requirements. Typically, the legislation changes relatively frequently and the new vague requirements are introduced, thus causing more difficulties. This vicious circle repeats itself, and businesses lose money chasing their own tail to comply with requirements which are interpreted differently by various governmental institutions.

The best example of such legislation which creates undue burden on citizens is the relatively recent state-issued identity card requirement in Bosnia and Herzegovina. It was mandated that all citizens should change old ID cards. All adult citizen data would be maintained in central database, which will enable easier information sharing between governments and governmental agencies, thus making procedures easier for citizens. However, an address in the ID card is apparently extremely important. Without an address, no official business can be concluded. Yet, the government chose to omit this important piece of data from the new ID card, later mandating requirement for any citizen requiring some official document or action to possess a piece of paper from the authorities containing- you guessed it- his or her address (which is in official records, thus contained in the central database)! Hence, the ID card- which, by-the-by contains individual's unique ID number, photo and its own serial number already- serves no other purpose but to verify to police, bank clerks or to cashiers (if you pay by credit card) the fact that you are indeed you. On the other hand, if you want the loan from the bank (which had been satisfied by the ID card as a proof of the fact that you are who you say you are), your loan application will not be processed until you produce a document by which a government certifies that you live in certain street, while that document by itself does not prove that you are who you say you are. Quite a conundrum!

If previous example was comical, the next is not. Recent case from Sarajevo proves the destructive effect of the government on business. A private taxi company (Company A) decided to lower its fares. Another taxi company (Company B) files a complaint with the Cantonal Ministry of Transportation claiming that Company A cannot "unilaterally decide to lower taxi fares" as this would "have an adverse effect on business bottom-line" of Company B. Hence, Company B files complaint to the government that Company A does not want to engage in price-fixing. Before you ask, collusion and even intent to collude in order to engage in price-fixing scheme are specifically prohibited by the law.

You will be glad to learn that the Ministry stopped Company A from lowering their price. Hence, the government sent a signal to "free market enterprises" that prices in "free" market can be determined not by forces of supply and demand but rather by tacit agreement of market actors as to what the appropriate price should be.

So, the research, empirical evidence and plain common sense indicate that, at least in this part of the world, governments are a part of the problem; rarely do governments act as agents of solution. What about second problem- details?

Problematic details

English proverb states that “the devil is in the details” and we could not agree more. After all, what is a true major difference between small and large business? Well, the difference is the scale (and of course, but to a lesser degree tax status and applicable tax breaks). Fundamentally, small business has the same problems as the big business: supply chain management, inventory management, managing payables and receivables, reducing costs and overhead, increasing turnover and profit, managing personnel, marketing, obtaining financing, maintaining liquidity, and handling a problem, common for this region- enforcing contractual obligations.

This is where size matters- big is better. Big company has an ability (assuming adequate human resources management) to dip into own skills-pool and have skilled and experienced personnel dedicated to a particular specialty area, i.e. supply-chain integration. Alternatively, big corporation can dedicate financial resources to hiring consultants to find solutions to the problem, if the skills of staff available are not deemed adequate for the task.

Small guys do not have that luxury. An entrepreneur is expected to do all of those things and to do them well enough to keep a business afloat, at the very least. The statistics is ruthless. More than 90% of small businesses do not live to see another year while those that live past the 5th year of operation are far and few between.

Therefore, an entrepreneur is expected to be know-it-all- a manager, an operation specialist, marketing expert, forceful litigator. Generally, he or she is expected to be a jack of all trades to some extent, to be a versatile operator, flexible, pro-active and knowledgeable. Yet, how many people do you know that fit this description? We all know some good entrepreneurs. Some are good in marketing or obtaining financing but are lousy managers. Some know at all time what they have in stock, but have no idea who owes them money for more than 90 days.

Governmental IT initiatives to help SMEs

So, where do information technologies (IT) fit in this context? We believe that description of some issues that an entrepreneur faces is sufficient to realize those individuals and businesses need assistance in market-place survival. Information technologies can play that pivotal role. Unfortunately, in former-Yugoslavia region, IT is under-utilized or poorly-utilized at best.

IT can assist both the governments and the entrepreneurs in crucial domain of information availability and transparency. There are very few examples of regulation and regulatory requirements being available in systematic manner over the internet. There are some sporadic efforts, of which some represent great “fist steps” while the others fall short of their promised benefits.

For instance, some ministries of various regional governments have the regulation (laws mostly, but rarely important bylaws) available on their websites. This is an example of sporadic efforts. Existence of such data is usually so poorly publicized that only an internet-savvy entrepreneur may find a legislation that affects his or her business. Three major initiatives in this domain would contribute to greater awareness of the regulatory requirements. First initiative should be elimination of the “legislative information monopoly” by Official Gazettes.

Historically, “Official Gazette” was the repository of legislative information. The monopoly on legislative information persists even today. Gazettes are available electronically and via internet but one must pay to obtain access. Additionally, each piece of legislation contains a clause that, for instance, “the law is effective 30 days after publication in Official Gazette.” A diligent reader must have already asked himself, how is it possible for any publisher to charge for access to public domain information? Indeed, the legislation of a country is not subject to intellectual property laws; it is information for the public, not proprietary information to be shielded from the eyes of the world. We researched this issue extensively, but could not find reasons which could justify existence of this information monopoly. Ignorance of the law does not excuse one to be prosecuted under the law, yet how can one be called ignorant when access to the law is restricted? We could accept that Official Gazettes charge for print

editions on grounds of tangible costs involved in reproduction of information, but electronic, online access should be free-of-charge. In that case, no matter how frequently the regulation changes, entrepreneurs (and the public) can stay updated if they choose so.

One nice example of information availability regionally is the Registry of Formalities and Inspection-Related Measures and Registry of Business Permits³, both freely available online and maintained by the Government of Republika Srpska in BiH. An entrepreneur can search these online databases to be informed not only what permits he or she needs to open a certain business, but find out the legal basis for the permit, what documents are needed, who to call if there are any questions, what is the fee etc. Moreover, he or she can find out what kind of inspection checks and by which inspection branch can be performed in his company. So, for instance, if one opens a business in tourism (i.e. motel) in Republika Srpska, an entrepreneur can be potentially checked on 33 various topics by 5 different inspection branches.

Secondly, it would be wrong to assume that all entrepreneurs have a desire, need or means to access the internet. Yet, majority of businesses use computers today. Governments could engage in low-cost effort of providing entrepreneurs, at the point of registration, a CD with relevant regulation, bylaws, templates of key documents (i.e. invoice, required company's rulebooks, contracts etc.), tax forms, basic spreadsheets (i.e. employee salary and contributions, key financial statements etc.), Open Office installation package, set of forms (insurance forms, loan application forms, etc.) which would save an entrepreneur's time and money for research and obtaining these documents.

Third important initiative would be a launch of concentrated effort to provide affordable internet access to population. Sadly, telecoms and private providers are slow to capitalize on the market potential. It is true that it is relatively easy to get internet access today, but the pricing versus perceived benefits are still prohibitive for vast majority of people. Education component notwithstanding, this initiative would have more profound effects on computer literacy and innovation than any other. One great example is offered on the local level in BiH, where the city of Tuzla's government engaged in the conscious effort to provide free Wi-Fi access to the entire city. Currently, the center (downtown) is covered with Wi-Fi with plans to expand the coverage. Unfortunately, these examples are rare, as local communities chronically suffer from lack of funds, vision or interest to provide for the benefit of its citizens. Needless to say, affordable internet access would enable small businesses to explore new and innovative business models for their benefit.

Open-source for SMEs

How can a small business improve using IT tools? Management of detailed information and the lack of knowledge in (relatively speaking) esoteric IT aspects, such as database modeling, object-oriented modeling, VB programming etc. precipitates application of user-friendly packages. On that front, established manufacturers (i.e. Microsoft, SAP) offer numerous small business solutions. Yet, even those solutions may be price-prohibitive for some businesses- for example, our local grocery.

The most time-consuming part of such business is certainly managing inventories. What was received, what was the date of expiration, shelf life, discounts on certain items in stock, what is the stock-rotation, what is profitable to purchase and what not? Depending on the size of the store, to keep track of this information may be daunting. What is the alternative to paper-tracking and brand-name programs?

There are numerous free or low-cost open-source solutions. Given the general low-level of computer knowledge, the most preferred option would be internet-based ERP solutions. Of course, an entrepreneur would most likely use only certain modules. Yet, the most convenient modules would certainly be tracking of accounts receivables and accounts payable, invoicing, purchase order generation and (for some businesses) already mentioned- inventory management.

³ Established with assistance of the USAID SPIRA project and the World Bank/FIAS.

The internet-based ERP solutions, of which majority are subscription-based, where an annual fee ranges from 25 to 200 USD eliminates numerous problems for small business. First major problem is an equipment investment. The required tools for this scenario are a computer (and today even an iPhone can do the trick) and access to internet. There is no software to purchase or install, data are not saved on the local machine, there's no need for expensive servers. Hence, significant investment in equipment is avoided.

Since the application is maintained by a company that provides a solution, small business does not need an administrator or a specialist to maintain the system. Back-up and recovery, a huge and often neglected "elephant in the room," even by major corporations, is pretty much automatically taken care of. No matter what happens locally- earthquake, fire, flood or Biblical plague- data are saved in some other location on dedicated servers. These providers, out of the justified fear of costly litigations, usually have redundant servers in different locations or they backup all data in data warehouses anyway. Some of these free (mostly limited) applications or low-cost applications allow the user to have an application on local machine, and to save data locally, and to upload data once connected to internet automatically or manually.

Enterprise resource management (ERP) and customer relationship management (CRM) are software categories that you usually expect to be of interest only to large companies, but even small businesses can benefit from automated management of their customers and supplies. Compiere⁴ markets an open-source ERP and CRM package that has gained a respectable following among small-business owners as well as enterprises. The program offers modules for accounting, order entry, customer management, sales-force automation, manufacturing, materials tracking, and more. The Community Edition is fully open-source and available as a free download, so an entrepreneur who requires these capabilities may consider this solution.

What these internet-based solutions offer to entrepreneur are the lower cost of entry and lower total cost of ownership, rapid implementation, rapid transmission of information across organizational lines and locations, accessibility - one can access web-based platform from anywhere where Internet access is available- eliminate requirement for deployment of backend systems while avoiding investing in costly hardware server infrastructure.

Yet, this represents a major business decision so an entrepreneur must carefully consider all pros and cons. The two major questions to be asked are "Do I really need all this?" and "Is my business that complex?" If the answer to these questions is negative, well, one should look for less complexity.

What about those less demanding users? As we said before, we cannot assume that majority of entrepreneurs would be comfortable with committing their business data to internet. For such user, understanding the cost trends, cost drivers as well as keeping basic control of finances in the business may be more important than everything else. Fortunately, free software solutions are available for installation on a local computer of such entrepreneur.

For example, GNUCash personal and small-business financial-accounting software, freely licensed under the GNU GPL, which not only supports bookkeeping but, more importantly enables Customer and Vendor tracking, Invoicing and Bill Payment, and Tax and Billing Terms. Just keeping track of bill payment and invoicing may be sufficient for an entrepreneur to begin attaining true understanding of his or her business and finding more time to focus on other issues of the business, which by itself represents a huge leap.

Unfortunately, all of these solutions require some, alas rudimentary knowledge of English (except Compiere, which supports Croatian language), which can represent a major stumbling point for lot of current and potential entrepreneurs. Yet, it may be better to spend money on language education than on expensive commercial software.

⁴ Authors do not endorse nor are affiliated with any software manufacturer, or an organization, nor does the reference in this paper constitute any form of endorsement, commercial or otherwise.

Conclusion

In this unconventional paper, we tried to expose and explore some potentials for utilization of free and open-source solutions to improve productivity and reduce costs of operations of micro-enterprises and SMEs in general, especially in the context of relatively low internet penetration rates in countries in the region of Western Balkans. The main benefits offered by open source are the lower equipment investment needs, lower cost of entry and lower total cost of ownership, rapid implementation, and no cost for software functionality. It is no longer necessary to pay premium for being able to keep track of what exactly goes on in a business. Therefore, small businesses should be encouraged to explore these options, preferably by concentrated efforts of governments to encourage use of tools of electronic age.

References

- Bessen, James E., Open Source Software: Free Provision Of Complex Public Goods (July 2005).
- Dedrick J. & West J., Why Firms Adopt Open Source Platforms: A Grounded Theory of Innovation and Standards Adoption, Standard Making: A Critical Research Frontier for Information Systems MISQ Special Issue Workshop
- Fitzgerald Brian, The Transformation of Open Source Software, MIS Quarterly, Vol. 30, No. 3, 2006
- Leibovitch, E. & Starnix, Brampton, The business case for Linux, Software, IEEE Jan/Feb 1999 Volume: 16, Issue: 1, pg. 40-44
- Locke, John "Open Source Solutions for small business problems", Charles River Media. May 2004
- Oreilly, Tim, What is Web 2.0: Design Patterns and Business Models for the Next Generation of Software. Communications & Strategies, No. 1, p. 17, First Quarter 2007.
- "Open Systems Accounting Software", Open Source Systems Inc. 2008. <http://www.osas.com>
- "TurboCASH Open Source Accounting Software", TurboCASH. 2008. <http://www.turbocashuk.com/>
- An SME Perspective of Public Services survey report, group of authors, USAID SPIRA, 2008, <http://www.usaidspira.ba/downloads>
- "Welcome to GnuCash.org", GnuCash. 2008. <http://www.gnucash.org/>
- World Bank, Doing Business reports, 2008. <http://www.doingbusiness.org>

Business Dressing and Culture

Ana Langović-Milićević, Tatjana Cvetkovski, Zlatko Langović¹,
Violeta Cvetkovska-Ocokoljić²

ABSTRACT – *Modern business background needs to respect new rules. Today business systems have a big number business activity out the native country so they need to respect different culture with different measure values. In this paper the importance of businesses clothes and influence of culture are stressed if we want to have successful business. Today, business people in Serbia do not have time to think about business clothes and it is not important for them. Business clothes are important for business image. First impression is important so choice of clothes have to be adjustment with that impression and it is very important in intercultural negotiation.*

KEY WORDS: *business clothes, culture, intercultural negotiation*

Introduction

Contemporary business predisposes international negotiations between increasing number of companies, which are becoming part of their life as an unsuccessful negotiation can ruin the previous careful planning.

Complete planning of a given business system is to be directed towards a global dealings which require an appropriate managerial approach aimed at a better understanding of various national influences and cultures on a company's business.

The issue to be considered is culture factor as an important issue conditioning a whole line of new rules. As on a particular company's business the culture exercises its influences to neglect of such an important fact will nowadays definitely lead to businesses negotiations failure that would consequently cause an unfavorable transactions' results.

Managers of new age should always bear in mind that behavior and business dressing of employees and managers in company are conditioned mainly by unconscious assumptions, values and norms of national culture which they carry into a given business system. In every national community the organizational types and functioning of companies are conditioned by the rules being deeply rooted into national culture of such a community. People in companies can not behave differently but in the manner expected by the assumptions, values and norms of their culture.

Business dressing

Today the business dressing is very important although in Serbia business people are occupied by their carrier and the relating responsibilities, so that buying of business garments never occupies top of their priority lists.

Although the proverb claims that "*THE CLOTHES DO NOT MAKE A MAN*", the wardrobe is indeed important for creation of the business image. One should bear in mind that for image of others the first impression is vital and thus the garment choice should coincide with the targeted impression.

¹ Ana Langović-Milićević, Tatjana Cvetkovski, Zlatko Langović, Faculty for Business Study, Belgrade

² Violeta Cvetkovska-Ocokoljić, Faculty for Culture and Media, Belgrade

In our milieu business people are lacking quite a number of service opportunity for professional styles, which are at the disposal in the "West" so that responsibility of individuals for creation of own professional image is serious one.

The obstacles preventing the proper attention for business dressing' issues are:

- Fear that good appearance might provoke a distrust in the professionalism itself
- High price of good clothes
- Time limitations
- Lack of knowledge about the fashion and of consciousness of its importance

Business clothes and cultures

Starting from the fact that the company's business is influenced by culture, it is indispensable to consider a whole line of rules applying to business dressing being influenced by the cultures. However, lack of respect of business dressing' rules in intercultural negotiations will lead to a failure, which would consequently lead to unfavorable business results.

In Germany beside an appropriate dressing style that presumes mainly gray or dark suits with light shirts and moderate scarf tie, a proper body posture is obligatory as it all demonstrate a proper self-discipline.

The simplicity and elegance are dressing characteristics of Austrians and for a good impression it is expected for business partners to do the same. It is recommended for men to wear dark suit with white shirt and conservative silk scarf tie. For woman a waistline tailored ensemble outfit with silk blouse or a business uniform is appropriate while outfits with jacket and trousers are to be avoided.

In last years the business dressing in Switzerland has been getting less formal. For men the garments should be moderate so that the suit are well tailored, while the simple shaped shirts are to be of cotton or silk to go with black leather shoes. The dressing should be fine but modest as the Swiss do not like to demonstrate wealth.

The French give priority to very expensive garments and tend to comment dressing outfit of others. The exposed items should be expensive: clothes, cosmetics, furniture or gadgets. The business dressing in France is reflection of social standing or business success. It is of extreme importance to be dressed with a style.

In Italy business dressing is formal but much attention is given to the attire. It is important that a clear distinction is made between summer and winter wardrobes – wool will suit winter garments and cotton and silk the summer ones. The appropriate wardrobe for men is in conservative style suit of dark colors but strong intensive colors for shirts and ties should be avoided. In business dressing women are to express the elegance since the way of dressing reflects the social level (the well being).

In Mexico the business dressing requires dark classical suit, although new times bring some changes and the new generation wear less formal outfits at business meetings.

In Portugal for business meeting a classical business suit is required. Long sleeves and trousers are quite important. The emphasize is on brand name labeled clothes. At business meeting it is accepted to take off the jacket with words "You wouldn't mind if I ...". The scarf tie is obligatory especially when lunch follows the meeting.

The business dressing in Spain is an indicator of business results and of social standing. Appropriate outfit for men are dark woolen or linen suits and silk scarf ties with white cotton shirts. Appropriate outfit for women are ensemble outfits with shirts and trouser or dresses, while the modesty is in the first plain. If the wardrobe is intended for great designers' work, then the recognition of people will be bigger.

In Britain the particularity in business dressing is represented. Male business dressing is a manner to exemplify integration, being expressed mostly by wearing appropriate scarf ties that are "revealing" so that it is not recommended to question their significance. In business circles women wear ensemble

outfits similar to the male ones but the skirt is expected, although new age has brought some changes. Dark colors starting from dark gray, dark blue, black and thick materials are characteristic. To wear denim clothes is still not appropriate. Some companies even have a prescribed dressing codex. Male are not to keep their writing pens in their waste pockets if the pockets are on jacket's chest place.

The business culture in Denmark imposes a particular dressing code - for men the suits with white shirts, scarf ties and well kept shoes are expected. Women are expected to wear styled fashionable ensemble garments.

The nation giving particular importance to dressing is Russian nation. The most money is spent on dressing and when there is not enough money for brand name garments, Russians will then rather buy a well made suits but not a copy. The appropriate wardrobe for men is suit and a scarf tie, while color variations are gray, light bleu or brown and for festive events black and white variations. Appropriate wardrobe for women would be under knee length for skirt and long sleeves blouse.

In Japan for each situation go another dressing and of course it has to be not only appropriate but in accordance with the standing. Classical dark suits are appropriate for men while women are not expected to wear trousers and the shoes should be without high heels. Gesticulations and sudden movements should be avoided. The silence is considered as appropriate and one should be careful about smiling since it can express not only a joy but also a discontent.

For the first business meeting in Singapore it is indispensable to wear formal dark trousers, light shirts with long sleeves and scarf tie while the jackets are not indispensable. Sometimes even scarf tie is not required since the climate is warm and wet. It is understood for women to wear long sleeves blouse with trousers and under knee length skirts, while any detail like jewels or watches is to look discrete.

From business partners in Arabic world a paid attention to own outlook is expected, which is suppose to represent the standing. An appropriate outfit for meetings is classical suit with a scarf tie. From business partner not coming from Arabic milieu, it is not expected to wear Arabic suit and in Oman it would even contradict their laws. From their partners the Arab word expects respect for Arabic way of living but not imitation.

While making business with Americans when wardrobe is concerned, the best solution is classical business suit, but when other types of meeting are in question, one should follow their American partners. In fact, most of American companies have own rules for dressing.

Example (5)

In June 1991 to visit one of our industrial giants the guests from Japan came: Mr. Kadoyama, director of Mitsubishi Bank from Frankfurt and Mr. Masuda, Director of Mitsubishi Materials - the Mining Concern seated in London.

*Japanese wanted to talk about foreign investment possibilities in development of this industrial giant. On behalf of our company the meeting was attended by Deputy President of the Businesses Board, Director of Commercial Sector and Director of Research and Development Department. **The first of them wore a light jacket without scarf tie; the other one was properly dressed, while the third company member had a jumper with shirt collar set inside. Contrary to them, two Japanese were dressed in spotless dark suits, light shirts and silk scarf ties.***

The negotiations have started. Japanese were asking questions carefully writing down every word. As not to loose time they asked to see Company's Informative Prospect with basic data relevant for a potential cooperation. After some time the brochure was given to them but it was in Serbian. So Japanese could only watch the brochure photos but could not read the data. On other hand, the hosts were answering questions indifferently glancing at their watches, not being much impressed by the fact mentioned by Japanese (probably to incite them contrary to own habits) that the mentioned bank investment to the Company could go up to 50 million \$. However, the meeting finished after an hour and a half although that meeting was the only purpose of their visit to Yugoslavia.

While parting, in front of the administration building of our giant, Director of Research and Development Department sent the Japanese to lunch (accompanied by the translator) to the Company's restaurant outside the city, excusing themselves that nobody from the company could join them as they were so very busy.

Thus, only Japanese and translator went to restaurant for lunch. Fifty million dollars worth deal has been lost.

Conclusion

The skill of proper business dressing is more important than ever observing of cause the culture factor. Notwithstanding that quite a number of employees prefer the casual wear, when daily agenda includes presentations, business propositions, meeting with client or potential clients or any other activity for which visual impression is relevant, the only proper appearance is the one of high professionalism.

Beside the fact that wardrobe choice depends from gender, the development concept and maintenance of business way of dressing are applicable on everyone and of course it is important to stress the cultural influence today. Purchase of business dressing should be viewed as an investment in professional future.

When the outfit is with a style, the dealing persuasion possibilities rise. During intercultural negotiations the wardrobe, personality and job must match so that the communication with the milieu would be even more successful.

References

- Adler N. (2002), *International Dimensions of Organizational Behavior*, South-Western- Thomson Learning, Canada
- Alon A., (2003), *Chinese Culture Organizational Behavior and International Business Management*, Greenwood – Publishing Group, Business & Economics
- Angell P., Rizkallah T., (2004), *Business Communication Design*, Mc GrawHill. New York
- Jovanović M., Langović Milićević a, (2006), *Intercultural challenges of globalization*, Megatrend university, Belgrade
- Jovanović M., Langović Milićević A., (2006), *Intercultural management*, Megatrend university, Belgrade, 225-228

Marketing Mix Application in Degree-granting Educational Institutions

Biljana Lazić¹

ABSTRACT – *The high education system and work of degree-granting educational institutions in our country represent an inexhaustible field of always relevant and very interesting topics. Previously mentioned institutions have undergone very important transformation of their own structure and organization in the last few years, because of the application of the Bologna declaration and the implementation of the accreditation process in the field of the high education. One of the aims of innovative high education system is giving more significant contribution to common economy growth and development of our country through educating the skilled, specialized, high-grade and ambitious young staff. The growing importance of the service sector and the specific character of educational service make us conclude that the use of marketing mix instruments in degree-granting educational institutions is necessary. If this institutions pay more attention to the quality of their services, regular creation of their prices, innovating of educational process and other marketing mix instruments, they may certainly be expecting to reach more competitive place on the market. The purpose of this paper-work is to emphasize the importance of the regular usage of marketing and high-quality formulation of marketing mix instruments in degree-granting educational institutions and their contribution to the economy growth and development of national economy. The main aim of this paper-work is to present the basic characteristics of the high educational system, to emphasize the problematic fields, to analyse the necessity of marketing concept application and to elaborate, in detail, marketing mix instruments in the previously mentioned field.*

KEY WORDS: *high education, degree-granting educational institutions, marketing concept, marketing mix instruments, economic growth and development.*

Introduction

In the era of knowledge expansion, as well as the expansion of different kinds and levels of education, degree-granting educational institutions have an irreplaceable role. If they professionally structure their study programmes, achieve adequate interaction between students and staff and make a pleasant and willing atmosphere, previously mentioned institutions will advance their own service and by producing specialized, young experts they will give an important contribution to the economy growth and development of our country. Degree-granting educational institutions must constantly follow the European and world trends of degree-granting education development and adapt changes in this field, in order to their key role in the economy development and culture promotion of a country be fully expressed. The previous system of degree-granting education in our country was characterized by the rigid structures of study programmes, an incapable methods of teaching and evaluating, excessive curriculums and certainly unreal burden of students. If we mention statistical data and indicators of degree-granting educational efficiency in Serbia, which present a situation before the reforms were carried out, we may notice that the previous system of studying was giving discouraging results. Before the 'Bologna' was applied, the efficiency of degree granting education was very low: ²

The rate of giving up is estimated on 45%, in other words the rate of finishing studies is 55%;

¹ Biljana Lazić, The Faculty of Economics and Engineering Management, Novi Sad

² [http:// www.cep.edu.rs/](http://www.cep.edu.rs/)

The average length of studies is longer than the nominal lasting for all study programs. For example, for studies at the second level which lasts for two years, the average length of studies is 4, 2 years, for degree-granting studies the average length of studies is almost 6, 8 years, and for studies which last for six years is 7, 6 years;

The rate of repeating one year of studies is the largest for the second year of studies (almost 46%), then comes the third year (around 40%) and the first year of studies (more than 25%);

On the average, in order to enroll the next year of studies students need 1, 45 years.

If we add to all of these statistical information which tell us that around 40% of students never complete studying in our country, it is completely going to be clear to us that the degree-granting educational reforms are necessary. Besides the application of Degree-granting educational law, it is very important for degree-granting educational institutions to be constantly working on innovating the educational process and improving of quality of its staff.

Application of marketing in degree granting education: reality and necessity

Previous, inadequate way of financing degree granting educational institutions which meant getting the budgetary resources according to number of registered student and size (dimension) of school was caused by a domination of quantity, and ignoring the quality and efficiency of studying. However, frequent emersion of private educational institutions and developing of the market, competitive conditions in this field, have considerably changed the former situation. More and more, the necessary financial resources must be “deserved and earned” (from the government, donors or students), and their usage must be justified. Slowly, but surely, the government degree granting educational institutions are coming out to survive thanks to “the long-standing reputation”, more exactly they are directly becoming responsible for their own development and existence on competitive market. No matter what the structure of property is, whether its orientation is profitable or non-profitable, any degree granting educational institution must pay more attention to advancement of a process of servicing its clients.

Taking into consideration the specifications in production, delivery and consumption of educational service, we may notice that the base of total educational process is exactly direct interaction between students and teaching staff. Sharper competitive fight is emphasizing the importance of using the service management and service marketing in the work methodology of degree granting educational institutions. First of all, the emphasis is being put on giving high-grade educational service and creating quality relations with students, in order to successfully accomplish mutual aims. In one word, marketing in education is defined as a process of managing relations between educational institution and its clients.³ It is very important that the marketing concept will be accepted and applied by all the employees in degree granting educational institution, because only then we may expect quality realization of educational process and giving a contribution to economic and cultural development of the community. The marketing strategy is basic approach, which will be used by business unit in order to achieve its own aims, and which includes a clear decision about target markets, marketing positioning, marketing mix and about the level of marketing costs.⁴

Without any suspicion, we can tell that in current conditions, there is a real necessity for optimal defining and application of marketing mix in degree granting educational institutions. With realization of mentioned process, the interaction with students will be significantly improved, the relations of mutual trust and respect will be developed, expectation will be fulfilled and the satisfaction of educational service givers and users will be provided.

³ Davies B., Ellison L., 1991., *Marketing – The Secondary School*, Longman Group, Harlow, Essex, pp. 1

⁴ Kotler P., 1988., *Upravljanje marketingom – knjiga 1*, Informator, Zagreb, pp. 295

Marketing mix in degree granting educational institutions

Exceptional impalpability of educational service and dominant role of teaching staff and students during the realization of educational process, emphasize a necessity for reorganization and expansion of classical marketing mix. The marketing mix instruments are controllable variables and with their optimal combination, degree-granting educational institutions are realizing desired aims which, first of all, refer to giving quality educational service, fulfilling expectations and providing a high satisfaction level of their own students.

In degree granting educational institutions, marketing mix includes the next instruments:

1. Educational service;
2. Educational service price;
3. Distribution channels
4. Marketing communications;
5. Staff and students;
6. Service environment;
7. Process of servicing.

Interest and necessity for researching this subject matter come from fact which tells us that larger number of participants, stern competitors, is present on the market of degree granting education, and they long to take the leading positions and attract the largest part of target auditorium by using marketing activities.

Educational service

Surely, the most important role of educational service is creating and transferring an intangible value which will be represented by appropriate physical proof, after the educational process will have finished. The sense of educational service is transmitting the definite level of knowledge and information from the teaching staff to students, in a way of adding and resuming the existing knowledge and at the same time, creating knowledge which did not use to exist in the past. According to Kotler's definition, the service is any activity or benefit which is offered by one participant to the other, and which is essentially intangible, it doesn't have a property over something as a result, it can, but it doesn't have to be connected to some physical product.⁵ As the basic characteristics of educational service we considerate as:

1. Being intangible

The educational service has immaterial character and it refers to a process of transmission the defined level of knowledge and education from teaching staff to students in the period of several years.

2. Being non-perishable

We can neither store the educational service, nor make its reserves.

3. Being heterogeneous– the diversity of quality

It is impossible to keep absolutely identical level of quality in different degree granting educational institutions which are in the same subject of learning. Whereas the teaching of one subject is continually repeating, and can be realized by more professors, it is very difficult to provide the same level of quality even in the unique institution.

4. Being simultaneous and the fact is that producing and consuming are inseparable processes

During the realization of educational process a participation of both sides is necessary. Educational institution, in its classrooms, realizes a process of transmitting (service production) knowledge from

⁵ Kotler P., 1988., Upravljanje marketingom – knjiga 1, Informator, Zagreb, pp. 112

professors to students, who are in that way resuming and expanding (service consumption) their own total system of education.

5. The absence of property

If a student pays anticipated sum of tuition free, he has a right to get definite package of services without the possibility to own certain capacity of educational institution.

Because of more complete analysis, we are going to explain briefly basic components of the service package and they are a physical product, service product, service environment and service delivery.⁶ In degree granting educational institutions physical product is tangible and real and it is manifested by the university diploma. The service product includes a group of all interactions between students and the college staff which is established during the educational process. Teaching rooms, student's capacities for accommodation, nourishment and the other non-teaching activities make a service environment of degree granting educational institution. The service delivery includes all activities which are undertaken in order to successfully realize and complete educational process.

The aim of any degree granting educational institution is to provide an optimal service quality which influences student's interest, market positioning of the institution as well as its service supply.

Educational service price

Degree granting educational institutions tend to realize the long-term marketing aims as well as to provide undisturbed and high-grade realization of current activities by creating a suitable level of their service prices. With competitive price they may provide a leading market positions in their branch and draw a larger number of students. Former degree granting educational system in our country, for large number of students, does not give any reason to be concerned about the level of educational costs, because their education is completely or partly financed from the national budget. This can be testified by an interesting UNESCO fact from 1991 which tells us that just because of the reason mentioned above, 86 to 90 percent of high-school students and degree-granting students in all level of formal education had attended public national educational institutions, even the whole 100 percent in former socialistic countries.⁷ If we add to this a problematic financial situation, it becomes clear that the price of educational service isn't treated as an important marketing mix instrument. Larger entrance of private universities and faculties which represent a competition, as well as reduced level of financing degree-granting education from the budget, influence the level and the way of creating the prices of educational services, which will emerge in the foreground. During the formulation of their service prices, degree granting educational institutions must take into consideration costs which arise during the realization of educational process. The consumers' demand as well as the influence of competition, also represents an important and obligatory variations. The government frequently gives too much freedom to degree granting educational institutions during the prices formulation and that may negatively reflect in the exaggeratedly high, and for larger part of population, insufferable price levels. In contrast to government institutions which still rely on quantity, some private faculties are more and more orientated on a high quality, a high and stable price, and the target "economic" groups of consumers and on the market in which an inelastic demand of degree granting educational services is present. In other countries, such privilege is still reserved for the colleges and universities which have a very long-time tradition and which give a high-quality educational service.

Distribution channels of educational service

If we start with a statement, which tells us that the purpose of distribution channels is to make possible coming of goods from a producer to a consumer on time, in place and in form which is suitable for

⁶ Ljubojević Č., 2002., Marketing usluga, Stylos DOO Izdavaštvo, Novi Sad, pp. 23

⁷ Savićević D., 1997., Privatno i javno obrazovanje u svetu i Jugoslaviji, Zbornik radova 4, Institut za preduzetništvo Univerziteta „Braća Karić“, Beograd, pp. 24

use⁸, it is becoming clear to us that in case of educational services the situation is still something different. If we take into consideration the fact which tells us that production, distribution and consumption of educational service make the united process, it becomes necessary for students to come directly and in scheduled time in degree-granting educational institution in order to make possible the realization of uniform service. The possibilities of choice and individually adapting of distribution channels are very small in case of degree granting education. The realization of educational process can be fulfilled only by direct channels of distribution because of concentration of students in one place which satisfies all the necessary requirements for giving educational service. In this way, the effective interaction between participants is established, and also the feedback with students is provided. By using direct channels of distribution, the possibility of continued quality control is handing as well as the possibility of adapting the service to concrete educational conditions and instantaneous educational structure of students. In the last few years, some faculties which possess the progressive technical and personnel potential are applying a “distance teaching system” and using it they satisfy a principle which tells us that educational service must be produced in the most suitable place and it must be used by person to whom it is the most necessary.

In this context, it is necessary to emphasize a location of degree granting educational institution which is considered as a very important factor of consumer’s choice. First of all, the institution must choose the location which is accessible and interesting for target group of consumers, and then take into consideration its own construction and maintenance costs as well as closeness and availability of the necessary labor. In our country, scarcely we may speak about attractive location, at least for national faculties which current location is often awarded, not independently selected.

Marketing communications

The aim of marketing communication is to in help consumer’s shift from the state of ignorance to the position of decision making and taking an action of buying.⁹ Institutions of degree-granting education may apply different means of communication in order to differentiate their own supplies in regard to rivals, emphasizing the quality of educational service and creating and consolidating their own reputation and image. Advertising, really gives wide possibilities to use different and actual means of communication, such as the radio and TV, the press, prospectus, booklets, leaflets. Degree granting educational institutions will be informing potential and encouraging present consumers in the right way, by sketching a qualitative advertising message. Using a private sale, institutions get into a direct contact with the potential students, give them “first hand” information and release even the most trivial confusions connected with real educational process. In the case mentioned, the personnel contacting the consumers interested, plays a very important, perhaps a decisive role with its own appearance, behavior and information. Undertaking activities of sale advancement, students are often offered different privileges accompanying educational service. If a student achieves exceptional and praiseworthy results during the realization of educational process, certainly a very important privilege for him or her, will be releasing from the payment of a part or the whole sum of tuition. Public relations activities present a thought-out, planned and constant attempt to establish and maintain mutual understanding between the organization and its environment.¹⁰ Undertaking mentioned activities, degree granting educational institution turn to considerable broad auditorium with the aim of creating a positive attitude and opinion about the institution and quality of its educational service. Publicity presents publishing positive information about degree granting educational institution and quality of its services by different neutral medium. It is a very objective way of informing the public because it is not financed by the educational institution.

It is very important for educational institution to create an optimal communicative mix and the messages sending to the public, first of all, must be real and justified. The “boomerang effect” can be at-

⁸ Milisavljević M., 1993., Marketing – trinaesto izdanje, Savremena administracija, Beograd, pp. 338

⁹ Ljubojević Č., 2002., Marketing usluga, Stylos DOO Izdavaštvo, Novi Sad, pp. 311

¹⁰ Đurić M., 1992., Public relations, Institut za tržišna istraživanja, Beograd, pp. 15

tained; the considerable loss in regard to expected profit can be realized by deceiving the target auditorium.

Staff and students

Giving educational service in degree granting system is very complex and long-term process which must include many mutually connected participants if attaining of quality final effect is expected. During the realization of giving educational service process, the key role is played by teaching staff on one side and students on the other, entering direct mutual interaction. The adequate selections of skilled and pleasant teaching staff as well as their constant moral and material motivation are leading variables in successful realization of educational process. Without the presence of students, as outermost consumers of educational service and accomplice in educational process, the final and mutually important aims can't be realized. It is very important that students having an appropriate level of previously acquired general education, always carefully follow teaching, as well as to get activated during solving a concrete problem situations. Private faculties are maximally trying to exceed old-fashioned and inadequate system of professors' domination in regard to students, which unfortunately is still present in the national faculties. In the whole process an important role is also played by non-teaching staff. The stress is necessary to be put on the people who make the first contact as well as on those who frequently communicate with students. The problem of inadequate and ineffective work of students' and other administrative departments is relatively often present on our faculties and certainly makes bad impression and harms the reputation of degree granting educational institution. In the whole process, it is of the essential importance that the manager of educational institution has a vision of his own school and that he is able to transmit his convictions to the staff.¹¹ When all participants of educational process successfully collaborate, develop mutual relations of respect and confidence and tend to realize common aims, the success is guaranteed.

Service environment

For a long period of time, the faculties in our country were neglecting an interior and exterior appearance of their buildings. The modest financial possibilities and very old buildings are certainly limiting factors, but on the other hand there are also different activities whose realization does not require a large sum of money and with them present educational environment may be significantly improved. Private faculties dispose with buildings which have been recently constructed, according to the size they are modest but in many cases sensibly and pleasantly organized, so they act as serious market competitors. Of course, the educational environment is neither crucial nor the most important marketing mix instrument but it simply can't be neglected. The exterior manifestation of institution easily can impress as well as develop an interest and attract the potential students. The interior of building is necessary to be equipped with suitable furniture, technological devices and other accompanying means which are necessary for undisturbed realization of teaching and non-teaching activities. A special attention should be paid to color usage, the lighting of building, decoration, proportion, rhythmic and symmetry in order to create a pleasant, warm and creative atmosphere.

Process of servicing

The overlapping of some instruments and their mutual qualifications is very frequent in the limits of service marketing mix. The service process primarily includes a realization of teaching activities, giving quality education and formal proof about the completion of educational process. All the others accompanying activities which contribute the realization of leading, mutual aims and providing a total satisfaction of students and teachers are also very important. The policy which is taken by degree granting educational institution as well as procedures which it respects during the realization of assignment and the regulated procedures of activities are an integral part of all-inclusive educational

¹¹ Kolmen M., 1996., Rukovođenje u obrazovanju, Časopis „Direktor škole“ 1/96, pp. 18-19

process. Because of exceptionally high level of student participation during the process of giving educational service and because of unavoidable interaction it is very important to precisely define assignments and permissions for all employees as well as the assignments and permissions for students in order to successfully finish the process. The success and mutual satisfaction can't be missed if the educational process is qualitatively, creatively and flexibly organized and all the participants actively go in for the realization of common aims.

Conclusion

In the dynamic environment of important scientific-technical accomplishments, a need for the change of educational and professional population structure is more and more standing out. The specialists of different profiles are necessary and they will with their own workmanship and devotion contribute to the economic, cultural and common-sociable progress of the country. Degree granting educational system is playing a decisive role during the realization of the mentioned process. Degree granting educational institutions must pay a special attention to the advancement of giving their own services process. Because of the expressive high level of participants' interaction and frequent presence of educational service users, in other word students, in the building of the institution, it is necessary to improve and modernize the realization of educational process as well as to accept positive experiences of the developed countries which are connected with the field of degree granting education. The application of marketing concept in degree granting education will provide very useful effects. It is very important to adequately sketch the marketing instruments and unite them in the mix which will be a basic factor of competitiveness and recognition of degree granting educational institution. With advancement of giving educational service process and with improvement of its own working conditions, degree granting educational institutions will draw a satisfying number of students and give them a high-quality and informative knowledge. Producing young, competitive and qualified experts, degrees granting educational institutions are giving a very important contribution to growth and development of their own country as well as to its approaching to Europe and World's current happenings. However, watching the present situation in Serbia we can state that if the predominant freedom which is left by new degree granting educational law will be used by national faculties for the continuation of existing autonomous practice, the implementation of desired results as well as more important improvements in functioning whole degree granting educational system can't be expected. Only if the level of collective deciding is lower, a decisive role of college council neutralized, an individual responsibility of leading staff increased and neutral commissions engaged during the process of employing a teaching-scientific staff, the improvement of educational system, adequate reform of degree granting educational institutions as well as their important contribution to economic growth and development will become very certain

References

- Davies B., Ellison L., 1991., Marketing – The Secondary School, Longman Group, Harlow, Essex, pp. 1
- Đurić M., 1992., Public relations, Institut za tržišna istraživanja, Beograd, pp. 15
- Kolmen M., 1996., Rukovođenje u obrazovanju, Časopis „Direktor škole“ 1/96, pp. 18-19
- Kotler P., 1988., Upravljanje marketingom – knjiga 1, Informator, Zagreb, pp. 112-295
- Ljubojević Č., 2002., Marketing usluga, Stylos DOO Izdavaštvo, Novi Sad, pp. 23 – 311
- Milislavljević M., 1993., Marketing – trinaesto izdanje, Savremena administracija, Beograd, pp. 338
- Savićević D., 1997., Privatno i javno obrazovanje u svetu i Jugoslaviji, Zbornik radova 4, Institut za preduzetništvo Univerziteta „Braća Karić“, Beograd, pp. 24
- [http:// www.cep.edu.rs/](http://www.cep.edu.rs/)

Entrepreneurship - Development Factor in Transitional Economies

Svetislav Paunović¹

ABSTRACT – *We live in a very dynamic business environment that creates significant challenges for all business actors. In order to implement changes, managers are under the huge pressures to constantly struggle for the development of the new products and markets. Entrepreneurship, as an action-oriented way of thinking, behaving and acting, focused on innovations and changes is probably the key development factor that enables sustainable market competitiveness.*

Discussions of entrepreneurship in transitional economies have almost exclusively focused on the creation of independently owned and operated (small) enterprises. But, entrepreneurship is not restricted to new or small businesses, private sector or profit-making enterprises. It can be demonstrated in old and new, small and large, profit-making and not-for-profit enterprises as well as in the private and public sector. This article elaborates the role and importance of entrepreneurship in the different stages of business growth. At the same time, some differences between entrepreneurship and intrapreneurship will be clarified and basic modalities of implementation of appropriate organizational culture that support entrepreneurship described.

KEY WORDS: *entrepreneurship, intrapreneurship, entrepreneurial culture, transitional economy*

Business environment and new challenges

We deal everyday with an increase speed of changes and more and more complex environment, difficult to predict. Globalisation changes, increasing competition and insufficiency of constant competitive advantage require permanent demonstration in order to create adequate position in the market. Modern technology (particularly information technology) enabled each resident of Earth to consume double the amount of information in 2003, than in 2000. Predictions are that this growth is going to have exponential trend in future as well. World economy has, to a large degree, transferred from the industrial to knowledge society. In time of turbulent changes accumulated knowledge is becoming outdated very fast. Assuming that it is not innovated, knowledge in the field of the technological sciences acquired during the last decade of the 20th century, is worth only 10% today. It is not enough only to learn, but to learn faster than the competitors. Quality and constant innovation became a necessity. It is not enough only to adjust to the changes that occur in the hectic environment. In order to attain a concept of sustainable growth and development it is necessary to create changes through the system of constant innovation (technical, economic, social) which are today, more than ever, *conditio sine qua non* of business success .

In this environment, organisations are exposed to a high level of pressure. Market is constantly threatening to leave on the margins those who are not adaptable and flexible enough in their performances in the market. It only signifies that large and by default “sluggish” companies must become able to operate as innovative, creative and adaptable, keeping the components that refer to efficiency in business activities and economy of scale. Success of large organisations equates the ability to identify and create business opportunities in the surroundings and the ability to perform necessary adjustments in order to attain certain benefits in the market. Dynamic changes in the business environment to a great extent force business entities to behave in entrepreneurial way.

¹ Svetislav Paunović, Belgrade Banking Academy, Belgrade

Current state of the world economy and current financial crisis (global by its character) further more increase the need for entrepreneurship (entrepreneurial behaviour). It is expected from entrepreneurs to start a new wave of business activities which will contribute to the recovery of the world economy. New entrepreneurs are needed for the new millennium. Entrepreneurship has always been the most innovative and the most creative way to accelerate progress and create assumptions for more welfare of the human kind. By reacting on the changes in the surroundings and carrying out new entrepreneurial projects, entrepreneurs are just contributing to solving the existing problems.

Entrepreneurship context

There are many authors that treat entrepreneurship as something rather mysterious, as talent, inspiration, ingeniousness, form of art. In this context, it is spoken about “great person” who by coming to this world brings innate inclinations and abilities for the entrepreneurial behaviour which reacts to the offered chance instinctively. On the other hand are those authors who think that entrepreneurship could be learned and performed in the organised way within the regular business activities, putting the emphasis on the practical aspect and routine performance of entrepreneurial activities[8].

There is no agreed definition what constitutes entrepreneurship. In fact there is no standard, universally accepted definition of entrepreneurship. Often the term entrepreneurship is equated with new venture creation and small business management and the concept of owner-management or self-employment. But, not all owner – managers can be regarded as entrepreneurs as well as not all small businesses can be treated as entrepreneurial. It means that clear distinction between the entrepreneur (entrepreneurial venture) and small business (small business venture) has to be made.

Entrepreneurship is an action-oriented way of thinking, reasoning, behaving and acting, business philosophy focused on innovations (technical, economic, social) as the critical elements in creating wealth in the future. Entrepreneurship is not restricted to new or small business, private sector or profit-making enterprises. It can be demonstrated in firms (old and new, small and large, profit-making and not-for-profit, in the private and public sectors, fast and slow growing). Many large organizations are entrepreneurial. They also can implement entrepreneurial culture and behave in innovative way by creating teams of entrepreneurs. Unfortunately, entrepreneurship is very rare source, therefore very expensive (well paid). Entrepreneurship is the process of creating values and opportunity driven process, where opportunities come from changes in the environment. Entrepreneur is someone who perceives an opportunity and creates an organization to pursue it [2]. While speaking about entrepreneurship we are always speaking about the most creative and innovative way of behaving where innovations are defined as a set of technical, economic and social improvements.

Entrepreneurship and economic development

You really do not need to be the futurist to see that entrepreneurship will play a large and increasing role in the future of our nation’s and our individual working lives. The nature of organisations, work and employment is changing and individuals who recognise these changes and prepare for them will be best able to succeed in the new environment [4].

In his article *How is Entrepreneurship Good for Economic Growth* [1], Z. Acz makes distinction between “necessity entrepreneurship”, meaning that you have to become an entrepreneur because you have no better option, from “opportunity entrepreneurship” which is an active choice to start a new enterprise based on the perception that an unexploited or underexploited business opportunity exists. Describing the ratio of opportunity-to-necessity entrepreneurship and comparing with per capita income of the country, he concluded that positive relationship exists. Countries where more entrepreneurship is motivated by an economic opportunity recognised than by necessity have higher level of income.

Many transitional economies among which is Serbia as well, started to address their numerous inherited problems from the past by developing entrepreneurship and applying business philosophy “Small is beautiful”. Many social problems, unemployment in the first place as the direct consequence of the

privatisation, are being dealt with through encouraging and carrying out entrepreneurial projects which are in most cases good examples of self-employment.

In that context previous differentiation of “necessity” from “opportunity” entrepreneurship is useful. In transitional economies mostly self-employment entrepreneurship actually exists, and much less entrepreneurship as opportunity driven process. Numerous training programmes were carried out in Serbia with target groups of potential entrepreneurs who were in the process of ownership transformation left without job and started with self-employment. Consultants who deliver these training courses often deal with the request of the trainees to help them in recognising personal entrepreneurial potentials and in suggesting the ideas for starting their own business. Essential thing is that entrepreneurship is not a method of solving social issues and problems and that entrepreneurial potential is very rare (some researches point out only 2-3% of world population). While the privatisation process developed, it became clearer that self-employment entrepreneurship presented only one side of the story and that it was not able to generate significant number of new jobs which could absorb unemployed to a great extent in the long-term period.

Strengthening competitiveness and more significant activity of the investors contributed to the business expanding and companies networking at different levels in the last few years. Number of opportunity driven entrepreneurship projects is increasing as well as joint venture projects that connect carrier of entrepreneurial ideas with potential investors (business angels, venture capitalists). On the other hand large companies begin to think about various models of entrepreneurship implementation in order to make its business activities more efficient. In this context there will be more corporate-backed ventures like spin –offs, intrapreneurial units and partnership arrangements. Although these organisations originate in larger corporations, they are being formed specially to stay small and entrepreneurial, to avoid bureaucracy and to maintain their innovative edge [4].

Intrapreneurship as a model of business revitalisation

Intrapreneurship is about ability to find new business opportunities within an existing business, an opportunity for corporate managers to take a risk and initiative in order to implement the new business idea, further diversification of business activities and appropriate management of business restructuring processes. Numerous studies indicate that large companies are not the best ones in developing intrapreneurship and creating entrepreneurial spirit. Company’s management task is to develop appropriate system and way of thinking (culture) which supports corporate entrepreneurship, entrepreneurial spirit and innovative environment at all company’s organisational levels.

Norman Macrae predicted back in 1976 in the magazine *The Economist* that very dynamic and fast growing companies will in future simultaneously apply alternative models of performing business operations based on strengthening competitiveness within the enterprise itself. Gifford and Elizabeth Pinchot developed a concept of intrapreneurship, while Gifford Pinchot and Ron Pellman, in its guidelines [9] for effective implementation of innovations, pointed out that company must, if it wants to be competitive, to demonstrate ability to innovate fast as well as the readiness to constantly prove itself in the market. John Naisbett insists on *intrapreneurship* as the way of starting the business in order to identify new markets and define new products and services, and Rosabeth Moss Kanter, from Harvard Business School, speaks about entrepreneurship as the key factor of companies’ survival [6].

What are the problems that enterprising managers have to deal with in large companies? If in the start-up stage of business development primary focus is on finding the market and appropriate marketing positioning of product/service and defining appropriate operative management structure, in further stages of organisational business development, need for diversification and revitalization of all business functions of the organisation and its development programmes, is becoming crucial.

Problems companies deal with are results of many factors [3]: growing competition in the market, erosion of leadership and entrepreneurial skills, feeling of self-content i.e. self-assurance which disturbs organisational changes, inadequate and insufficient capacities of management team to build organisational infrastructure which can support demands of organisational growth. It is showed in prac-

tice that lack of leadership and entrepreneurial skills is one of the key causes of decreasing trends in organisation development. Process of revitalisation, in that context means, that corporation must “re-invent itself”.

Core issue is how to develop adequate system and way of thinking (culture) which supports corporative entrepreneurship. It might seem contradictable but the problems closely related to the need of revitalisation of organisation are result of the very success of that organisation. Growth comes along with success, and it creates certain level of resistance towards changes, in the both external and internal environment. Basic problem which makes process of revitalisation difficult is the fact that organisation in this stage of development must concentrate simultaneously on several key organisational development goals [5]:

- revitalizing market
- revitalizing products
- revitalizing resources
- revitalizing operational systems
- revitalizing management systems
- revitalizing corporate culture

Instead of focusing on one man, company must create teams of managers- entrepreneurs and adequate system/way of thinking (culture) which supports entrepreneurship. There are several ways for the organisation to become entrepreneurial: by forming intrapreneurial units which autonomously function within the company (R&D and profit centres, which are suppose to provoke the existing “status quo”, constantly “listen” to the market demands and recognise potential business opportunities and implement them in practice), forming new companies within the existing company following the logic “new project-new company”, spin-offs, split-outs. Intention to shift from “position” leadership to “knowledge based” leadership is in focus. In that context it is completely normal to treat potential entrepreneur as a business partner. Company needs people who will be dedicated to particular business as to their own.

Entrepreneurial culture and some barriers in its implementation

Entrepreneurial culture means that all employees think and act as entrepreneurs. Organisation does not have entrepreneurial culture if all new ideas are initiated (and all decisions are made) exclusively by top management – founder – entrepreneur. Culture of this kind of organisation where procedure for implementation of one man’s ideas is strictly regulated could be characterized as bureaucratic and authoritative. However practice shows that long term success in business is questioned if the new business initiatives are related exclusively to one man.

If we would want to indicate the most important values of entrepreneurial culture [7] which contribute to the quality of entrepreneurial atmosphere, we must particularly point out the following:

- innovativeness
- respecting the individuals, their potentials as well as different and diverse (not typical and unconventional) way of thinking
- permanent improvement of human resources’ skills (enabling individual development, investing in the human resource development as the most cost effective investment)
- risk (freedom to permanently challenge “status quo” and to make sometimes a mistake by risking, but with no “cruel” punishment for possible mistakes)
- independence in making all business decisions (responsibility for making decisions at lower level as well, decentralised decision making procedures, freedom of performance, delegating authorities, fast and flexible decision making, reducing to minimum bureaucratic procedure of deciding)
- non-formality (equal treatment regardless the position in the hierarchy, whereas employees should be treated as partners and not as subordinated personnel)
- networking and team working (contacts with external partners prevent atmosphere of “isolation” and “open” organisation for external influences and ideas).

In the group of motivation factors which stimulate building of entrepreneurial atmosphere and entrepreneurial culture, readiness of top management to enable independence to enterprising managers should be stressed out, as well as encouraging creativity at all organisational levels, enabling individual development and individualism, and allowing the associates to implement some of their ideas in practice, by carrying it out in the market, readiness for the partnership in business with key associates.

Companies in Serbia, in their everyday business activities, however, are faced with numerous barriers that hinder efficient building and implementation of entrepreneurial culture. These factors could be divided into three groups.

The first one is related to the risk factor and all moments in business related to it. It is obvious that mistakes are inevitable in entrepreneurial behaviour. The essence is in defining the causes of mistakes? Is that a bad judgment or the circumstances out of control of an individual? How are the individuals punished for the mistakes? How are individuals rewarded for the success? Many companies speak about entrepreneurship and try to promote it. Associates are required to behave in entrepreneurial way, to take the risk. When they however succeed in their undertakings they are usually rewarded inadequately or not at all. Nevertheless, when they fail in their undertakings, they are punished or let off. Hence, risk to fail is too high and reward for success is too small, which directly slows down building of entrepreneurial spirit and atmosphere.

Second group refers to existing way of thinking which does not have ambition to change present state. In that context enterprising managers often come into the conflict with the following way of thinking: "We have always done it in that way" or "To change something now demands a lot of time and effort" or "Why should we change anything if everything functions very well". That kind of approach directly discourages creativity and obstructs showing entrepreneurial qualities.

Third group of factors refers to organisational hierarchy. In an attempt to more precisely regulate relations in the business process, this group of factors creates the need of the constant "asking for permission" to do something. The deeper is organizational structure, the more difficult is to obtain permission to do something new. That means weakening of motivation factors for innovativeness and creativity at the lower levels of decision making in the organisation.

Summary

Entrepreneurship as the most creative form of activity and innovation based concept has a key role in creating preconditions for more comprehensive changes in all fields. World economy is facing many challenges. In transitional economies these challenges are even more difficult and painful bearing in mind inherited problems from the past. In order to launch "new wave" of growth and development, new entrepreneurs and entrepreneurial projects are needed more than ever (from start-up companies to large corporations) which will be based on new market opportunities. It is fundamentally important that encouraging development of entrepreneurship should be the top priority of the economic growth and development policies in the coming period.

References

- [1] Acs Z. (2006): How is Entrepreneurship Good for Economic Growth, www.mitpressjournal.org
- [2] Bygrave W.D.(2004): The Portable MBA in Entrepreneurship, John Wiley & Sons Inc., Hoboken, New Jersey, p.2.
- [3] De Jordy H.(1990): On Your Own - Successful Entrepreneurship in the 90s; Mc Grow Hill, Ryerson, Toronto, Montreal.
- [4] Dollinger M.J. (2003): Entrepreneurship- strategies and resources, prentice Hall, p.5)
- [5] Flamholtz E.G. (1990): Growing Pains - How to Make Transition from an Entrepreneurship to a Professionally Managed Firm; Jossey - Bass Publishers, San Francisco, p. 336-340

-
- [6] Kanter R.M. (1990): When Giants Learn to Dance, Touchstone Edition, New York,
- [7] McCrimmon M. (1995): Unleash the Entrepreneur Within - How to Make Everyone an Entrepreneur and Stay Efficient; Pitman Publishing, London, p.155.
- [8] Paunović S.(2003): Preduzetništvo – od biznis ideje do realizacije; Univerzitet BK, Beograd
- [9] Pinchot G. and Pellman R. (1999): Intrapreneurship in Action, Berrett-Koehler Publishers, San Francisco

Microcredit as a Cure for Poverty: The Case of Serbia*

Bojana Radovanović¹

ABSTRACT – *When the Nobel Peace Prize for the year 2006 was given to Dr. Muhammad Yunus and Grameen Bank "for their efforts to create economic and social development from below", microcredit was recognised as an efficient tool against poverty. According to Statistical Office of Republic of Serbia, 6.6% of Serbian population was objectively poor and 13.9 unemployed in 2007. On the other hand, the possibilities for poor and unemployed to take a micro loan in order to start business are limited. Many groups are totally excluded from the banking system on the grounds that they are not bankable. This indicates that certain measures should be undertaken so that the potential of microcredit as a tool for poverty and self-employment incentive could be fully exploited, for the benefit of the groups in need and Serbian society as whole.*

KEY WORDS: *poverty, unemployment, microcredit, microfinance institution*

Introduction

When the Nobel Peace Prize for the year 2006 was given to Dr. Muhammad Yunus and Grameen Bank "for their efforts to create economic and social development from below", microcredit was recognised as an efficient tool against poverty. Instead of reconciliation with the world in which poverty is the destiny for a half of its inhabitants² and a trial to beat it with charity, small amount of money should be lend to poor people so they could undertake businesses that generate incomes, allowing deprived to care for themselves and their families. The idea is to help poor people to improve their condition on their own. This "small amount of money for micro enterprise establishment by poor" is known as **microcredit**³.

Grameen Bank has done business for more than quarter of a century providing poor people, particularly rural women, with micro loans. The Bolivian Banco Sol, another pioneer in microfinance industry, has mostly been concentrated on the urban, so called "economically active poor" - entrepreneurs with small business for which the traditional banking services have been out of reach. Besides these two, nowadays there is a great number of other **microfinance institutions** (MFI)⁴ organised in different ways: as non-profit organisations, credit unions, savings and credit cooperative societies, specialized banks, etc. Their experience has shown that poor people can be relied on to repay their loans, and also that financial services could be provided to poor people through market-based enterprises without subsidy. On the other hand, their activities resulted in poverty and unemployment reduction⁵.

* This paper is a part of researching project no. 159004, financed by the Ministry of Science and Technological Development of Republic of Serbia, named: "The Integration of Serbian Economy into the EU - Planning and Financing of Regional and Rural Development and Enterprise Development Policy"

¹ Bojana Radovanović, BA in Economics, Junior Researcher, Institute of Economic Sciences, Belgrade

² "Some 2.7 billion—almost half the world population—live on less than \$2 per day." Source: *The Wealth of the Poor-Managing Ecosystems to Fight Poverty*, United Nations Environmental Programme (UNEP), the United Nations Development Programme (UNDP), the World Bank, and the World Resources Institute (WRI); 2005 p.3

³ What is considered to be "a small amount of money" differs from country to country.

⁴ There should be made a distinction between terms microcredit and microfinance. The later has broader meaning and entails insurance, savings, transfer services, etc., as well as micro loans. Source: Microfinance Gateway; www.microfinancegateway.org;

⁵ Bangladesh Institute of Development Studies (BIDS) carried out an extensive study of the impact of microcredit program using longitudinal data of 3,000 households between 1997–2000. One of the key findings was that "microcredit has a positive and significant effect on poverty status of the program households". The study also finds that members of microcredit

Poverty and unemployment in Serbia

Statistical Office of the Republic of Serbia has undertaken a research analysis on poverty in Serbia and the data were presented in the *Living Standards Measurement Study, Serbia 2002-2007*⁶. Poverty has been analyzed based on the data obtained in the Living Standards Measurement Survey (LSMS) conducted in May 2007. The data indicate that 6.6% of Serbian population is poor. It is estimated that the consumption of the 490000 inhabitants of Serbia (6.6%) is below the poverty line⁷. However, as in most countries, subjective poverty in Serbia was significantly higher than the objective measures showed - twice as many Serbians were subjectively poor compared to the objective assessment⁸.

The most affected categories are: the population from rural areas of South East Serbia, the uneducated and the unemployed, then elderly people (65 and over), as well as households with two and more small children (aged 0-6). The research shows that poverty is strongly correlated with education - the highly educated population is not exposed to poverty risk, and they accounted for a mere 1.7 percent of the poor. Moreover, labour market status significantly affects poverty. The highest poverty risk is experienced by inactive households, as well as households with no employed members.

The processes of transition towards market economy, privatization, bankruptcy, restructuring, downscaling, etc, have led to great number of dismissed workers. On the other side, new work places have not been opened as rapidly so that they could absorb people who lost their jobs and for the new generations of workers. This has led to relatively high unemployment rate in Serbia. According to Labour Force Survey 2007 conducted by Statistical Office of the Republic of Serbia, the unemployment rate was 13.9 percent, while the EU unemployment rate was 7 percent and in surrounding countries it was less than 10 percent (Croatia 9.0 percent, Hungary 7.2 percent, Romania 6.7 percent and Bulgaria 6.9 percent) in 2007.⁹

The unemployment rate for women is 16.5 percent and for men 11.8 percent. It could be noticed that women unemployment is relatively higher. Similar to other countries that have gone through a transition period and experienced high unemployment, young people were most affected by unemployment. Young people (between 15 and 24 years of age) account for 15.5 percent of the total number of population aged 15+. They constitute 6.3 percent of the employed and 24.8 percent of the unemployed. It is clear that youth unemployment is extremely high.

The data unambiguously show that unemployment is one of the main causes of poverty, largely resulting from a low education structure of labour active household members. The reduction of unemployment rate and education attainment would have the largest impact on poverty. However, there are groups of unemployed that do not belong into the category of poor population, but which are still the indicator of unsatisfactory level of Serbian economic development. The possible solution to these serious problems could be helping the poor and unemployed to start a business by providing them with a microcredit.

programs are less vulnerable when faced with crises. Moreover, improvements in other social indicators (child immunization, use of sanitary latrines, and prevalence of contraception) are also more noticeable for microcredit program members compared to non-members." Source: *Scaling up Poverty Reduction, Case Studies in Microfinance*, Consultative Group to Assist the Poor and World Bank Financial Sector Network; Washington, D.C.; 2004; pg. 58.

⁶ *Living Standards Measurement Study, Serbia 2002-2007*, Statistical Office of the Republic of Serbia, The World Bank, Department for International Development, Statistical Office of the Republic of Serbia, 2008.

⁷ Source: *Living Standards Measurement Study, Serbia 2002-2007*, Statistical Office of the Republic of Serbia, The World Bank, Department for International Development, Statistical Office of the Republic of Serbia, 2008.

⁸ "To define subjective poverty, we used respondents' answers to the question about the minimum funds a household requires to cover its basic needs. In order to compare the relation between subjective and objective poverty, the poverty line defined according to consumption of population was applied to subjective assessment of respondents concerning the minimum amount required to cover basic needs." *Living Standards Measurement Study, Serbia 2002-2007*, Statistical Office of the Republic of Serbia, The World Bank, Department for International Development, Statistical Office of the Republic of Serbia, 2008, p. 13.

⁹ The definition of unemployment by the Labour Force Survey is based on International Labour Organization definition and therefore Serbian unemployment rate is comparable.

Microcredit for poverty and unemployment reduction in Serbia

Microcredit owes its success to the fact that there is potential in every human being. No matter of which educational level, gender or age one is, everyone is capable of using its talents and skills in lucrative way.

“Miroslav Spasić having lost his job in a cable factory took the severance pay from his work and a loan from Micro Development Fund (microfinance focused non-governmental organization) and invested the money in a second hand plane in order to start up his own business. Today, he has his own production of fences, protection bars for boutiques and shops, flower holders. His fences are of high quality and of esthetical appeal. He plans to employ more workers and extend the business soon”¹⁰.

“*Lastavica Catering Service Ltd* is a fully independent and sustainable NGO - owned social business. It started as an income generation initiative for refugee women supported by several humanitarian organizations, while today, it is a successful small enterprise that has 12 fully employed women. The catering company *Lastavica* provides regular monthly income for its employees – women that are marginalized in their status: refugees, Roma, long-term unemployed, undereducated or inadequately trained”¹¹.

These two examples illustrate successful stories of once unemployed, today independent individuals. The first example shows good practice in using micro loan for self-employment by a person who lost his job. In the second, the group of marginalized women was financially supported to establish a business. Their business has been developed and today enables them to earn their living with their own efforts and work. The initial capital for business establishment was not provided by micro loan, but by a donation. Nevertheless, the success of *Lastavica* indicates that it would have been able to repay a micro loan back, if it had been provided with some. What are the options for other poor and/or unemployed to take microcredit in Serbia?

There are different financial and non financial institutions, ranging from non-profit and public agencies to private entities, which provide microcredit and donations for unemployed and other individuals, poor families, rural households and micro and small enterprises¹². The organizations which operate in public sector are the following: Development Fund, National Employment Service, Guarantee fund, Fund for financing increased employment in the economically underdeveloped and distinctly migrant regions. In private sector, there are different banks, leasing companies and investment funds dealing with microcredit. There is also a number of NGOs, humanitarian organisations and donators operating in non-profit sector.

Analyses show¹³ that public institutions' microcredit is not available during the whole year, but periodically in accordance with the institution's annual funding programme. It is not possible to rely on whether and when it will be provided. The procedure for applying is rather complicated and centralised, with a small or no influence of the local institutions on decision making process. Except of the Serbian National Employment Service, which has branches all around the country, other institutions are out of borrower's living places. The credit purpose is strictly determined and usually is not compatible with the applicants' needs. Advisory service is low and rather limited on formal requirements regarding the application process. Caused by centralised procedure, the costs are disproportionably high. Nevertheless, the credit price is subsidised below the inflation rate, and therefore is highly affordable.

On the other hand, micro loans provided by private sector are highly available – credit supply is high and always present. The net of microcredit institution's branches is rather dense and territory is covered

¹⁰ Source: www.mdf.org.yu

¹¹ Source: www.lastavica.org.yu

¹² Igor Brkanovic, Milan Lalovic, Aleksandar Lakic, Srdjan Tilger, *Study on Micro-finance Support to Start-up in Serbia*, International Labour Organization, Belgrade, 2007.

¹³ Igor Brkanovic, Milan Lalovic, Aleksandar Lakic, Srdjan Tilger, *Study on Micro-finance Support to Start-up in Serbia*, International Labour Organization, Belgrade, 2007.

well. In order to apply for a micro loan a client is obligated to be a bank's comitent. Some banks give technical support in cash-flow analyses, business plan development, etc. which is the necessity for risk assessment, but there is a lack in overall advisory service etc. Microcredit provided by the private sector is rather unaffordable – interest rate is above the profit margin.

The amount of the available resources provided through non-profit organizations is limited and highly below demanded. Since employees visit clients in their place and establish direct communication the loans are “at hand”. Credits are designed in accordance with the client's needs. Advisory services are highly developed – cash-flow projection, financial management, business information provision, connection. Credit price is relatively high, but in the profit margin framework. However, these institutions encounter various problems, such as the inability to access foreign capital. The main source of capital are donations, so that the activities of these organizations are often limited with regard to loan beneficiaries (one of conditions for granting donations is that the future beneficiary belong to some marginalized group, which, although it is good, prevents loans to be offered to other groups of people who need these funds as well).¹⁴

Another important issue is the legal framework for microcredit industry in Serbia. The legislation which refers to public institutions is clear and precise. The public institutions are allowed to provide microcredit to targeted groups when it is in accordance with their strategy and aims. On the other hand, legislation in this field is arranged in favour of banking sector and forbids establishment and work of microfinance institutions in private or non-governmental sector. In other words, there is not a law which recognises microfinance institutions other then commercial banks.

It could be concluded that the options for the poor and/or unemployed to take a microcredit in Serbia are limited. In other words - microcredit supply does not meet the needs of its clients: microcredit is either very expensive or provided in insufficient amounts, or is not compatible with the applicant intentions for its use. The poor and unemployed inhabitants of Serbia do not have appropriate opportunities for taking a micro loan and being considered as of the high risk many groups are being kept outside of banking system. Moreover, lack of legal framework degradates sustainability the existing organizations and prevent others to develop a business in this sector.

What should be done?

As a highest priority, certain measures (such as passing a Law on Microfinance Institutions) should be undertaken so that the legal obstacles could be overcome and the infrastructure for founding microfinance institutions created. However, microfinance could be attractive for wider number of organizations only if it is perceived as a profit-making industry or sustainable activity. As it was briefly presented in the introductory passages, the micro loans have been repaid regularly, and even the organizations providing microcredit to the poorest operate on lucrative bases. Nevertheless, it should be underlined that their credit landing models are created in accordance with the socio-anthropological and economic characteristics of the particular country.¹⁵ Respecting the differences among the cultures, it would not be plausible to conclude that successful models elsewhere would be successful in Serbia as well. In order to enable adequate credit landing model definition, there should be undertaken certain researches of sociological, cultural and economic aspects of Serbian society. Consequently, the poten-

¹⁴ Milan Lalovic, Zoran Skopljak, *Analysis of Regulatory Obstacles to SME Development in Serbia*, Report from TAIEX Workshop, MEER – Department for SME and Entrepreneurship Development, Belgrade, June 2008.

¹⁵For example, Grameen bank operates as following: a bank unit is set up with a Field Manager and a number of bank workers, covering an area of about 15 to 22 villages. The manager and workers start by visiting villages to familiarise themselves with the local milieu in which they will be operating and identify prospective clientele, as well as explain the purpose, functions, and mode of operation of the bank to the local population. Groups of five prospective borrowers are formed; in the first stage, only two of them are eligible for, and receive, a loan. The group is observed for a month to see if the members are conforming to rules of the bank. Only if the first two borrowers repay the principal plus interest over a period of fifty weeks do other members of the group become eligible themselves for a loan. Because of these restrictions, there is substantial group pressure to keep individual records clear. In this sense, collective responsibility of the group serves as collateral on the loan. Source: Grameen Bank Web site:

http://www.grameen-info.org/index.php?option=com_content&task=view&id=43&Itemid=93

tial of microcredit as a tool for poverty and self-employment incentive would be fully exploited for the benefit of the groups in need and Serbian society as whole.

References

Brkanović Igor, Lalović Milan, Lakić Aleksandar, Tilger Srđan, *Study on Micro-finance Support to Start-up in Serbia*, International Labour Organization, Belgrade, 2007.

Lalović Milan, Skopljak Zoran, *Analysis of Regulatory Obstacles to SME Development in Serbia*, Report from TAIEX Workshop, MEER – Department for SME and Entrepreneurship Development, Belgrade, June 2008.

Group of Researches: *Living Standards Measurement Study, Serbia 2002-2007*, Statistical Office of the Republic of Serbia, The World Bank, Department for International Development, Statistical Office of the Republic of Serbia, 2008.

Group of Researchers: *The Wealth of the Poor-Managing Ecosystems to Fight Poverty*, United Nations Environmental Programme (UNEP), the United Nations Development Programme (UNDP), the World Bank, and the World Resources Institute (WRI), 2005.

Group of Researches: *Scaling up Poverty Reduction, Case Studies in Microfinance*, Consultative Group to Assist the Poor and World Bank Financial Sector Network; Washington, D.C.; 2004

www.microfinancegateway.org

www.mdf.org.yu

www.lastavica.org.yu

www.grameen-info.org

www.bancosol.com.bo

Development and Features of Female Self-employment in Bosnia-Herzegovina*

Mirjana Radović-Marković¹, Snežana Lekić²

ABSTRACT – Transition period, experienced by many countries, has been reflected on the loss of the job security reckoned to be the utmost achievement of the socialist and non-market economies. Instead, the labour market trends and changes during 1990s caused many employees to lose their jobs not only as the surplus work force but as an economic surplus as well. At the same time, new job opportunities decreased, which was primarily reflected on the female labour. Therefore, self-employment has become the main source of new employment that, at the same time, contributes to unemployment rate reduction in many countries. One can conclude that the level of female entrepreneurs' participation in economic development of transition countries is largely related to the conditions in which they work, to support provided by their state, to development of legal regulations and to the rate at which the economic reforms are implemented. With respect to this, one can make clear distinctions between transition countries in which reforms are implemented more slowly and those ones in which such process is carried out more quickly. It is hard to generalize and make a sole conclusion for the most of transition economies. Therefore, the authors specifically chose to analyse and examine the example of Bosnia and Herzegovina, which with its specificities differs from some other countries in the region. There is a strong synergy in Bosnia and Herzegovina between a social role of the woman, her education, profession and position in labour market.

KEY WORDS: transition, labour market, self-employment, job opportunities, work force, part-time employment, unemployment rate, female entrepreneurship, Bosnia and Herzegovina

Factors determining the growth of self-employment in Bosnia and Herzegovina

Most of the East European countries in the process of transition show certain specific features with respect to development of entrepreneurship, and particularly development of a female entrepreneurship. Namely, small and micro businesses became an important source of growth in new employment in these countries, although these potentials have not been fully utilized yet. This unused opportunity particularly refers to women, who despite of their university education and high participation in labour market are becoming entrepreneurs on average in two times fewer number compared to men. This disparity is noticeable in all countries regardless of the level of availability of small and micro businesses in their economies.

Gender asymmetry could be primarily observed at dismissal from work, sectoral changes in employment and job creation in private sector. This might be explained by horizontal and vertical segregation of female jobs, as well as by the position of women in those economies in which the male work force is predominant. In view of that, for many women self-employment turns out to be the only way to achieve a chance of getting a paid job. In other words, most of women opt for self-employment and open micro and small businesses, primarily because of the fact that is the only options to get em-

* This paper is a part of researching project no. 159004, financed by the Ministry of Science and Technological Development of Republic of Serbia, named: "The Integration of Serbian Economy into the EU - Planning and Financing of Regional and Rural Development and Enterprise Development Policy"

¹ Prof. dr. Mirjana Radović-Marković, full professor, Institute of Economic Sciences, Belgrade, Zmaj Jovina no. 12, mradovic@gmail.com

² M.Sc. Snežana Lekić, lecturer, Belgrade Business School-Higher Education Institution of Applied Studies, Belgrade, Kraljice Marije no. 73, snezana.lekic@bbs.edu.yu

ployed, while reasons related to women entrepreneurs in developed market economies are much rarer (a wish for proving themselves in business, the need for independence, a desire to fulfil their business ambitions, to use free time advantageously, perform bigger socialization of women, etc.).

Common trend towards an increase in self-employment in the countries of the ex-socialist block has not bypassed Bosnia and Herzegovina either. A large number of factors influenced this rise. First of all, an enlarged global competition increased pressure on companies to reduce their expenses through much more flexible forms of employment contracts with employees. Attributable to this are also reduced opportunities for formal employment due to low rates of economic growth and the capital-intensive model of economic development. Likewise, development of information technologies and an increasing application of computers at work have influenced that a large number of people choose to work at their homes and to work for themselves.

Despite a large share of the informal sector in the overall labour employment in Bosnia and Herzegovina (Table 1), there are few researches and indicators of such kind. According to scientist F. Schneider (2004)³, in the period between 2002 and 2003, 36.7 % of people worked in the informal sector in Bosnia and Herzegovina, while according to estimates of the Economic Policy Research, that percentage was somewhat higher. However, regardless of such high share of the informal sector in the overall employment in Bosnia and Herzegovina, it was approximate to that one in Serbia and other countries in the region.

Table 1. Rates of employment and unemployment, and share of the informal sector in the overall employment in Bosnia and Herzegovina, in 2001 and 2004

	2001	2004
Employment rate	40.6	44.9
Unemployment rate	15.9	22.3
Informal sector (% of the total employment)	47.7	42.7

Source: LSMS, 2001 and 2004

In the total structure of the self-employed in the informal economy sector in 2004, men's participation was almost twice as much as that of women. This Table also shows that agriculture with its 43 % has the highest participation in the informal sector self-employment whilst the biggest share in the formal sector self-employment is in the sphere of services with their 60 % (Table 2).

In Bosnia and Herzegovina, there is a strong synergy between a social role of the woman, her education, profession and position in labour market.

Data available on the basis of research show the existence of typically female and typically male professions. There are still very deep stereotypes on desirable occupations and professions women or men are more engaged in. Capabilities of the women in Bosnia and Herzegovina to answer the requests dictated by the labour market are considerably limited. There are numerous factors which affect that fact⁴:

- old-fashioned understanding of a role of a woman in a family and society;
- low level of education and level of information of women in rural areas;
- favouring men during employment;
- weak credit rating (high interest rates, low percent of women who are owners of real estate).

³ Schneider, F. (2004), "The Size of the shadow economies of 145 countries all over the world results over the period 1999 to 2003", IZA Discussion Paper No.1431.

⁴ BOSNIA AND HERZEGOVINA GENDER ACTION PLAN, The Labour and *Employment* Agency of *BIH*, 2002.

Table 2. Characteristics of the formal and informal employment in Bosnia and Herzegovina, in 2004

	Informal employment	Formal employment
Total	100	100
Gender		
male	63.7	64.5
female	36.3	35.5
Self-employed	9.9	8.1
Farmers	21.0	-
Economic activity sector		
Agriculture	43.0	2.8
Industry	30.2	37.2
Services	26.8	60.0
Weekly number of work hours	42.5	44.2

Source: LSMS, selectively chosen data in 2004

In most of transition economies, a rise in inequality with respect to earnings that are associated with the level of the informal sector's share in the economy of those countries, which is the case with Bosnia and Herzegovina as well (Rutkowski, 1996)⁵. This inequality of wages is present in the both business sectors.

Table 3. Average monthly net wage in the formal and informal sectors in Bosnia and Herzegovina, in 2001 and 2004

	2001	2004
Average monthly income in KM (Convertible Marks)		
Formal sector	398.7	505.2
Informal sector	331.0	391.4

Source: LSMS, selectively chosen data in 2004

Many researches indicate that women particularly lagged concerning the amount of earnings in comparison with men, which is quite similar to other countries of ex-Yugoslavia too, with a slight exception of Slovenia. These differences can be above all attributed to the type of jobs women perform, their levels of education, lower level of information and poorer professional interrelation. For many women, the informal sector and self-employment have become the only chance for a paid job and employment. Many of them started their own business not even knowing how to manage their dealings, to enhance and develop them, to manage human and financial resources. This reflected to the possibility of their businesses' survival as well as to the amount of realized incomes. However, there have been some breakthroughs concerning this. Namely, there were initiated many activities set out in UN Declaration (2000)⁶ signed by 189 UN member states. One of the signatory countries was Bosnia and Herzegovina, which particularly advocated that discrimination against women should be reduced and position of women in all spheres of their life and work should be improved.

There are also many indicators that development of the private entrepreneurship in Bosnia and Herzegovina has been still facing with certain restrictions of legal and procedural character. Problems refer to corruption and a long period of time needed to register a private firm and collect the required documentation. According to the report of the World Bank, to establish a firm in Bosnia and Herzegovina it takes 54 days on average, which is the longest time in comparison with all countries in the region.⁷

⁵ Rutkowski, J., (1996), "Changes in the wage structure during economic transition in Central and Eastern Europe", World Bank, Technical Paper No. 340

⁶ "The UN and MDGs – a core Strategy", June, 2002

⁷ Doing Business in 2006, World Bank Survey, 2006

Therefore, for development of entrepreneurship in Bosnia and Herzegovina, a stronger state support is indispensable that would be manifested in changing legal regulations and shortening procedures for establishing small businesses as the basic generators and initiators of economic growth in both developed countries of the world and in the countries with transition economies. It is also necessary to provide financial support to future entrepreneurs through microcredit programs and thus make it possible for many educated people who lost their jobs during periods of transition and privatization to enter the entrepreneurship waters and become self-employed. Besides, lots of university-educated people will not stay somewhere stuck in jobs of inferior quality or less paid jobs with no chance of progressing in career, dealing with and less paid jobs in the informal sector of economy. Finally, we may conclude that thus changed forms of employment, which are directly connected to economic development, transition, globalization and raised competition, require better understanding and new ways of conceptualization of the informal sector of economy.

Conclusion

Facing massive unemployment and a deficient social welfare system, the promotion of self-employment and microenterprise became a political priority in Bosnia and Herzegovina. Relative to other countries, Bosnia and Herzegovina still suffers from a weak business environment and high barriers to entrepreneurship, as shown by the World Bank's Doing Business (2005).

With an increased inflow of capital in Bosnia and Herzegovina, provision of financial support to small businesses and implementation of all-purpose reforms in economy and society, we may rightfully expect a more significant growth of private businesses in which women will have a more important role.

There will be also created conditions for general improvement of women's position in society who, in the overall economic misfortune of the countries in the region in the last decade, were in the most affected segment of society. It is also expected that founding a number of women's organizations, and their networking similarly to those around the world, will contribute not only to better interrelation of women, their mutual exchange of experiences and knowledge, but to the creation of a new space for their employment through their joint engagement. In addition, granting microcredits for development of the entrepreneurial activities is of extreme importance for enhancement of self-employment and reduction of unemployment. Therefore, the country specially analyzed in this paper is expected to provide a national strategy for development of self-employment, which should disable putting the sign of equality between the informal sector employment and poverty. Also, better attention should be turned towards women and children's work in the informal economy sector, which is poorly paid and which often exceeds the limits of human business activity. In that way, the issue of discrimination, present in most of the countries of the former socialist block, regarding the equality of earnings and right to equal conditions of working and employment (since women are always the first to be dismissed from a job in the process of company privatization and they find a new job with effort). Besides, adequate education and training programs should be accessible to them to prepare them well for self-employment and autonomous management of business activities, in which way the efficiency of new businesses would be raised and conditions for their further development and survival on market provided. Special emphasis should be given to continuous improvement of work force through lifelong education, in order to decrease differences between transition economies and the developed world and participate justly in the global market competition where knowledge and a good knowledge management are considered as the key factor of successfulness. Taking into consideration all these elements, a good platform for future development of entrepreneurship could be created and a large space for reduction of unemployment rate in these countries opened, as the unemployment rate is among the highest in the countries with transition economies, which was shown by this research.

References

- Radovic-Markovic, M., (2006), "ENTREPRENEURSHIP - Theoretical and practical guide on all aspects for starting successful small business", Link group, p.p. 306, Belgrade
- Radovic-Markovic, M., (2005), "Women and small business – from idea to realization", Poslovni biro, Belgrade, p. 164
- Rutkowski, J., (1996), "Changes in the wage structure during economic transition in central and Eastern Europe", World Bank, Technical Paper No. 340
- Schneider, F. (2004), "The Size of the shadow economies of 145 countries all over the world results over the period 1999 to 2003", IZA Discussion Paper No. 1431.
- "The UN and MDGs – a Core Strategy", June, 2002.

Women and Informal Activities in Transitional Countries and Serbia: Old and New Views*

Mirjana Radović-Marković¹

ABSTRACT – *In this paper, the author analyzes the growth of the informal economy in countries in transition with a focus on Serbia. The author concludes that the existence of the informal economy can no longer be considered as a temporary phenomenon. It has proven to be a major source of employment and income generation for the poor, and thus understanding the informal sector provides valuable tools in the fight against poverty. At the same time, women in the informal sector face significant obstacles: low pay; lack of access to such resources as capital, education, and training; and exclusion from the policy-making process. Because that, the author also considers the battle against discrimination in relation to women workers. The final section of this paper presents author's approach to SME development policy and integration of Serbia into European Union (EU). She concludes that Serbia will try to be integrated into EU and the global economy as soon as possible, because it is the best solution for the country to decrease the gap with developed countries.*

KEY WORDS: *women entrepreneurship, countries in transition, informal economy, gender, discrimination, development, integration, European Union, Serbia*

Introduction

Transitional countries have experienced some of the world's most dramatic societal changes within a short time and mushrooming of informal activities has been a key element in these shifts. The transition progress converged with globalisation and aspiration for EU integration in the late 1990s and due to the emergence of abundant cheap labour and deregulation of labour markets, the region became a target for production relocation, out-sourcing and sub-contracting for Western European markets. Transition period through which economies of many countries go, greatly reflected on the loss of job safety, which was considered as the greatest achievement of socialist and non-market economies. Namely, market movements on the labor market during nineties, influenced many people to lose their jobs not only as technological surplus, but also above all as economical surplus. At the same time, the job opportunities decreased, which was primarily reflected on women's work force. The average size of the hidden economy in the 1990s in transition countries was more than twofold than that of the developed market economies. This difference persisted and even increased in the 2000s. Women exploit this situation by creating self-employment as private tutors, translators and assistants to foreign companies (Musiolek 2002).

Definition of informal sector and informal workers

The growth of women's share of the labour force, and particularly of mothers' labor force participation, has fundamentally changed the way families function, the relationship of families to the workplace and to schools, and women's economic opportunities. In a period of just 50 years, the rate at

* This paper is a part of researching project no. 159004, financed by the Ministry of Science and Technological Development of Republic of Serbia, named: "The Integration of Serbian Economy into the EU - Planning and Financing of Regional and Rural Development and Enterprise Development Policy"

¹ Prof. dr Mirjana Radović-Marković, Institute of Economic Sciences, Belgrade, Zmaj Jovina 12, mradovic@gmail.com

which women enter the labour market increased. Women have made significant changes in their economic roles.

Men and women entrepreneurs are found in two distinct sectors:

- the formal or traditional mainstream sector,
- the informal or marginalized sector.

An informal sector that operates outside the formal sector is very active in transitional economies. Namely, high rate of unemployment, low wages and non-payment of salaries have led to the rapid growth of informal employment. Examples of informal work in Eastern Europe are multiple job holding that combines employment in the remaining public sector (e.g. teachers and doctors), with other activities because of low purchasing power. The informal economy consists of a range of informal enterprises and informal jobs. Jobs in the informal sector are at first sight, invisible, like hotel jobs, restaurant jobs, jobs in major cities' streets (fruit and vegetables salesmen and saleswomen, refreshing drinks salespersons, etc.). According to the definition of informal sector, given by the International Conference of Labour Statisticians (ICLS), "*informal sector of economy consists of unregistered companies which, apart from business owners, continually employ other people (often family members without salary) who work without contract and without right to social and retirement protection.*" In other words, informal sector is a sector of economy in which companies operate past existing regulations and in which there are no legally and economically protected employees. The 'informal' or 'shadow' economy has included an extremely wide spectrum of activities.

Even though these jobs are beyond the reach of law, still those shouldn't be associated with criminal activities. Informal workers are waged workers who work without contract or social security coverage. Actually, in economic crisis, informal economy has become market wide open for personal work and providing services.

According to scientist Charles Handy, an informal economy may appear in different forms, such as:

- Black economy** – *illegal market of small businesses and people who find jobs for themselves (illegal economy)*
- Brown economy** – *personal services and home jobs are at the edge of formal economy*
- Gray economy** – *which is completely legal, but doesn't take into account work at home and volunteer work in which every one is engaged in certain sense.*

Here we can distinguish three basic types of jobs:

- Jobs that are paid and include full-time employees, but which are not registered
- Marginal jobs which include so called pocket money, which may be, but usually isn't registered
- Jobs which include all activities performed freely in gray economy.

Characteristically for the most of the transitional countries is the increase of the black economy, especially in developing and countries in transitions. However, in terms of black economy and its increase, one should make clear distinctions between providing unregistered personal services and activities related to criminal.

The measurements of informal economic activities in transition countries

The measurements of informal economic activities in transition countries have been undertaken since the late 1980s. The estimation has been performed separately for time points in two periods: the first include 1990/00 and 1994/95 and the second all other time points from 1999/2000 to 2004/05. The only difference was in the measurement of the causal variable: the state regulation. The unweighted average size of the informal economy in 23 transition countries in 1990/91 was 31,5 %, and rise to 34,6% of official GDP in 1994/95. Then the average size of the informal economy in 25 transition countries is further rising: to 38,1% in 1999/00, to 39,1% in 2001/02 and to 39,5% in 2003/04. In 2004/05 the average size of hidden economy has decreased to 38,8% of official GDP. The fastest growth of the hidden economy in transition countries was in the 1990s (measured in percentage points

annually). These figures point out that informal economy growth was fast at the beginning of transition process and then this growth was reduced in the later stage of the transition process. Women remain the main source of underestimation of the informal sector contribution for at least three reasons, namely:

They are engaged in those informal activities which are the most difficult to capture and measure, such as, home-based work or outwork.

They are engaged, more than men, in second or multiple jobs, especially in rural areas,

Their production activities are hidden behind the less “valuable” status of family worker in agriculture or the hard-to-capture status of independent road vendor. In these types of work, their contribution to the commercial margin is limited, and their value added in the transformation process is overlooked (Charmes, 1998).

Ibeh also concluded that the informal work is “necessity-driven” in developing and transition economies but “opportunity-driven” in developed economies where there are soft loans and credit facilities for business start-up, but the fact still remains that women in all economies remain somewhat marginalised in their contribution to the informal sector of their country.

Old and new views of the informal economy

The informal sector is a product of rational behaviour of entrepreneurs that desire to escape state regulations (The World Bank Group 2007). It is growing in developing, transition and developed countries and taking on new forms. (Zoya A. Khotkina, 2005) Informal sector is a huge source of employment for women in transition countries and it is greater source for women than for men. Patterns of informalization differ from country to country. Workplaces in the informal economy have shown a rather pronounced gender segregation – horizontally (various types of work) and vertically (different statuses).

Table 1. Old and new views of the informal economy

The old view	The new view
The informal sector is the traditional economy that will wither away and die with modern, industrial growth.	The informal economy is ‘here to stay’ and expanding with modern, industrial growth.
It is only marginally productive.	It is a major provider of employment, goods and services for lower-income groups. It contributes a significant share of GDP.
It exists separately from the formal economy.	It is linked to the formal economy—it produces for, trades with, distributes for and provides services to the formal economy
It represents a reserve pool of surplus labour.	Much of the recent rise in informal employment is due to the decline in formal employment or to the informalisation of previously formal employment relationships
It is comprised mostly of street traders and very small-scale producers	It is made up of a wide range of informal occupations—both ‘resilient old forms’ such as casual day labour in construction and agriculture as well as ‘emerging new ones’ such as temporary and part-time jobs plus homework for high tech industries.
Most of those in the sector are entrepreneurs who run illegal and unregistered enterprises in order to avoid regulation and taxation.	It is made up of non-standard wage workers as well as entrepreneurs and selfemployed persons producing legal goods and services, albeit through irregular or unregulated means. Most entrepreneurs and the self-employed are amenable to, and would welcome, efforts to reduce barriers to registration and related transaction costs and to increase benefits from regulation; and most informal wage workers would welcome more stable jobs and workers’ rights.

Work in the informal economy is comprised mostly of survival activities and thus is not a subject for economic policy.

Informal enterprises include not only survival activities but also stable enterprises and dynamic growing businesses, and informal employment includes not only self-employment but also wage employment. All forms of informal employment are affected by most (if not all) economic policies.

Source: Martha Alter Chen, (2007), "Rethinking the Informal Economy: Linkages with the Formal Economy and the Formal Regulatory Environment", DESA Working Paper No. 46, page 5.

"Classical" informal work involves cross-border trade, craft workers, food processing, home-workers and home-based workers. In many transition economies, workers in the informal economy, domestic workers and home-workers are outside the scope of protective legislation while other workers are deprived of effective protection because of weak labour laws. This is particularly true for small enterprise workers, which account for >90% of enterprises in many countries, with a high proportion of women workers (ILO 2005).

Informal economic activity in Serbia

Transitional period in many countries like Serbia is reflected on the loss of business security which is considered as the largest achievement of the socialistic and subsistence economy. Instead, movement and changes at the labour market in the 90s influenced that many employed people have lost their job, not only as technical redundant labour, but as economic redundant labour as well. At the same time, opportunities for new employment decreased and that situation reflected employed women to a great extent. During the 90s, the largest unemployment rate was in South Eastern Europe countries, like Bosnia and Herzegovina and Macedonia (around 40%), Croatia and Yugoslavia (between 22%-26%). From 2000, due to privatisation and entering Serbia and Montenegro in transitional processes, the unemployment rate increased more and more. While in Serbia and Montenegro this rate was 21,6% in 2006 in the countries of the Eurozone, which in 2006 included 12 EU members states, the unemployment rate was 7,5%. Unemployment rate of women in Serbia was significantly larger (22,8%) comparing to man (18,5%) in 2006.

In the structure of unemployed persons, women had also the largest share with 54,03%. In Montenegro, unemployment rate of women according to statistical data in 2006 was 30,1%, and for men was 29,6%. The largest numbers of unemployed people are the ones with finished high school and university. People with this diploma are 61,92% of the total number of unemployed women. Unemployment affects specially women over 50 year of age and it is very difficult and slow for them to find a job. In Montenegro at the end of the October 2006, there were 74.820 unemployed people, from that number 33.582 were women and 41.238 were men. At the end of December 2006, Serbia had 916.257 unemployed persons. 191.864 were older than 50 years of age. Among them more than 83.700 were women where large number of women did not have working experience or did not have at the field in which they are educated.

Unfortunately, modern employers have no interest for them. There are many reasons for this large rate of unemployment. If we take into consideration that women over decades constitute those segments of population which have largest percent among unemployed persons and that they are waiting in average more for a job that men do, and that because of some unwritten rule in crises in economic, social and political situation they are losing their job and source of income. It is easy to find explanations for this extremely hard position of women which especially culminated in the last ten years. Those women who were in the process of work in mentioned aggravation where working in those branches which were less profitable or they were working in grey economy. Low family budget often did not allow them to start their own business with their own financial asset or with their savings that women are using in the large number for starting their own business. Thus, here is not about the jobs that they are doing but is about of the quality of these jobs.

Large number of women that succeeded to start their own business and to be self-employed did not have enough knowledge to run those businesses so the businesses soon failed. Also, they did not have support from the society and they did not have tied credits or loans, which effected on impossibility to realise their entrepreneur's and manager's potentials in practice. Thus, large numbers of women were satisfied with marginalised jobs in non formal economy or working at non managing positions at state or public companies. This could also be explained with horizontal and vertical segregation of women jobs, but also with position of women in these economies where men are dominant.

A high level of informal economic activity is characterised for Serbian economy. Calculations based on LSMS (Living Standards Measurement Survey) suggest that informal employment accounted for 31 and 35 percent of total employment in 2002 and 2003, respectively. Accordingly, Serbia has one of the highest shares of informal employment in Europe. The 2003 Poverty Reduction Strategy Paper for Serbia estimated that about one million people in Serbia in 2002 were involved in the informal economy (IE), which represents a little less than one third (30.6 percent) of those who actively participated in the labor market. Apart from this, 10.8 percent of the persons that had a main job in the regular economy had an additional job in the IE. Those involved in the gray economy represented 42 percent of poor employees in 2002. Recent research suggests that the real cost of the informal economy to governments, is the cost of programs to help the "informal poor" (Djankov, Lieberman, Mukherjee and Nenova (2003). *Because that the existence of the informal economy can no longer be considered as a temporary phenomenon. It has proven to be a major source of employment and income generation for the poor, and thus understanding the informal sector provides valuable tools in the fight against poverty.*

Creating social-economic programme against discrimination in relation to women workers

In order to avoid all types of discrimination and to start with conducting many activities which are stated in UN Declaration (2000), and which are related to elimination of discrimination towards women and to the advancement of their position in all spheres of life and work it is necessary to create special social and economic programme in Serbia. Creating this social-economic programme, an alternative and real professional access and respond on many problems will be offered, which transition in Serbia is bringing in relation to women workers. For creating that kind of a programme first it is necessary to diagnose the situation, i.e. presenting the current situations and tendency at the labour market. Precise records do not exist, but according to rough estimations large numbers of unemployed women that are over 50 years of age mostly are women with lower level of experts and with small working experience, in this segment of unemployed women. Also, the number of women who do not have working experience at all or do not have it in the profession in which are educated is very low. Unfortunately, for those categories, modern employers are not interested in at all, which will be specially examined using benchmarking this segment of unemployed women. In this context we recommend that public policy must take steps to enforce existing prohibitions on gender and age discrimination. To this end, we call government to:

Publicly denounce gender discrimination in the workplace and commit it to addressing women's and men's unemployment with equal vigor.

Enforce existing anti-discrimination legislation against public and private sector employers who discriminate on the basis of sex and age in employment decisions and establish and enforce penalties for employers who discriminate on the basis of sex and age criteria. In addition, we are argued for establishing new agencies /government and nongovernmental working on these issues. These agencies should help women over 50 to be better networked, as experience shows that many in the 50+ age group lack contacts to find new work. They also should work with employers to increase awareness of the competences of those over 50 and prevent discrimination.

Special emphasise should be placed on life long education of workers in order to decrease differences in comparison to developed countries and to equally participate at the global market

where knowledge and good knowledge management are treating like a key factor of success. Taking into consideration all these elements, good platform for future development of women entrepreneurship should be made and new space for decreasing rate of unemployed women should be opened in Serbia. This will give opportunity to women of this age group, that is marginalised both by employer and by state, because they are not provided with adequate resources, any other support or organising help and assistance in including them in the process of work, so they could feel useful at work, in their families or in the society in all.

SME development policy and integration of Serbia into European Union (EU)

In the field of small and medium-sized enterprises development, the initial framework was given by the adoption of the European Charter on Small and Medium Enterprises by the Western Balkan countries, at the EU - Western Balkan Summit, in Thessaloniki, in 2003. The charter presents the pan-European instrument developed within the Lisbon agenda (long-term development vision of the EU). It resulted in changing policy towards this sector in the countries of the Western Balkans which adopted it. Since then, ten policy guidelines defined in the Charter, have become the main references in the SMEs policy development in the region: education and training for entrepreneurship; more favourable and faster start-up (on-line access for enterprise registration); better legislation and regulations; available capacities (the training institutions providing adequate knowledge and skills, adapted to the needs of small enterprises, including the forms of life-long learning); training and consultations; promotion of on-line access (communication between small enterprises and public administration); promotion of activities of small enterprises on domestic and foreign markets (execution of European and national competitiveness rules); taxes and financial issues; strengthening technological capacities of small enterprises; models of successful e-business activities and efficient support to small businesses; development of stronger and more efficient presentation of small enterprises interests on the professional and national levels. The improved skills and technologies along with the government supported export promotion, present the new orientation in government policy, which will help small and medium enterprises in Serbia to become competitive.

We would like to point out the importance of optimal incorporating of Serbian regions into Trans-European energy, transport and telecommunication infrastructure networks and common market, having in mind that strengthening of the regional economic performances can accelerate the total structural changes and economic development and to decrease great disparities in regional development.

Conclusion

Serbia should focus or continue to focus on the following three issues that could have attracted entrepreneurs to the formal sector, had they believed that formal firms do enjoy these benefits: (i) contract enforcement (especially the functioning of the courts); (ii) access to finance (particularly bank credits); and (iii) clear title to land and real property.

It is expected that the forming of a number of women organizations and their networking similar to others around the world, will contribute not only to better connections between women, exchange of experiences and knowledge, but also to create new space for employment. Besides that, micro credits for development of women entrepreneurial activities is also of great importance for increasing self-employment of women and the reduction of their unemployment, which is the trend everywhere in the world, especially in countries in transition and developing countries.

With greater capital income in Serbia and by providing economic support to small companies, as well as with conduct of general reforms in economy and society, one can rightfully expect significant growth rate of private businesses. In new expected conditions, women businesses will have greater contribution than before. In addition, there will be conditions, which will enable general improvement of the position of women in society, who have in the country's economic misfortune, in the past decade been in the most impacted society segment.

Finally, we can conclude that Serbia will try to be integrated into the global economy as soon as possible. It is entering the period of intensive structural changes and international opening of its economy, first of all, towards the EU and neighbouring countries. Namely, after a long period of stagnation, wars, low economic rate of growth, high rate of inflation (in 1993 it was the highest rate in the world), high rate of unemployment and low national income per capita, Serbia is on path of accession to the EU in the near future.

References

- Alter Chen, M, (2007), "Rethinking the Informal Economy: Linkages with the Formal Economy and the Formal Regulatory Environment", DESA Working Paper No. 46
- Gatewood, Carter, Brush, Greene, & Hart, (2003), *Women Entrepreneurs: Moving Front and Center: An Overview of Research and Theory*
- Fagenson, E. A., & Marcus, E. A. (1991). Perceptions of the sex-role stereotypic characteristics of entrepreneurs: Women's evaluations. *Entrepreneurship Theory and Practice*, 15 (4), 33-47.
- Ibeh, A.M., "DIFFERENCE BETWEEN THE INFORMAL SECTOR IN DEVELOPING COUNTRIES, DEVELOPED COUNTRIES AND ECONOMIES IN TRANSITION" (2007) in the book, "*Gender and Informal Economy-case of Africa, developing, developed and transition countries*", ICEA and Prenticeconsults, Lagos, 60-68 pages
- Kitching, Beverley and Woldie, Atse (2004) *Female Entrepreneurs in Transitional Economies: a comparative study of Businesswomen in Nigeria and China*. In Proceedings Hawaii International Conference on Business, Honolulu, Hawaii.
- Khotkina, Z, (2005), "The impact of macro-economic policies and economies in transition on women's employment, including in the informal sector", United Nations Division for the Advancement of Women (DAW) Bangkok, Thailand, 8-11 November
- Minniti M, and Arenius P, (2003), *Women In Entrepreneurship*, United Nations Headquarters
- Radović-Marković, Mirjana., (2006), "Woman Entrepreneurship and Leaders Abilities of Women and Their Position in the Business - (case study of Serbia and Balkan region)", *International Journal*, Vol. 1, Issue 3., Punjab College of Technical Education, India
- Radović-Marković, Mirjana. (2006), "Perspectives and Possibilities for Small Business Development in Serbia in "New Economy Conditions", The collection «State and Perspectives of Serbian Economy», The scientific gathering at the Institute of the Economic Sciences, Belgrade was organized in July, 225 -231 page
- Radović-Marković, Mirjana. (2007), *The development of female entrepreneurship in eastern european countries with stress on Serbia*. : ACHAKPA, Priscilla. *Gender and informal Economy: developing, developed and transition countries*, Lagos, ICEA and PRENTICECONSULT, pp. 55-61.
- The Entrepreneurship Gender Gap in Global Perspective: Implications for Effective Policymaking to Support Female Entrepreneurship, (2005), CGO Insights.
http://www.simmons.edu/som/docs/centers/insights_22.pdf

Women Activism in Nepal Micro Credit Movement Towards Selfreliants Economy and Happiness

Raghu Bir Bista¹

ABSTRACT – As required women economic activism in society level for materializing Gender Balanced Development Approach in micro credit is made financial tool to tear the rigidity of traditional, conventional and legal gender inequality, discrimination and exploitation. Popularly expansionary of this micro credit intervention can be seen as movement for women activism under women's leadership. This paper basically concerns the relationship between women activism and micro credit movement. This paper discusses qualitatively and quantitatively self reliant of women in Household decision making process, choice and preference and Household income and expenditure. In addition, it quantitatively assesses the externalities of women activism and micro credit. For this paper, data base is secondary character supplied by the survey of Center for Integrated Development Studies Report 2006.

KEY WORDS: women activism, micro credit, happiness, selfreliant, etc

Introduction

Over more than 50 years plan development period, literatures claim development failure as achievement of development struggle and sluggish in Nepal. It is evident of meaningless International support as foreign aid and theoretical endorsement. As consequence, mass poverty, particularly women poverty, incapability and marginality has been a bigger picture portrayed by Human Development Index 2008, Women Development Reports, and Interim Plan (2007-10). Studies have shown it as key development threat. Therefore, women activism is made foci of national policy as well as menu of Interim Plan (2007-10) for poverty reduction goal.

Feministic movement that has been of more than a decade in the post 1990's has established the importance of women's economic activism in household and national economy in Nepal as an integral component of Balanced Development Approach. It was political motivated along with par and parcel of male movement for political gain. It doesn't mean zero Nepalese women activism. Conventionally, they are activism in HH² sector and HH farming agriculture sector but it is not accounted in terms of monetary value. If we study Population Census 2001, a demographic figure of women activism is nearly 82 percent. Therefore, it is not considered. Hereby, women activism in formal sector is accounted. In accordance with Population Census 2001, it is recorded approximately 20 percent. Therefore, feministic movement and women activist claim that women activism in the informal economy should be recognized on the basis of women right. Otherwise, women should be given opportunity of activism in the formal sector. Therefore, Nepalese women are considered as socio-economic marginal and poor sex group having 82 percent demographic size, when women size in demography is 51 percent that is women domination. However, its reflection in the constitution and socio-politics cannot be found as customary and obligatory stature. Therefore, NGO, GO and CBO have conducted feministic movement against women discrimination, violation, marginality, poverty and slavery status not only in

¹ He is Assistant Professor, Post Graduate Program, Department of Economics, Tribhuvan University, Kathmandu, Nepal. He is an editor, Economic Journal of Development Issues published biannually in English. He is associated with Center for Integrated Development Studies. Recently, he is academic representative for distance learning university, Akamai University, USA. His address: Raghu Bir Bista, Post Box No: 9137, Kathmandu, Nepal

² HH is a shortcut of Household

urban centers but also in rural areas since 1990. Many studies have shown that the state plays a critical role, through family and employment policies as well as national tax law, in shaping gender inequality in the economy (Glass and Riley 1998, Gottfried and Kato 1998, Gottfried and O' Reilly 2000, Gustafsson 1995, Pyle 1990). In women activism, critical state's policy role is generalized because state and women activism have interdependence.

We must notice that globalization, liberalization and privatization led dynamic labor market, competitive exchange value of labor and technological revolutionary information accessibility have automatically transferred from traditional and informal labor market of women (or of women activism) to modern, formal and competitive women activism through the expansion and growth of national and international different kinds of alternative opportunity and attractive opportunity cost of labor. This is crucial change in women's economic role in the course of economic development. Therefore, Informal and formal statistics and studies have shown the significance growth of women activism's contribution in household and national economy, its positive role to reduce Gender based violence through economic independence and confidence and to reduce poverty through the growth of household income and involvement in household decision making. Thus, increasing transfer of women activism to formal sector from informal sector or to wage value from barter value with changing state policy and role and change market structure can be found in Nepal. It is supported by the growth of women activism from 22 percent in 1970 to 27 percent in 1995(ES, 1995). Relatively, it is lower than Developed countries but is satisfactorily progressive.

Again in Nepal, Feministic movement in 2006 was a part of political movement for the establishment of Republic Nation through the elimination of Monarchy. The movement has established women rights as 33 percent quota in the constitution in the general election of the country. Therefore, more women could able to represent to women of Nepal in the Parliament and Constitutional Assembly. Thus, women have reached in the constitution formulation and law making. Let's hope it would be helpful to stimulate the growth of women activism.

Women activism scenario

This paper basically concerns women activism, particularly cause and consequence of economic activism as micro credit movement and self reliant led economic happiness. As term, women economic activism is used to women's economic empowerment or women employability of marginal women. Further in this paper, we just use women activism for economic activism to be easy understood.

Relevancy of Women activism in the context of the improvement of Gender Development Index (GDI) and Human Development Index (HDI) is necessarily needed to be seriously attempted at public policy so that Gender Balanced Development (GBD) led overall development can be achieved. It is supplemented by demographic fact of women dominated population and by lower rank in HDI and social indicator than male. World Bank (1991) comments about state of women in Nepal that within the increasing tides of poverty of Nepal, women are the poorest of the poor, a relatively more deprived segment even from among the poor.

As evident, women facts, figures and reports specify categorically women as the poorest of the poor gender. It ridiculously refers to failure of development plan efforts and huge resource allocation. It raises a query whether development can be achieved in the state of deprived mass women. It is never ever possible development perspectives and thinks. May be it is a big debate.

Visiting all through Nepal and analysis of data and information make us surprises that women are economically active. This women activism can be seen in every where as integral component of HH along with Husband and other labor. Why it is not recognized as women activism. It is argued that it is related to informal economy. Here, this paper discusses women activism in formal economy or monetary economy. In depth, a picture of women activism can be seen in monetary economy but it is still unknown about self reliant and independency in decision making process of resource allocation in HH with her choice, preference and utility. Therefore, this is very controversial issue to separate women

activism between formal and informal economy. Without it, we cannot conclude about it and we cannot get reliable facts and figures. Therefore, methodology of studies and reports in their regard are required to be under observation for reliable and validity test before using for plan and policy implication.

This paper uses portray of women activism based on various relevant studies and reports of Acharaya and Benet and Government of Nepal (Population Census (1991), Ministry of Agriculture (1993) and Nepal Living Standard Survey (2004))

The independent women study of Acharaya and Benett...covered all through Nepal through ecological division and sectors as well as women's status based on rights. Its data size was sample based survey. Acharaya and Benett... found that in Nepal, women's economic activity rates even by conventional definitions are estimated to be much higher than those reported in the census data. A scrutiny of regional data indicates a persistent reporting bias in economic activity rates. While the overwhelming majority of mountain 73.6 percent and hill 59.9 percent women were reported as economically active, only about 27 percent of the Terai women were so reported. The report on status of women shows that women in the Tarai were equally active in the economic sphere, albeit invisibly, but that their activities were not reported as being economy. The report is not so clear about women activism in terms of wage and non-wage classification. But it gives picture that woman activism in Himal is relatively higher than in Hill and Terai and women activism in Hill is relatively higher than in Terai. When we observe economic development, we get reverse situation. Terai and Hill are relatively developed.

The government agencies such as National Planning Commission, Central Bureau of Statistics, Nepal Rastriya Bank and Ministries have conducted different level and kinds of survey and studies as required in accordance with the government schedule and target. Three relevant studies are selected here from Central Bureau of Statistics (CBS) and Ministry of Agriculture.

CBS conducted regular Population Census in 1991 all through Nepal through the use of cross sectional HH sampling data survey. Population Census (1991) found that some 82 percent of working women are self employed and 12 percent are wage employed, as compared to 69 percent and 27 percent in the case of men. More than 4 percent of women are unpaid family workers, the only category where women have outnumbered men. Less than 1percent of the workingwomen hold the status of employer. Women's participation in the informal sectors has increased significantly in both urban and rural areas. Vending, petty trade, liquor making and vegetable selling are some of the more common employment ventures undertaken by women. Similar results was found when CBS conducted Nepal Living Standard Survey in 2004 in which NLLS(2004) found men and women's economically active were more than 80 percent. It seems to be positive indication if marginal product of labor is higher. Other wise, it would be subsistence character because of massive agro-opportunity. Its consequence might be critical life. Women's economically active is not noticeable because of its traditional activities. Besides it, significant of non-active women may be a threat. In simple, value of women's active and non-active is not found generally difference in women's status and role.

In 1993, Ministry of Agriculture had conducted the survey study as regular stuff in which MOA (1993) reported that women also play a major role in the livestock rising. Overall, women contribute 70 percent of the labor and up to 26 percent of the farm level decisions in the livestock sub sectors.

In these three studies of the government agencies, existence of massive women activism in informal sector (agriculture, livestock farming etc) is reported. But wage women activism in formal sector (non-agriculture sector) is found significantly small. It is evident that women activism is an integral component of HH economy as well as national economy. This is very interesting status of women activism that also generates a query, *why women's status is recognized as the poorest of the poor, why their productivity is not linked with resource allocation pattern of HH and why women are marginal, illiterate and exploited.* Of course, they are non-waged women activism but it has also economic value, mean and importance. However, its importance is underestimated.

Objectives, data and analytical method

The broader objective of this paper concerned to analyze the structural regime of women *activism* through micro finance in Nepal. Its specific objectives carried out as follows: assess status of women capability and activism through micro finance; observing self reliant role of women for structural change and development, and analyzing happiness status of women in Nepal.

For addressing above objective, the paper concerned three key research questions: a) whether Nepalese women's capability and activism are effective, b) are there effective structural regime based on equity, justice and freedom, c) what is women role towards it, and d) whether Nepalese women carry property of happiness.

This research paper was basically based on the Micro Credit survey 2006 conducted by Center for Integrated Development Studies. In the Survey, there was 68 sample out of 350 population of women involving in Micro credit Program in Lalitpur Districts. In their written permission, the results were used for analysis, discussion and presentation with arguments. In addition, explorative and descriptive research design was applied for data and information collection from the secondary sources. Government Agencies (Ministry of Women, Children and Social Welfare, Ministry of Finance (MOF), Women Cell, Department of Women), Centre Bureau of Statistics (CBS) and National Planning Commission (NPC) were used first rank sources. International Agencies such as World Bank Publication, Asian Development Bank publication, UNDP, UNICEF and Action Aid were used for second rank sources. Relevant different NGOs studies and reports, independent studies, Newspaper and websites were used third rank sources.

Findings, interpretation and discussion

Intervention measure context

Nepal accepts politically and socio-economically to all UN resolution to protect women's right and empowerment. In all development paradigm of national plan, women activism is a major menu as an integral component of development. In this course, micro credit has been initiated in the post 1990's development module as major development intervention through collectivism in development action, behavior and structure. After Nobel laureate Prof. Ynush's micro credit revolution in Bangladesh as a human right, access to micro credit program has become popular as an effective development program although Nepal initiated Productive Credit to Rural Women (PCRW) in the Sixth Plan (1975-80) for women activism. Since the early 1980's, the policy makers and planners have become acutely aware of the economic significance of women's productive activities and the nature of their contribution of income generation. It has been firmly established that women in Nepal are vital and productive contributors to the national economy but their access to knowledge, skills, resources, opportunities and power still remain rather low (Shtrii Shakti, 1995). Then, it has achieved acceleration.

In Nepal, women are 9.2 million, 50.13% of total population of 18.5 millions (NPC: NP: 1998). Data of women shows that women can play multidimensional role to overall development of the country. But the contribution of women to overall development of the country is very unsatisfactorily level because Nepalese Women are still found suppressed, exploited, neglected and forced to live insecure life caused by illiteracy, ill health, poverty, orthodox traditions and discriminatory legal system (NPC:NP: 1998)

To empower women and reduce gender inequality, HMG has launched various programs such as PCRW program. PCRW program was introduced in 1982 in five of Nepal's 75 districts. It has now expanded to 67 districts. To increase access of rural women to economic resources, Production Credit for Rural Women Program (PCRW) was carried out in 621 VDCs and 10 municipalities of 67 districts (NPC: NP: 1998). It has been assessed as one of the most successful program for women in Nepal. As of 1995, PCRW had mobilized 56,950 credit groups. The Women Development Division (WDD) of the Ministry of Local development has implemented PCRW program. At VDC level, women workers

implement it. The Nepal Rastriya Bank through the agricultural development Bank, Nepal Bank and Rastriya Baniya Bank canalize credit.

The development of PCRW was based on the rationale that there are clear links between women's ability to earn income, the use of that income for the welfare of the family, and women's status within the family and communication (NPC and UNICEF: 1996).

The basic objectives of PCRW is to improve the social and economic status of women by providing credit facilities with which to undertake loans for income generating activities based on the group collateral (NPC and UNICEF:1996).

Classification of PCRW

Observations show that there are three categorical PCRW programs such as GO Initiative PCRW, INGO and NGO initiative, and User's Self initiative. Thus, massive initiatives have taken for women activism. Distinction of PCRW models, financial sources and sustainability among these can be seen only institutional initiatives and distinctions. Otherwise, its process, module, structure, system and destination are commented nearly similar.

Module of PCRW begins from the formation of small women groups scattered in VDC. The committee formation is followed in these women groups for its proper function under the leadership. Then after, training to how to conduct meeting, writing minutes and letters and keeping saving accounts are provided. Besides it, there are organized multi level advocacy programs on different women issues for their leadership development, entrepreneurship as well as awareness so that self decision can be taken in Household and Society. Simultaneously, saving and credit programs for productive activism are made functional. Thus, women activism through micro credit and collectivism as marginal people's right is aggressively followed.

Micro credit and decision making process

Demography of rural women is 76 percent (ES, 2008). This size of demography carries homogeneous characters of discrimination, guilty feelings, fatalistic, spiritual, emotional, traditional value carrier and illiterate. Women social behavior and practices is based on patriarchal system. Therefore, women role on decision making process of household and society is not well practiced, although her informal role lies in every dimension. This can be said male hegemony in Eastern World and Hinduism. Rare cases can be found as women hegemony in matrimonial system. It doesn't mean women as irrelevant. Of course not, Hinduism observes women as Glory, Power, Dignity and Pride.

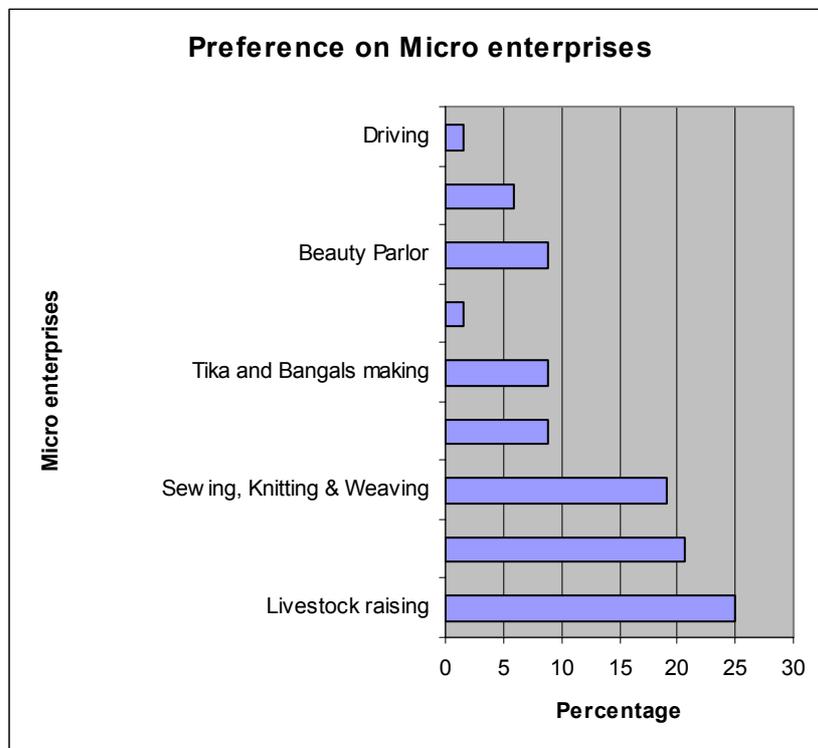
Micro credit instrument through PCRW motive women first of all to join in the mainstream of women activism through different activism. They have to take a decision within the committee on the sake of credit outflow and saving as well as different programs. Such practices have significantly changed women activism in HH and the society with knowledge of women right, information, good talking, forward looking and confidence. Therefore, in the survey of Center for Integrated Development Studies (2007), approximately 95 percent women have ability, experience, role and involvement in decision making process of HH and the society after the involvement in PCRW.

Self reliant in preference, choice and utility: micro entrepreneurship

Target of PCRW is to empower socio-economically to illiterate, exploited, discriminated, Gender based violated, poor and marginal so that women poverty mass can be reduced for balance development led overall development. Data shows us a picture of their rural and agricultural background. In the survey, mass preference and choice on entrepreneurship was found micro enterprises in which mass preference went to agro based micro enterprises such as livestock farming (25%) and vegetable farming and processing (20.6 %). It was followed by skilled based micro enterprises such as sewing, kitting and weaving(19.1%), candle and dhoop making(8.8%), Tika and Bengals making(8.8%) and

food processing (pickle, chips etc)(1.5%). Instead of service oriented micro enterprises, 83.5 percent women had preferred only production micro enterprises, particularly agro based and then skill based, which are HH character.

Graph Table 1. Preferences on micro enterprises



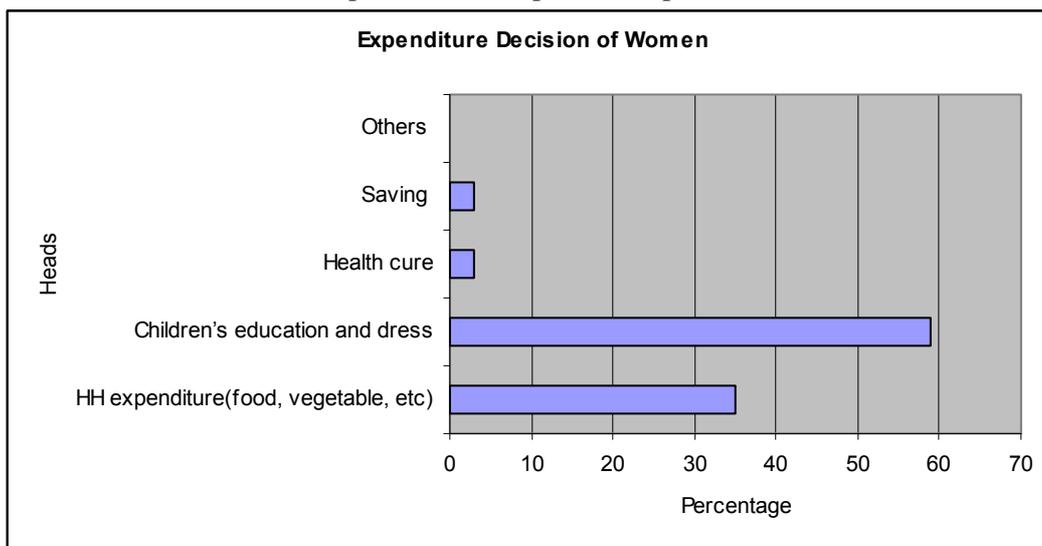
Such picture of preference and choice indicate three key things: they need their economic activism for extra income generating in HH for formal involvement in HH economic activities, resource allocation and distribution so that its HH utility will maximum for a good life, they time preference is only for using leisure time when we see daily time chart of women activities and they prefer for confidence building, social status and aware for their own rights and independent decision making. Happiness of women can be found in the boundary of HH with economic prosperity, emotional and spiritual life.

Self reliant in HH income and expenditure

Based on CIDS survey 2006, HH income and expenditure were applied as analysis of HH behavior, structure and level. In rural areas, HH income pattern, structure and level are traditionally patriarchal system as well as agriculture based (farming, livestock farming etc). Here Adam Smith's the so called invisible hand; market did not work because of barter exchange system. Therefore, behavior of HH income and expenditure was natural phenomenon, God's sake. HH income was self sufficient and independent character, although State's public utilities (road, clean drinking water, electricity, school, health facilities etc) could not be found as required to the citizen for social security, except well documentation. It was not more influenced by non-agriculture production as well as materialistic. There was a scarcity with HH budget deficit. In such poverty, almost Nepalese are obliged to be survival.

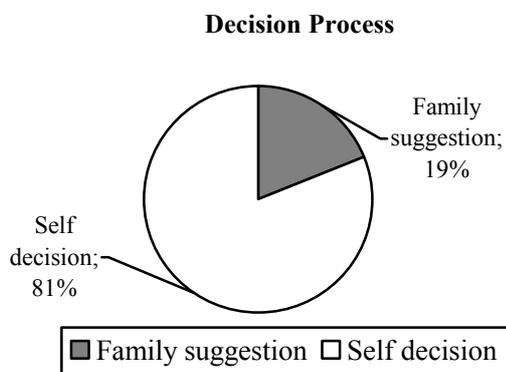
PCRW provided alternatives through micro credit and collectivism. Women had earned alternative incomes from their alternative micro enterprises. There was a query about male's hegemony attitude, behavior and status. In the survey, it was helpful to HH expenditure pattern such as HH expenditure (35%) and Children's education (59%). It indicated positive impact on HH expenditure and income.

Graph Table 2. Expenditure patterns



Decision on expenditure was important for women activism and role in HH. Resource rules out in HH. Women became a source of resources after doing income generating activities. Women had a choice to decide how to utilize these resources. She could spend independently it for her sake. Otherwise, she had a choice to allocate it in the family for HH expenditure. The survey shows that women (81%) used all these resources independently for family and children’s expenditure. In simple, it indicated the growth of women’s confidence level and decision power in HH for resource generation and allocation in the course of HH benefit. Therefore, women activism had positive impact on decision making process and expenditure.

Graph Table 3. Decesion and Expenditure



Decision making reflects degree of confidence level of women. The survey measure the confidence level of women. It reveals 100 percent women having confidence and happy for their decision on expenditure. Women empowerment comes from women activism.

Table 4. Decision on Expenditure: Right or Wrong

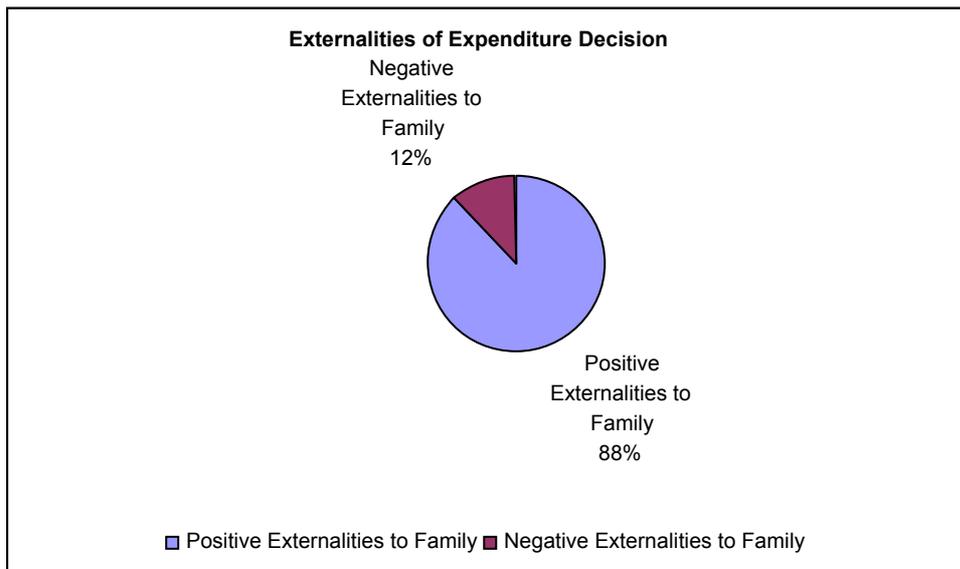
Decision on Expenditure	Total	%
Right	68	100
Wrong		
Total	68	100

Source: CIDS survey, 2006

Women activism, externalities and happiness

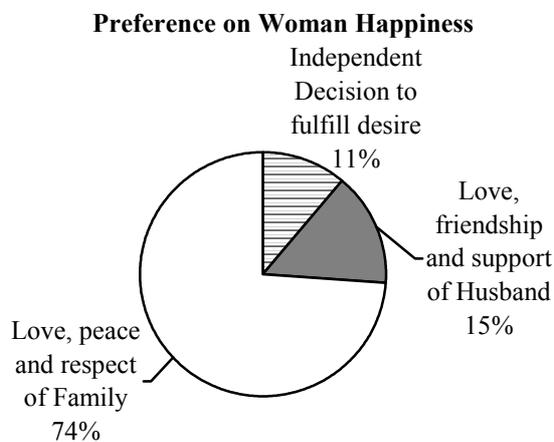
Women activism contents either positive or negative externalities towards happiness in the present HH structure and social norms, values and system. Its consequence is very important to HH peace, love and happiness. The survey has found that there were positive externalities to family (88%), except few families (12%). It means that women activism had benefited HH economic activism, sufficiency and happiness through encouraging male and other members for alternative economic activities. Thus, male socialization and gender neutrality would play important role to improve gender equality.

Graph Table 5. Women Activism and Externalities



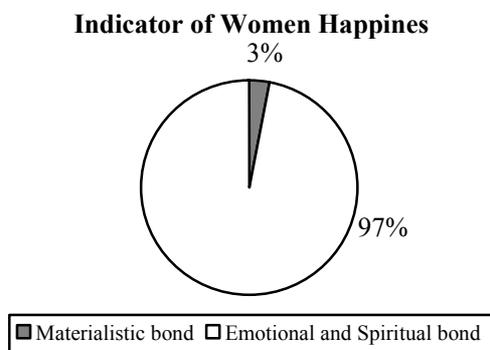
Life's destination is happiness from whatever its measures such as materialistic or non-materialistic. Human activism is only searching human welfare and happiness in which conductions, either in prosperity or scarcity. Therefore, women happiness definition is an important. The survey found that women loved family happiness (74%), followed by husband and wife happiness (15%). It indicates rural women are family nature, like as tradition.

Graph Table-5A. Women Happiness



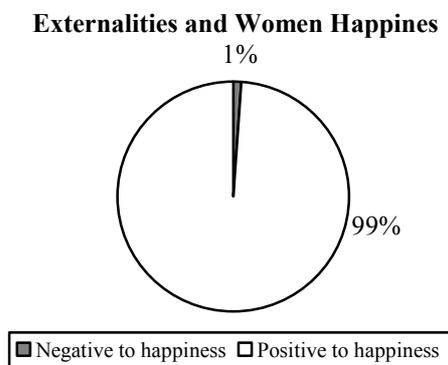
There are different types of happiness such as materialistic and spiritual happiness. The survey has found that almost women liked to get emotional and spiritual happiness, rather than materialistic happiness.

Graph Table 6. Emotional, Spiritual and Materialistic



The impact of Women Activism on Happiness was found positive in the survey. Table – shows that approximately 99 % women were happy because women activism through PCRW had positive impact on their family life and HH environment. It means that improvement of emotional and materialistic sufficiency to HH was indication as well as assurance of women happiness and welfare.

Graph Table 7. Women Activism, Externalities and Happiness



Conclusion

In the course of development and poverty reduction, the survey is evident that *PCRW*, a module of micro credit intervened by the government of Nepal, INGO and NGO is found an *effective financial* instrument for women activism. This menu of public policy has successfully organized marginal, exploited and oppressed women along with other interested women and developed micro credit network for establishing financial institution, particularly cooperative for saving and credit transaction. There may be drawbacks of policy and institutional regime as well as of credit disbursement and successful case stories.

Micro credit mobilization is a simple tool that carries ability to build up women activism of marginal women with bright up of their capacity and ability has made self reliant role of women in decision making process, in preference and choice of micro entrepreneurship and HH income and expenditure. Its externalities on women happiness are positive. Still, there is a room to be discussed in depth for its certain degree of level of its effectiveness for the mass level materialization of the public policy. Si-

multaneous relevant local development measures are required for getting higher success rate. In developing countries like Nepal, political debacle on development projects can be seen ill reflection as corruption, political intervention and intentional disturbances. Therefore, bottom level CBO and User's group should be forward as active observer to accelerate women activism for overall development and poverty reduction.

References

- Acharya and Bennett (1981-1993); Ministry of Agriculture/HMG/N, Women's Role in production of Main Food Crops of Nepal (1993a) Women Farmers in Nepalese Agriculture: A case study of Selected Districts and Crops (1993b); women in Resettlement Area: A Case Study of Nawalparashi District (1994)
- ADB (1999). Women in Nepal. *Country Briefing Paper*. Kathmandu: ADB
- CBS (2001) Population Census 2001. Kathmandu: CBS
- CBS (2004) *Nepal Living Standard Survey 2004*. Kathmandu: CBS
- Ministry of Agriculture (MOA), women Farmers in Livestock Production Program: A case Study of Selected districts (1993c)
- World Bank (1991) *Nepal: poverty and incomes*. Washington: World Bank
- Ministry of Finance (1995) *Economic Survey, 1995*. Kathmandu: Ministry of Finance
- Ministry of Finance (2008) *Economic Survey, 2008*. Kathmandu: Ministry of Finance
- NPC(National Planning Commission). 1998. *Ninth Five Years Plan*. Kathmandu: HMG (His Majesty's Government)
- NPC. 1998. *Ninth Five Years Plan*,. p-719. Kathmandu: HMG
- NPC. 1998. *Ninth Five Years Plan*,. p-719. Kathmandu: HMG
- NPC and UNICEF. 1996. *Children and women of Nepal: A Situation Analysis*, p-137.

In Tune With Business Entrepreneurial Opinion on “In Tune With Business” Programme

Peter Szirmai, Katalin Mihalkov Szakács¹

ABSTRACT – *The facts, manipulating competitiveness, but mainly those incidental direct and indirect expenses of business associations, caused by the present regulation, have been under consideration on an international level since the second half of the nineties. As a result of these processes, the study of Djankov et al was published in 2002. This study presents high administrative costs and long procedure.*

The international interest, taken in this topic, appeared some years ago in the European Union, too. The Lisbon Strategy is focused on creating a business-friendly regulation environment, adapting the so-called “Better Regulation” aspect. In 2006, in the interest of proving the practical existence of these processes, a survey was made in the EU member states. This survey ranked the countries by the level of administrative liability. Hungary and Greece shared the first place, which means complicated and over-regulated business environment.

Thank to this survey and the national general feeling, a kind of demand came up on business reform in Hungary. The end of 2007 and the beginning of 2008 were the time of reform conceptions. The government got many pieces of advice from the members of the economy, for example ECOSTAT, Adam Török – member of Hungarian Academy of Sciences –, and other representatives of enterprises.

The Ministry of Economy and Transport invited Small Business Development Centre of Corvinus University of Budapest to make a research, based on a survey with questionnaires. In practice it means that this kind of research can give practical and realistic answers to the present business problems, instead of those theoretical ones, given by the mentioned specialists. In the survey – based on Doing Business Index, used as a benchmark by the Ministry of Economy and Transport – we examined both the effects of “In Tune with Business” Programme and the required further arrangements. In my presentation I am going to demonstrate the survey, and its most important and relevant economic suggestions.

KEY WORDS: *business environment, business reform, competitiveness, doing business Index, Lisbon strategy*

Preamble

The Ministry of Economy and Transport declared ‘In tune with Business’ Programme on 17th October, 2006. The aim of the programme is reducing entrepreneurial liabilities, amending the functioning conditions of enterprises within the confines of Convergence Programme.

Thank to the more than 400 advises of experts from the entrepreneurial sector and the representations of interest, a kind of action plan could be realised. This plan contains not even conceptions for developing business area and reducing the functioning and transaction costs of enterprises, but the proposed arrangements, too. These arrangements respect the simplicity of firm and tax administration, the expansion of legal certainty, the amending of financial operations, and the purity of competition.

The presentation of ‘*In tune with Business*’ Programme was accepted by the government on the session on 25th April, 2007. At the same time the acceptance meant the first working of the 33 arrangements. The main ones from these arrangements of the Ministry are the following:

¹ Peter Szirmai, Katalin Mihalkov Szakács, Corvinus University of Budapest

- Realization of one-stop information of entrepreneurs, mainly on the Internet.
- Accurate and quick authorization processes.
- Increasing the effectiveness of controlling systems in order to eliminate illegality.
- Promoting the expansion of e-taxation, e-payment, e-invoicing, and e-business.
- Professional education of small and medium size businesses.
- Expansion of financing.

My presentation is based on a public opinion poll, made by Small-Business Development Centre at Corvinus University of Budapest in the beginning of 2008. Our centre was asked by the Ministry of Economy and Transport to make a survey on the “*In tune with Business*” Programme 2008 itself and its effects. Under the lead of Attila István Petheő many colleagues from other departments of the University took part in the research and wrote the chapters of the final study.

The end of 2007 and the beginning of 2008 were the time of reform conceptions. The government got many pieces of advice from the members of the economy (for example ECOSTAT, Adam Török – member of Hungarian Academy of Sciences –, and other representatives of enterprises or advisory firms) how to organize the Hungarian economy.

Our survey diverged from the others of this topic in two different approaches. First, we did not argue on or against the effectiveness of any theoretical conceptions, but we tried to get true and practical knowledge. Using questionnaires in the survey we asked many entrepreneurs about their opinion on the present effects of “*In tune with Business*” Programme and what expectations on further arrangements they have. Secondly, these theoretical conceptions based on a general view of competitiveness while creating advises. Using another kind of methodology we could examine those real basic entrepreneurial burdens that influence competitiveness.

Theoretical Antecedents

The facts, manipulating competitiveness, but mainly those incidental direct and indirect expenses of business associations, caused by the present regulation, have been under consideration on an international level since the second half of the nineties. The first international data about the administrative liability of taxation were published in 2001 in an OECD study, which was followed by the pioneer one of Djankov et al in 2002. (DJANKOV ET AL: *Businesses' Views on Red Tape 2001*. 2002). These studies presented shocking data on high administrative costs and long procedure. The study of Djankov et al served as the basis of Doing Business Index by the World Bank.

The international interest, taken in this topic, appeared some years ago in the European Union, too. The Lisbon Strategy is focused on creating a business-friendly regulation environment, a simply system of norms devoid of needless liabilities. The idea of reducing administrative liabilities became a priority in the European Union during the Dutch presidency. The so-called “Better Regulation” aspect was combined with regulation-development activities. In fact, these administrative liabilities have two aspects, since for example a registration-liability on one side is a processing-liability on the other.

In 2006, in the interest of proving the practical existence of these processes, a survey was made in the 25 EU member states, as part of the “Better Regulation Programme”. This program aimed to reduce the number of needless regulations and administrative liabilities in small and medium size business associations. This survey ranked the countries by the level of administrative liability. Hungary and Greece shared the first place, which means complicated and over-regulated business environment. The Scandinavian states reached the best place on the list, though in these countries there are high taxation liabilities. In practice, a 25% reduction in administrative costs would cause a 2.6% growth in GDP until 2025.

Doing Business Survey 2008 by the World Bank

Though both the Lausanne IMD World Rank on Competitiveness and the Global Index on Competitiveness by Michael Porter are applied worldwide, in our survey we concentrated on Doing Business Index, used as a benchmark by the Ministry of Economy and Transport. In fact, these indexes on competitiveness have very similar results on the countries and their problems. Doing Business Index by the World Bank ranks the countries according to the functioning of enterprises. The following chart (*Chart 1*) informs about the global rank of 175 countries and the criteria that the index examines.

Chart 1. The rank of the countries – Doing Business Index by the World Bank, 2007

Country	Rank	Start- ing busi- ness	Collec- tion of permis- sions	Employ- ing peo- ple	Property registra- tion	Get- ting credit	Saving inves- tors	Pay- ing taxes	For- eign trade	Keep- ing con- tracts	End- ing busi- ness
Singapore	1	9	5	1	13	7	2	2	1	4	2
New- Zeeland	2	3	2	13	1	3	1	9	16	13	16
USA	3	4	24	1	10	7	5	76	15	8	18
Hong Kong	4	13	60	23	58	2	3	3	3	1	15
Dania	5	18	6	10	39	13	19	13	2	30	7
United Kingdom	6	6	54	21	19	1	9	12	27	24	10
Canada	7	2	26	19	28	7	5	25	39	43	4
Ireland	8	5	20	37	79	7	5	6	2	39	6
Australia	9	1	52	8	27	3	51	41	34	11	14
Estonia	17	20	14	156	21	48	33	31	7	29	50
Latvia	22	30	82	96	85	13	51	20	19	3	64
Lithuania	26	57	57	124	4	36	83	71	23	18	31
Slovakia	32	72	50	75	5	7	98	122	90	50	36
Hungary	45	67	87	81	96	26	107	127	45	12	53
Bulgaria	46	100	103	57	62	13	33	88	89	90	72
Romania	48	26	90	145	123	13	33	134	38	37	81
Slovenia	55	120	62	166	99	68	19	63	69	79	34
Czech Republic	56	91	83	55	54	26	83	113	30	97	108
Poland	74	129	156	78	81	68	33	125	40	68	88
Croatia	97	93	162	139	99	48	122	43	96	45	78
Russia	106	50	177	101	45	84	83	130	155	19	80

Source: Doing business, World Bank, <http://www.doingbusiness.org/economyrankings/>

The relative position of Hungary is a bit better than in case of Global Index on Competitiveness. In comparison with other newly joined counties in the region, we are about in the midfield. The Baltic Countries and Slovakia have better position, but the others are behind us in the rank. Furthermore, we have better position than a year ago: in 2006 Hungary owned the 51st place², but in 2007 it is the 45th. If we consider the examined criteria and the national development in the fields of electronic administration and foundation of business associations, we may have no doubts about a spectacularly better position for 2008.

² In the original report 2006 Hungary took the 66th place, but thank to a check our place was corrected.

The methodology of the survey

According to the public procurement contract our research consisted of two parts. Having agreed with the principal, in the first part we made some structural in-depth interviews with leaders of representations of interest, lawyers, entrepreneurial specialists, and made some focus-group interviews with small groups of entrepreneurs. The main goal of this part was to definite those problems, that we were going to examine in the second part by surveys. Thank to the first part we could create twelve different groups of problematic themes:

- Liabilities of establishing/starting business
- Tender administration
- Purity of competition, corruption
- Liabilities of tax administration
- Gridlock
- Electronic payment, electronic invoicing, electronic administration
- Legal certainty
- Demand on training and information
- Accountancy Act and regulation
- Administrative liabilities of environmental protection
- Employment, conditions of employment
- Executive processes and permissions

Beside these twelve groups, this part of the research had many important results and putting. Here I would like to introduce you three of them.

Many experts (ex. National Association of Entrepreneurs, National Chamber of Commerce and Industry) said that most of the problems could not be defined in the Ministry of Economy and Transport or on the level of it, but on a higher or a lower level. They resented that taxation (wage of tax, law) is not a competence of our survey, since in their opinion – and in fact, too – taxation has a serious effect on the optimism, on the feeling, and on the business environment of the entrepreneurs. Their opinion respects mainly on the wish, that nobody could change taxation law, or introduce new kinds of law within a year.

Supporting and developing entrepreneurships is always the cause of political fights, not only between the ins and outs, but sometimes in the coalition government, too. Further problems occur among the Ministries, since the Ministry of Finance often thinks to be liable for all business affairs. According to our experts' opinion, the solution for this problem is establishing a kind of board or interdepartmental organization on the level of the Prime Minister that is empowered to work and carry out programmes like '*In tune with Business*'.

The present level under the Ministry means that the implementation of the newly legislated acts (though their conceptions are positive) often have much room for improvement. The lawyers we have interviewed all complained that every Registry Court have different requirements on certificating the seat of the company. They said that there were offices, where the property had to be certified by the original documents, and there were offices, where a copy or a statement was enough. Contrary to it the entrepreneurs we have interviewed said that using e-administration was not worth for the lawyers. The reason for it is that lawyers can earn more and have lower costs (e-signature) when using the traditional system of establishing. The two parts agreed in that the administrators of courts, governmental institutes and municipalities cannot keep up with the changing of regulation, which lowers legal certainty.

According to the respondents, the propagation of the program also has much room for improvement. This opinion was very interesting, since the group of the respondents consisted of members of institutes, which took part in creating '*In tune with Business*' Programme. Though these members were glad, since their opinion and advices had been asked in the Program, they could not answer the questions, pumping the arrangements of the Program.

The extensive part of the survey

We made interviews with groups of 30 elements, focused on the themes of each 12 topics. This kind of focusing means that our sample – from a professional point of view – is not a representative one, since we did not make random sampling.

Furthermore, during the sampling we tried to choose those entrepreneurs or experts into the interviewed groups that could be affected by that certain topic. For example, analysing the topic of ‘establishing/starting business’ we interviewed enterprises that were established in one year, or in the topic of ‘Accountancy Act and regulation’ we examined accounting companies and accountants.

Thank to these methods our research is not a representative one, but by the content it is significant.

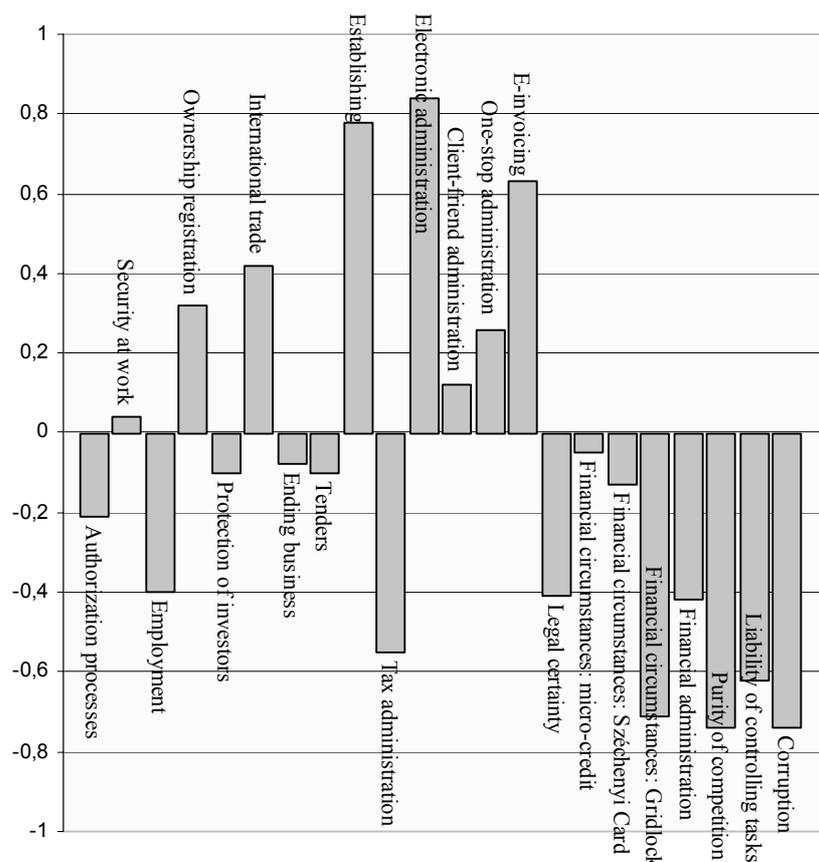
Chart 2. The regional distribution of the examined firms

Region	Piece	Distribution (%)
Baranya	43	12.8
Bács-Kiskun	10	3.0
Békés	3	0.9
BAZ	1	0.3
Csongrád	5	1.5
Fejér	15	4.5
Győr-Moson-Sopron	3	0.9
Hajdú-Bihar	6	1.8
Heves	6	1.8
Jász-Nagykun-Szolnok	3	0.9
Nógrád	4	1.2
Pest	37	11.0
Somogy	12	3.6
Szabolcs-Szatmár-Bereg	6	1.8
Tolna	3	0.9
Vas	1	0.3
Zala	7	2.1
Budapest	172	51.0
Altogether:	337	100.0

In case of 11 topics of the 12 we had a thirty-element sample, but thank to László Szerb and his colleagues we could examine the topic of ‘Liabilities of tax administration’ on a hundred-element entrepreneurial sample. It means that finally we had a sample of more than 430 elements. Our colleagues made the interviews, recorded the data and analysed them by SPSS.

Results and observations

The opinion of entrepreneurs is often the opinion of the “opinion-formers”. It means that in most cases entrepreneurs only repeat those facts about business-life that they hear in the press, in the media, in the Hungarian society and political life. For example there were more who said that state administration was full of corruption, than those who themselves experienced it in practice.

Illustration 1. The changes of the 22 factors in the past 3 years, according to the respondents

In my opinion it is important to draw attention on another special result of our research. Though there were many positive changes in business life affecting enterprises, they do not reflect in the answers. It can have many reasons, but here I would like to mention only three of them.

Threshold of stimulus. In most cases, small-scale changes do not become conscious. A 1 or 2 percent reduction of affixes or taxes does not cross the threshold of stimulus, so people simply do not take notice of it.

Apperception time. Social changes very often become conscious only in a long-term period. For example changes in taxation appear in practice only in next year returns, or simply it takes information a long time to get to everyone. In case of our research I have to mention that the PR of 'In tune with business' Program is a bit weak. In practice it means that not every positive change can get to the stakeholders.

Public opinion = Climate of opinion. Climate of opinion is always full of not only rational and cognitive, but emotional and affective elements, too. It means that people often analyse the information they get through a kind of filter, modified by their former experiences, attitudes, social class or ideology. Sometimes those arrangements, which should face positive reaction, meet negative attitude.

In the illustration 1 you can see the rank of those factors that mainly embarrass competitiveness and functioning of enterprises.

The result of the research: The most important suggestions in the order of the 12 problematic themes (abstract)

Chart 3. The most frequent „wishes” about reducing administrative liabilities

Nr.	Claim	Frequency
1	Simplification of system of taxation and administration	177
2	Making administration electronic	64
3	Simplification of law, statistics and bureaucracy	41
4	Reduction of taxes	22
5	Simplification of public accountancy and rules of accounting	15
6	One-stop administration	11
7	Tender administration	10
8	Stable system of law	6

1. Liabilities of establishing/starting business

1. Electronic administration is going to be realized in the near future, so the quick elimination of incidental problems is getting more and more needful. The decline of costs cannot be felt, since only the mediators (in practice lawyers) enjoy the lower costs of simpler administration.
2. One-stop administration would result in quicker office routine.
3. Most of the respondents criticized the authorization process in local governments, mainly because of the slow administration. We suggest first discovering its reasons.
4. In our opinion it would be important to create a kind of free database on the Internet. It would help to the potential establishers get the elemental pieces of information they need.

2. Tender administration

1. Information-technological developments.
2. Publicity of evaluation („losers” would like to know the reason of rejection).
3. Contraction of numerous tenders as aggregated themes.
4. Coordination of regional tenders.

3. Purity of competition, corruption

1. Stricter administrative control, mainly in case of illegality.
2. Partner-like approach at institutes of state administration.
3. Free and accessible database on the Internet about firms.
4. Calculable economic regulation, combined with state guide.

4. Liabilities of tax administration

1. Simplification of returns.
2. Possibility of electronic returns and administration.
3. Better coverage from APEH (Hungarian Tax and Financial Control Administration).
4. The number of types of taxes should be reduced.
5. The number of account numbers at APEH (Hungarian Tax and Financial Control Administration) should be reduced.
6. The number of exceptions should be reduced.

5. Gridlock

1. People want laws to be simpler, mainly those in connection with liquidation. They suggest the introduction of the debtor's personal liability, and sanctions, supported by the law.
2. They want the income – lost thank to gridlock – to be enforceable during the litigation.
3. The State and the chambers should take part in controlling the problematic businesses. For example the respondents advised field auditing in case of building operations.
4. In tenders the firms, handing in bids at an unreal, low price, should be disqualified. Its reason is that these firms are supposed to employ people illegally, or to be defaulters.
5. A special kind of structure of contracts may ensure payments. In case of state orders and tenders principal contractors should assume an obligation to paying, for example in practice they may put 45% of the sum of money into deposit at a lawyer.

6. Electronic payment, electronic invoicing, electronic administration

1. Extension of electronic administration to non-electronic areas.
2. Checking the regulation of e-invoicing.
3. Respondents think that the necessary infrastructure and knowledge of informatics for electronic administration is already at service, so it is worth to build upon it.

7. Legal certainty

1. Speeding of liquidation.
2. Public list about the owners of liquidated firms.
3. Practice of justice should be coordinated in case of responsibility rules.
4. Corruption should be cancelled from administration of justice.
5. Speeding of executive processes while rising their effectiveness.

8. Demand on training and information

1. Understandable and informative homepage with every important information.
2. Teaching entrepreneurship even in secondary schools, but mainly in every collage and university.
3. Using Internet as an information-forum for enterprises.
4. Teaching entrepreneurship in cheap, state-supported courses.
5. Incitement of learning foreign languages.

9. Accountancy Act and regulation

1. Coordinated reform of tax and accounting administration.
2. A simplified registration system cannot be effective without simplified tax requirements.

10. Administrative liabilities of environmental protection

1. The number of administrative tasks in connection with waste-economy should be reduced.
2. The lead-time of authorization in environmental protection should be reduced.
3. Coordinated supply of data towards the authority.

11. Employment, conditions of employment

1. Creating a regulation system about flexible employment.
2. More flexible regulations of employment.
3. More possibilities for administration on the Internet.
4. The number of types of taxes and affixes should be reduced.

12. Executive processes and permissions

1. Possibility to speed the authorization processes for a kind of additional charge.
2. The system should be simplified and the regulations should be more obvious at places, where the frequency of completion of documents is high.
3. The list of regulations on different businesses should be published on the Internet.
4. Extension of one-stop and electronic administration to further business areas.
5. Sanctions, when the deadline of administration is overstepped.

Chart 4. Rank of the facts that hinder functioning and growing

	1.	2.	3.	Freq.	Rank score
Bad and dilatory debts	104	44	27	175	427
Scarcity of financing sources	54	31	43	128	267
Complicated and changeable regulation system	43	43	45	131	260
Complicated tax administration	27	56	40	123	233
Corruption	32	25	19	76	165
Illegal employment	35	17	14	66	153
Non-appropriate official administration and permission procedure	12	30	21	63	117
Lack of specialists and entrepreneurial knowledge	11	23	34	68	113
Lack of information	5	16	38	59	85

References

Djankov et al, 2002: Businesses' Views on Red Tape 2001

<http://www.doingbusiness.org/economyrankings/>

<http://www.eipa.eu/en/activities/show/&tid=2898?gclid=CLnezp2Rn5cCFQVOtAodfX3dJA>

http://ec.europa.eu/governance/better_regulation/index_en.htm

http://www.europa.eu.int/comm/lisbon_strategy/index_en.html (The Lisbon Strategy)

http://www.oecd.org/document/19/0,3343,en_2649_34141_32506387_1_1_1_37405,00.html

http://nfgm.gov.hu/en/our_tasks/sme/enterpr_poli

Doing Business – The Challenges of Establishing Small and Medium Enterprises in Bosnia-Herzegovina

Mira Šunjić-Beus, Danijela Martinović, Ljiljan Veselinović¹

ABSTRACT – Bosnia-Herzegovina, with its overly complicated state structure (two entities, Brčko District and 10 cantons within the Federation of Bosnia-Herzegovina), its 120 different and uncoordinated laws, which also regulate the establishment of SMEs, represent a huge challenge in implementing efficient measures when setting-up a business in Bosnia-Herzegovina. Nevertheless, an array of obstacles in doing business is also connected to specific business environment (availability of sources of finance, high competition, etc.). When establishing a small or a medium firm, more than 20 steps have to be implemented in order to start a business, a process which is extremely complicated and can take as much as 100 days, and raise costs up to € 1000. Other factors that discourage the establishment of SMEs in Bosnia-Herzegovina also include unfavorable conditions of financing during the establishment, and later on during business activities, as well as weak state support to small businesses and poor protection of domestic production. Due to these problems, the World Bank listed Bosnia-Herzegovina among the last countries of South East Europe in the efficiency of Doing Business report (only before Albania, which is the last). It is precisely these indicators that motivated the authors of this article to analyze the effects of measures which were taken in the last few years in order to eliminate the above listed problems, and ease the procedure in establishing small and medium firms in Bosnia-Herzegovina. Therefore, this study will greatly focus on the implementation of the Framework on Registration of Businesses in Bosnia-Herzegovina, and the effects of BRIS system introduction.

KEY WORDS: small and medium enterprises, doing business, registration of businesses, BRIS

Introduction

Small and medium-sized enterprises are the main drivers of economic development in European countries. According to data of the European Bank for Reconstruction and Development (EBRD), in the majority of South East European countries, SMEs contribute to more than 50% of gross domestic product (GDP). Small businesses are the cornerstone of U.S. economy too². In 1999, small businesses account for over 99 percent of all U.S. firms and they generated over 37% of the gross national product. Small firms have been employing nearly half of the work force. Nowadays, SMEs are the engine of growth as well³.

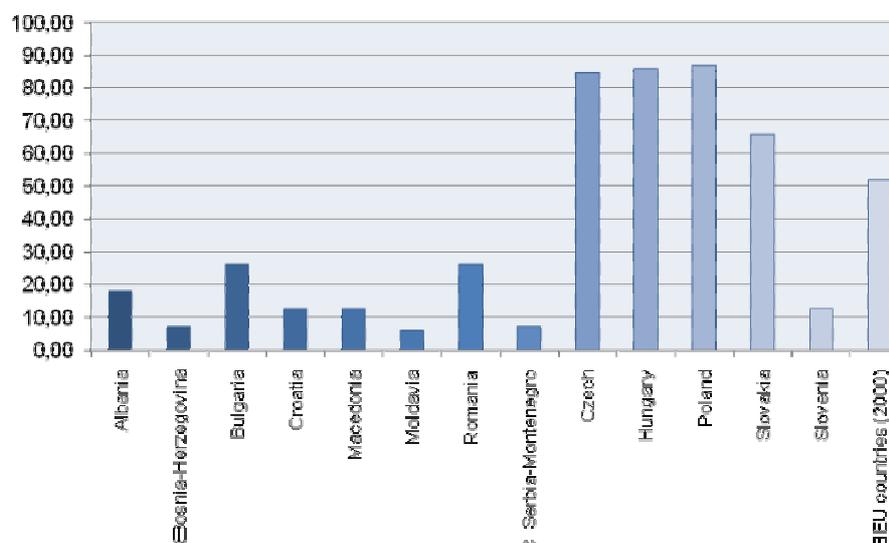
The importance of SMEs in a developing country is also outlined in the *Copenhagen economic criteria*, an EU guideline for all pre-accession and accession states, including Bosnia-Herzegovina. One of Copenhagen's sub criteria outlines the importance of continuous support to the SME sector. The following graph shows the number of firms per 1000 inhabitants (data from 2004) in Bosnia-Herzegovina, the region and the EU.

¹ Mira Šunjić-Beus, Danijela Martinović, Ljiljan Veselinović, School of Economics and Business in Sarajevo, University of Sarajevo

² William G. Zikmund et al (1999). *Business: The American Challenge for Global Competitiveness*, Austin Press, p. 112

³ According to data presented in the paper "Importance of SMEs and the Role of Public Support in Promoting SME Development"

Graph 1. Number of SMEs per 1000 inhabitants in the countries of South Eastern Europe
Source: EBRD, 2004



A 2008 report conducted by Doing Business ranked Bosnia-Herzegovina 105th out of 178 national economies. Business Competitiveness Index, which carries out the work for the World Economic Forum, in its 2007 research positioned Bosnia-Herzegovina as 107th, out of 127 countries. Only a year earlier was Bosnia-Herzegovina ranked 96th; this decrease in 11 places is an alarming sign, since its neighboring countries, as well as other transition economies around the world, show consistent progress and move up the ladder.

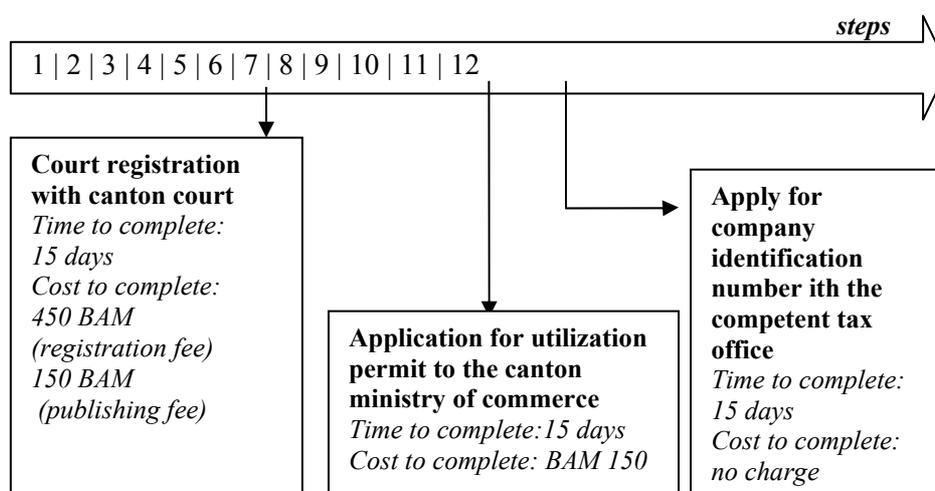
According to this data, it is evident that Bosnia-Herzegovina is stagnating, while other countries show continuous progress. In addition to that, Bosnia's competitiveness and business attractiveness is declining, which contributes to additional problems in conducting business. Therefore, it is evident that Bosnia-Herzegovina needs a reform which would ease the process of business establishing and increase advancement; these two factors would surely augment its standings in future economic reports.

The main goal of this study, therefore, is to identify the problems, as well as positive changes that were introduced until today.

The establishment of small and medium enterprises in Bosnia-Herzegovina

The process of SME establishment in Bosnia-Herzegovina is long and an expensive one. There are twelve general steps, as well as a number of additional procedures which need to be taken and completed in order to even commence the procedure.

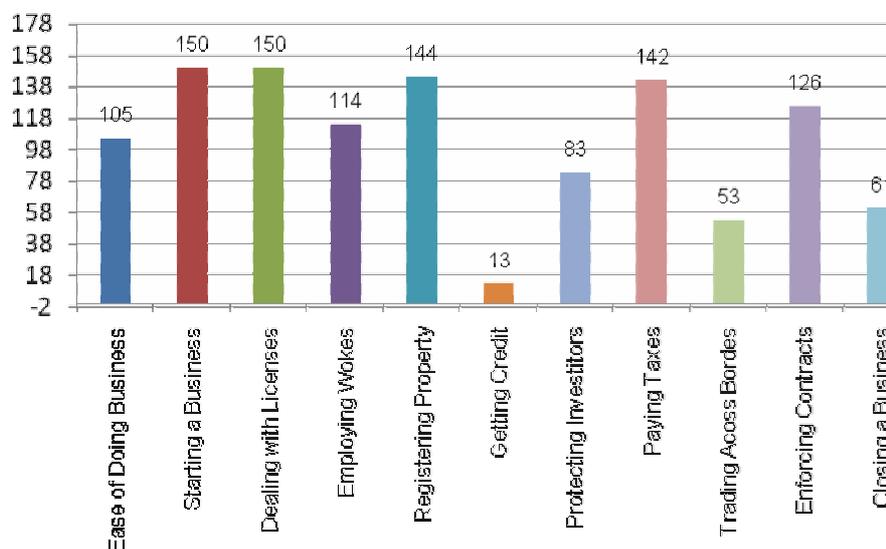
The process itself lasts 54 days, and can cost up to € 1000. The following scheme illustrates some of the steps and shows their costs. As one can notice, the most time consuming step is company registration (two weeks), followed by the process of obtaining an identification number, and submitting an application for the utilization permit to the cantonal Ministry of Commerce, both of which last for two weeks.



Scheme 1. The analysis of particular steps in the process of SME establishment

The graph number 2 illustrates the rankings of Bosnia-Herzegovina in several different fields of business: from firm establishment to closing. According to this data, one can notice that Bosnia-Herzegovina achieves good results only in three segments (getting credit, trading across borders and closing business). In all other areas, Bosnia is ranked 100th or worse, out of 178 economies.

Graph 2. Bosnia and Hercegovina Ranking in Doing Business 2008



Source: Doing Business 2008 Report

If we look at data from 2003 up to 2007, we can see that there is no evident progress in these areas. The number of procedures and the duration of the process itself have not decreased; moreover, in comparison to other countries in the region and OECD states, the process of company establishment has become more expensive and considerably longer.

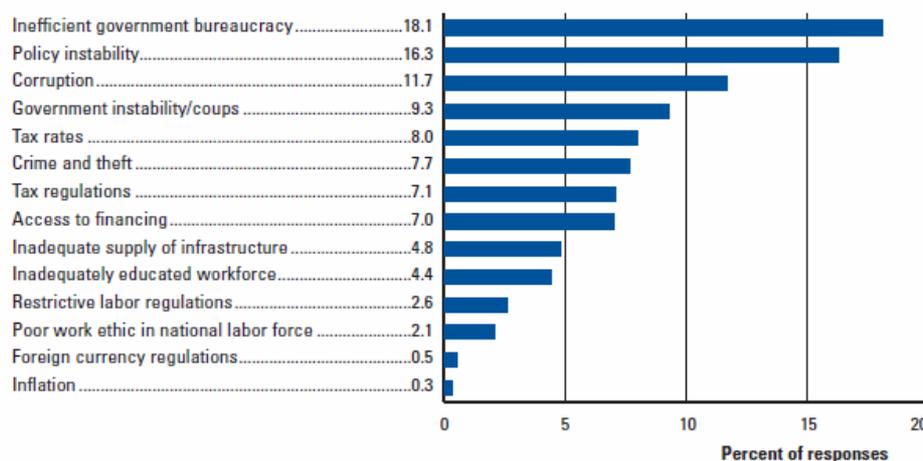
Table 1. The Progress of Bosnia-Herzegovina in the period from 2003 to 2007

Indicator	BH 2003	Region 2007	OECD 2007				
Procedures (number)	12	12	12	12	12	8.8	6.0
Time (days)	59	54	54	54	54	26.1	14.9
Cost (% of GNI p/c; income p/c 2006, 2005, 2004, 2003)	51.8	46.2	40.9	37.0	30.1	11.1	5.1
Min. capital (% of GNI p/c; income p/c 2006, 2005, 2004, 2003)	379.1	65.0	57.4	52.0	43.0	45.3	32.5

Source: Doing Business 2004; 2005; 2006; 2007; EBRD; World Bank

The most problematic factors for doing business

According to World Bank study, the most problematic factors in doing business are inefficient state bureaucracy, political instability, corruption, government instability, tax rates, criminal activities and availability of finances.

Graph 3. The most problematic factors for doing business

Source: The Global Competitiveness Report 2007-2008, World Economic Forum

During this research, World Bank has collected exclusively primary data, which illustrates the ideas of the business community, and what it considers to be problematic factors for doing business in Bosnia-Herzegovina. As one can notice from Graph 3, inefficient government bureaucracy is the most serious problem for the business community (18.1%).

According to some other authors, Bosnia and Herzegovina has not achieved any positive steps in reducing these obstacles⁴. Medjedovic, Efendic and Zaimovic identify obstacles for doing business in the following area: competition policy, development of the financial sector and non-banking financial institutions, market entry and market exit, functional legal framework, property rights etc. Following similar obstacles that considerably influence small and medium businesses on a global level are identified in the area of financing, taxes, regulation and policy instability⁵. Among 35 countries, Bosnia and Herzegovina has more obstacles in the area of policy instability and financing than other countries⁶.

⁴ Medjedovic Aldin et. al (2008), Economic Challenges of B&H Integration to the EU, ICES2008 conference, Sarajevo, p. 13

⁵ Mirjam Schiffer, Beatrice Weder (2001). *Firm Size and the Business Environment: Worldwide Survey Results*. International Finance Corporation (IFC), p. 15

⁶ Ibidem, p. 19

However, financing seem to be a common issue in a number of countries since small firms report significantly more problems with financing than large firms⁷. Because of its important role in global economy⁸, obstacles for small and medium business should be removed in order to achieve better economic growth rate. Even so, SME sector is not very much supported by the B&H state⁹. Other problems for SME's in Bosnia and Herzegovina are the unfavorable credits, bureaucracy and administration obstacles¹⁰.

The BRIS System – a unique information system for company registration in Bosnia-Herzegovina

There is no wonder that, due to complicated state structure and the overlapping of a number of laws on local, cantonal, entity and state levels, there are over 120 different laws and regulations which control the establishment and operations of small and medium enterprises in Bosnia-Herzegovina. The most problematic and uncoordinated tax policy is found on the cantonal level. These laws create serious technical problems in introducing a unique information system for company registration in Bosnia-Herzegovina, known as BRIS system. BRIS was envisioned under the 2004 Framework Law on Registration of Business Subjects. With the help of the Office of the High Representative (OHR) and the United Kingdom Department for International Development (DFID) this new, coordinated electronic system, which also simplifies the process of firm registration, was introduced.

The first phase in introducing the system started out with a donation from DFID, which paid for 16 computers which were to be used in courts throughout the country. The second phase commenced just this year, and it envisions complete computerization of connecting all business subjects that are in the process of registration, as well as providing a higher degree of coordination of procedures and registration steps on all levels of government. This sophisticated registration mechanism will contribute to less time-consuming registration process (now it will last only 5 days), faster collection of necessary documentation, simpler procedures and availability of special registration forms and indications in electronic format.

A new system of registration and electronic communication between key players in company registration and business establishing results in crucial advancements since¹¹:

The registration of business subjects must be completed in the period not longer than five work days from the day of receiving a completed application form (which is available in the electronic format at www.bizreg.ba).

The registration process can be initiated before any court which is responsible for the registration of business subjects, regardless of company headquarters;

Tax identification code can officially be obtained during court registration. The process is independent from tax registration (thanks to parallel procedure of company registration and registration at the tax office, the process of opening a bank account is quicker).

The Resolution on Registration is uniform in the whole territory of Bosnia-Herzegovina;

Data on registered business subjects is available in electronic format and can be obtained by general public.

In order to fully understand the potentials and advantages of this new system, it is necessary to look back at the procedure of company registration itself.

⁷ Ibidem, p. 33

⁸ Milenko Dostic (2002). *Menadzment malih i srednjih preduzeća*. Sarajevo: Ekonomski fakultet u Sarajevu; William G. Zikmund et al (1999). *Business: The American Challenge for Global Competitiveness*. Austin Press; *Doing business Reports* and others

⁹ Asim Kico (2003). *Small and Medium Enterprises Development in Bosnia and Herzegovina and Role of Entrepreneurial Centers*. Master in Local Development for the Balkans, Trento, p. 2.

¹⁰ Ibidem, p. 2

¹¹ Federalno ministarstvo razvoja, poduzetnistva i obrta (2008). *Kratak vodici o poduzetnistvu i nacinu registracije poslovnih subjekata*. http://fmrpo.gov.ba/slike/poduzetnistvo_hr.pdf (last accessed: 01/10/2008)

While setting-up a micro-firm (additional operations, private business, etc.) requires a nine-step registration process, the establishment of a small or medium enterprise is more complex, and thus consists of a number of pre-steps and the official registration procedure, which again, is also complicated. The number of pre-requisites and official steps in company registration largely depends on the size of a firm which is being established. In Bosnia-Herzegovina a large number of newly founded enterprises are limited liability companies (more than 90% of the overall number of companies). This is largely due to the fact that establishers are not fully responsible (meaning that they do not guarantee with all their assets for company obligations, which is the case with companies with unlimited liability or limited partnerships).

The same is true for shareholders companies, which require a high amount of initial capital (50.000 KM), as well as a permit issued by the Commission for Securities. Therefore, it is not unusual to see such a high number of limited liability companies among other small and medium enterprises.

In order to establish a limited liability company, a founder needs to go through 12 steps in order to register a firm¹²:

1. Decision on establishment, and Contract on the establishment of the LLC. Also, if there is more than one establisher, a contract between founders must also be drafted.
2. Open a transient account in a bank in order to pay for founder equity or in cases of registration of tangible assets for the sake of the company valuation by court artifice is needed.
3. Tax certificate (which can be obtained at the Tax Office).
4. Declaration on non-possession of another business subject and declaration on acceptance of managing position.
5. Registration forms for private company establishment (11 different forms).
6. Obtain a court issued decision on company registration.
7. Obtain a decision from market inspection authorities (work permit is issued by the Market Inspection Authority after a request by the establisher is received and an authorized inspector's examination).
8. Obtain a statistical number (registering a firm in the Company registrar at the Institute for Statistics).
9. Obtain a tax identification number (issued by the Tax Office).
10. Open a permanent bank account.
11. Obtain a duty tax code (if the company is registered as importing/exporting firm). This number is issued by the closest Customs Administration Office.
12. Start business activities (employee registration at the Pension and Health Insurance Fund).

The old system, before the introduction of BRIS, did not allow for completing two or more steps at once. The reason for this was that every step that followed required documentation, which in turn, assured that the previous one, was completed. For example, in order to register his company, an establisher was obliged to enclose documentation from the previous two steps; in order to get the inspecting authority to start the inquiry process, a founder needed to show a court decision on registration, while in order to obtain his tax identification number, he, in addition to court decision, also had to show his work permit from market inspector. Moreover, to open a simple bank account required one to possess all of these documents.

Although the process of acquiring some decisions and other documentation was relatively short (the longest waiting period was for court decision on registration), parallel completion of many steps and (in cases of incomplete documentation) longer procedures, caused serious delays in business starting. Of course, one should also consider the fact that information systems were not connected, which with an inefficient process greatly complicated the procedure. This was largely due to poor communication. Therefore, it was to no surprise that many companies waited over 200 days before they commenced with their businesses. One of the most serious problems lied in obtaining construction permits and urban approvals.

¹² Current legislation

These long procedures, which increased the costs of firm establishing, were very discouraging, and therefore many founders gave up after months of hard work of obtaining the necessary documents. Another discouraging fact was that foreign investors who wanted to open businesses in Bosnia-Herzegovina were subject to even stricter and longer procedures.

The problems that aroused out of this complex system called for an immediate introduction of a more modern and simpler procedure. That is why the BRIS system was launched. As mentioned previously, the framework for the introduction of BRIS was outlined in the 2004 Framework Law on Registration of Business Subjects. Nevertheless, due to uncoordinated procedures and the need for additional subjects, the system became operational only this year.

The BRIS system is structured in such a way as to allow the National Center for Applications (NCA) to locate an APC (application processing computer), which would process the information from a specialized data base (BRIS), or more precisely, process the information received directly from application counters (BRO) at local courts or municipality offices.

This system plans to connect CIPS, courts, Tax Office, Institute for Statistics, municipalities, inspections, custom authorities, banks, etc. The correlation between these institutions in the process of establishing and registering a firm would greatly simplify the entire process, and allow for a more rapid exchange of information. For example, the officers at the Tax Office could easily check whether a certain company is registered, while customs authorities could verify the registration and company's tax code. If this system were to be thoroughly instituted it could allow for a very fast collection of all the necessary documentation. Moreover, data on all registered companies would be available to general public, potential business partners and creditors.

Finally, the connection between these public actors would lower the risk of tax fraud, fictional firms and grey economy. The rationalization of the entire process will increase the number of small and medium enterprises, and thus automatically decrease unemployment rate, which in the first half of 2008, equaled to an outraging 44%. Small and medium-sized enterprises are key for delivering more growth and jobs¹³.

Nevertheless, just as it is with all newly introduced systems, the application of BRIS currently encounters many problems. Although, the mechanism was planned to be instituted at the entire territory of Bosnia-Herzegovina, but due to poor connection between the courts, Tax Office and municipalities, as well as technical software difficulties, only courts in Sarajevo and Bihać were able to introduce this system in its entirety. However, these courts do not complete its tasks in due time, since the procedure for issuing individual permits and decisions last longer than planned. Some argue that the problem lies in these institutions' inefficiencies and inability to complete the tasks on time, while others say that the responsibility should be taken by company founders who fail to submit necessary documentation.

The above indicated problems implicate a need for additional solutions regarding the entire BRIS system. Consequently, we would like to suggest several answers to these issues: laws which would regulate the establishment and work of a company on all levels must be coordinated, more transparency on all levels (from municipality to state), which would allow for a more rapid exchange of information, and a decrease in number of procedural steps. The final goal would be to centralize the process of issuing permits, or better to coordinate all the necessary activities from the National Center for Applications, which would (just like CIPS does in the case of citizens) create a database on all registered businesses on state level.

Conclusions

Starting from a fact that small and medium enterprises play an exceptionally important role in every economy¹⁴, it is clear that Bosnia-Herzegovina needs to adjust its legislation and procedures, as to

¹³ http://ec.europa.eu/enterprise/entrepreneurship/docs/com_2007_0592_en.pdf

¹⁴ See: William G. Zikmund, Dennis Middlemist, Melanie R. Middlemist (1999). *Business: The American Challenge for Global Competitiveness*. Austin Press, p. 112.

allow for the removal of bureaucratic obstacles and ease the process of firm registration. A decrease in registration costs and more time-efficient measures represent the most important reform. It is reasonable to argue that state is the most stimulating factor in this process; the introduction of the BRIS system is one of the most praise worthy steps taken in this regard. However, there is still a need for a more efficient and speedy process, for only then will it be possible to feel the real effects of the new system in the entire country. The reforms could contribute to greater competitiveness of Bosnia's SMEs, as well as lower business risks. On the other hand, a well-organized registration mechanism would allow for faster registration process, more registered companies, and a decrease in unemployment rate. As a final point, it is essential to note that Bosnia-Herzegovina needs to institute permanent reforms, including more time-efficient procedures, lower registration costs, harmonize tax policies, and continue to invest into advancing the business environment, which will become feasible only through the creation of a common economic space.

References

- Anwar Shah (2007). Public Sector Governance and Accountability Series. IBRD / World Bank
- Asim Kico (2003). Small and Medium Enterprises Development in Bosnia and Herzegovina and Role of Entrepreneurial Centers. Master in Local Development for the Balkans, Trento
- IBRD/World Bank (2004-2008). Doing Business Report 2004, 2005, 2006, 2007 and 2008 – Country Profile for Bosnia and Herzegovina. <http://www.doingbusiness.org>
- IBRD/World Bank (2004). Doing Business 2004 - Understanding regulations. Washington, USA
- IBRD/World Bank Doing Business (2005). Removing obstacles to growth. Washington, USA
- Sarajevska regionalna razvojna agencija SERDA. Internet resources from www.serda.ba (last accessed: 01/10/2008)
- Federalno ministarstvo razvoja, poduzetništva i obrta (2008). Kratak vodič o poduzetništvu i načinu registracije poslovnih subjekata. http://fmrpo.gov.ba/slike/poduzetnistvo_hr.pdf (last accessed: 01/10/2008)
- Commission of the European Communities (2007). http://ec.europa.eu/enterprise/entrepreneurship/docs/com_2007_0592_en.pdf (last accessed: 01/10/2008)
- Medjedovic Aldin, Adnan Efendic, Tarik Zaimovic (2008). Economic Challenges of B&H Integration to the EU. ICES2008 conference. Sarajevo: Ekonomski fakultet
- Milenko Dostic (2002). Menadžment malih i srednjih preduzeća. Sarajevo: Ekonomski fakultet
- Mirjam Schiffer, Beatrice Weder (2001). Firm Size and the Business Environment: Worldwide Survey Results. International Finance Corporation (IFC)
- Nicholas C. Siropolis (1994). Small Business Management. Boston: Houghton Mifflin Company
- Qimiao Fan (2006). Importance of SMEs and the Role of Public Support in Promoting SME Development, Conference presentation at A Policy Dialogue Workshop, conference title "Creating A Conducive Legal & Regulatory Framework for Small and Medium Enterprise", St. Petersburg, Russia September 14-16, 2003
- World Economic Forum (2005-2008). Global Competitiveness Report 2005, 2006, 2007, 2008
- William G. Zikmund, Dennis Middlemist, Melanie R. Middlemist (1999). Business: The American Challenge for Global Competitiveness. Austin Press

Development of Entrepreneurship and the SME Sectors in South-Eastern Europe

Antal Szabó¹

Introduction

The **South-Eastern Europe – SEE** region refers to Albania, Bosnia and Herzegovina, Bulgaria, Croatia, The former Yugoslav Republic of Macedonia, Republic of Moldova, Romania and Republic of Serbia and Republic of Montenegro. It is a diverse region of 55 million people, with an average income per capita ranging from US\$720 in Moldova to US\$6,820 in Croatia.

It is envisaged that the European Union perspective will be extended to countries of South-Eastern Europe: Albania, Bosnia and Herzegovina (BiH), Croatia, Montenegro, Serbia, The former Yugoslav Republic of Macedonia – called as Western Balkan countries -, and Kosovo under the UN Security Council Resolution 1244 and Turkey. ² Croatia, Turkey and The former Yugoslav Republic of Macedonia are considered as candidate countries, while Albania, BiH, Kosovo, Montenegro and Serbia – as countries of the Western Balkan - as potential candidate countries.

Being a Hungarian, I considered Yugoslavia as the first European economic and political integration. Behind the “iron curtain” we admired the freedom and democracy of the multiethnic and multicultural country with relatively high welfare and self-governmental enterprise management system. Sitting in a nice cafeteria on the other side of the Neretva River and slurping the Turkish café we envied our neighbours for their achievements and life. Till there will be a long way to understand what kind of forces acted under the surface and how this peaceful world was exploded though a pinch of nationalism, hatred cooked in foreign kitchens of the big powers and pro-active intervention by the international community.

In the process of disintegration of Yugoslavia from 1989 onwards SEE gained an explosive atmosphere and especially after the unjustified NATO bombardments of the remaining Serbia and Montenegro in 1999 the certain despair came over. The policy and actions of foreign powers undermined the federal institutions that held Yugoslavia together and then prevented compromise problems and solutions, between and within republics. Brussels should not be surprise that many Serbs are not glad to join the EU.

The name of the lengthy and confusing “The former Yugoslav Republic of Macedonia” for itself is a paradox having protested by a small EU country ignoring the ancient historical fact. Why Greece does not protests the US using Macedonia in Alabama, Georgia, Illinois, Indiana, Iowa and Ohio? How to develop real European integration even the name matters?

The geographical design and establishment of BiH with three existing governments is a result of international dilettantism both from the side of the Pentagon as well as from Brussels. Drawing a map without historical, religious and economic justification is a revenge of arrogant victors. The country has three ethnic constituent people, politically is decentralized and comprises two governing entities, the Federation of Bosnia and Herzegovina and Republika Srpska, with District Brčko as a de facto third entity. The bureaucratic monster created by the “midwives” of the Dayton-agreement do not work. Both the Government in Sarajevo, as the Courts not functioning. Without the EUFOR peacekeeping forces with ridiculous small staff – 2125 soldiers – would be a danger of a new civilian war in the air. The citizens are completely uninterested in a possible EU-integration as a carrot

¹ Dr. Antal Szabó, UN retired Regional Adviser on Entrepreneurship and SMEs, Scientific Director of the ERENET

² Western Balkans: Enhancing the European Perspective. COM(2008) 127 final, Brussels, 5.3.2008.

Ivo Andić, a Bosnian-Serb, Literatur Nobel-Prize awarded in 1961, in his novel describes how Muslims, Serbs, Croats, Hungarians, Jews and others who come into the region through 500 years of history lived peaceful together even during the Ottoman Empire. It was enough to destroy the bridge and people perceive themselves as separate, distinct, particularly in periods of hardship or crisis. It is long way to go while on the road of distrust, misunderstanding and hesitation, passing the first feeling of transience period, to begin to find its place in the new order of things.

The Governments and Peoples in South-Eastern Europe recognized, that the most important task is to maintain peace, avoid violence through a mutual co-operation among the countries, in order to developing democratic society, facilitating trade, scientific and technological research and development, fostering environment conservation and preserving the colourful mosaic of cultural heritage and values in the region.

The role of international initiatives in entrepreneurship development

SEE is a playground of various international initiatives by the countries in the region as well as is a place of Euro-Atlantic co-operation, as well as international organizations.

The main initiatives and grouping are:

- The Central European Initiative – CEI – since 1989;
- Organization of the Black Sea Economic Cooperation – BSEC - since 1992;
- Southeast European Co-operative Initiative – SECI – since 1996;
- Stability Pact for South-Eastern Europe – since 1999;
- Adriatic-Ionian Initiative – AII – since 2000; and
- Western Balkans Initiative since 2006.

Below the Author highlights some of the most important activities of these initiative and groupings in the field of entrepreneurship and SME development.

Southeast European Co-operative Initiative - SECI

The Southeast European Co-operative Initiative was launched in December 1996 based on an Euro-Atlantic co-operation. The UN Economic Commission for Europe provided technical assistance to SECI. The "troika" formed by these three individuals has served as the catalyst to SECI's activities. The impetus behind the Southeast European Cooperative Initiative (SECI) is encouraging cooperation among its Participating States and facilitating their integration into European structures. SECI was not an assistance program, rather as a "help for self-help." It promoted close cooperation among the governments of the region and created new channels of communication among them.

At the project selection meeting held on 29 January 1997, six projects were identified among these the first entrepreneurship and SME-related project in SEE called "Financial Policies to Promote Small and Medium Enterprises through Microcredit and Credit Guarantee Schemes"- This project was coordinated by Romania in cooperation with the Author of this papers as UNECE Regional Adviser on Entrepreneurship and SMEs and the Central European Initiative. SMEs are recognized as an engine of economic growth and a source of sustainable development. Within this sector micro and small-enterprises are of special importance because they are considered as the cradle of entrepreneurship, particularly in countries facing high unemployment and poverty. The estimated number of registered unemployed in the SECI region is more than 4.5 million. The setting up of SMEs can secure job creation and self-employment.³

The project included the review of the development of legislation and data on financial facilities in SECI countries based on the existing questionnaire developed in cooperation with EBRD, and the preparation of an evaluation of existing experiences on credit associations schemes. On the basis of the

³ UNECE Press Release as of 30 January 1997. See <http://www.unece.org/press/pr1997/97seci1e.htm>

above innovative microcredit facilities and/or credit guarantee schemes for SMEs will be set up with the support of international donor agencies and the business community.

The Project Group has conducted a review of the existing national policies concerning financial services and microcredit guarantee schemes and has examined the development of relevant legislation and data on financial facilities in SECI countries based on a questionnaire worked out in cooperation with the EBRD. The group also conducted a study, "Best Practices for Financing SMEs" which evaluated existing experiences and results concerning microcredit schemes. The UNECE also established a network between SME focal points and financial intermediaries that can be found on the Internet. The Project Group has determined that the three essential things which need to be accomplished in the SECI region concerning the promotion of SMEs are: to improve the legal conditions and environment for SMEs in each SECI country; to assure against risks for private entrepreneurs; and to give access to credit through, for example, leasing.⁴

Central European Initiative – CEI

From its the establishment the CEI Member States have paid particular attention to the development of SMEs and entrepreneurship. In the process of economic transformation of CEI transition countries, SMEs have a crucial role in developing and creation of favourable employment conditions. The exchange of experience in the field of SME promotion has been the subject of initiatives of individual member countries, under the supervision of the Ministry of Industry of Hungary and from 1995 managing by the Ministry of Economy of Slovenia.

The CEI Working Group on SMEs has mainly concentrated on the transfer of best practices and experiences from the most developed CEI countries to the countries in transition. The two main examples of the CEI WG on SMEs efforts are:

The "*Declaration on Small and Medium-sized Enterprises at the Dawn of the 21st Century*" jointly prepared by the WG on SMEs and the UNECE, adopted by the CEI Ministers of Economy on the occasion of the CEI Summit Economic Forum in Budapest (22-25 November 2000).

The contribution in strengthening co-operation with the Stability Pact for South Eastern Europe and SP Investment Compact.

Special co-operation has been established between the Croatian Institute for International Relations (IMO) and the **OECD/LEED Programme**. In 2003, on the occasion of the 6th CEI Summit in Warsaw, Poland, the CEI and the OECD launched the **CEI-LEED Local Development Network of Advisors (LDN)**, a network of experts, points of reference, national or local institutions involved in CEI countries, aimed at fostering local development by strengthening local expertise. The launch of this network meets to requests made by CEI Member States to the LEED Programme in order to support CEI BAS activities by coordinating training activities, contributing to capacity building and disseminating best practice in local development and entrepreneurship policies.^{5,6}

The CEI has also actively co-operated with the EBRD for the establishment of the Business Advisory Services (BAS) in CEI Countries. The "EBRD/TMG Business Advisory Services in CEI Member States" Programme is a proven multi-donor programme co-funding specific consultancy projects with small and medium-sized enterprises, improving their quality and competitiveness. A BAS office in a CEI country consists of the BAS office National Director, Project Officer and a Programme Assistant. All country programmes are managed by a TMG/BAS Programme Director. By using simple procedures and a cost effective structure, the BAS allows effective support of a large number of enterprises, focusing on practical inputs with clear objectives such as financial information systems, market research and development, quality management systems, engineering studies, and business plans. Ex-

⁴ <http://www.secinet.info/?BshowProj=1>

⁵ http://www.insme.org/documenti/CEI_NLmarch2005.pdf

⁶ CEI-LEED Local Development Network of Advisors

http://www.oecd.org/document/61/0,3343,en_2649_34417_32344573_1_1_1_1,00.html

post evaluation of CEI BAS impact on enterprises shows measurable benefits in profitability, productivity, sustainable employment and new jobs creation. The Programme is predominantly using (>80%) local accredited consultants, thereby enabling an increase in the ability and competence of the local consultancy industry.⁷

Organization of the Black Sea Economic Cooperation – BSEC

The Black Sea region is a distinct geographical area strategically located at the junction of Middle- and South-Eastern Europe, the Middle East, the Caucasian region, and the European part of the CIS expert Belarus, spreading over several thousand kilometers of territory. It is difficult to state that there is a homogenous strategic interest of all its 12 Member States, except for promoting human rights, building democratic societies, steering their economies towards a market economy. More than 3 million SMEs in the BSEC region employ over 21 million workers in total, while the number of the unemployed amounts to more than 10 million.

On 25 June 1992, the Heads of State and Government of eleven countries: Albania, Armenia, Azerbaijan, Bulgaria, Georgia, Greece, Moldova, Romania, Russia, Turkey and Ukraine signed in Istanbul the Summit Declaration and the Bosphorus Statement giving birth to the BSEC. Serbia and Montenegro joined BSEC in April 2004. Later the BSEC membership was inherited by Serbia after the country dissolved in 2006. However, Montenegro was not allowed to rejoin the Black Sea Economic Cooperation (BSEC) due to a disagreement between Turkey and Greece.

At a meeting of the Ministers of the Organization of BSEC responsible for small and medium-sized enterprises (SMEs), held on 27 September 2001 in Istanbul, eleven BSEC Ministers adopted a Declaration on SMEs at the Dawn of the 21st Century in Istanbul. The meeting was organized jointly by the Ministry of Industry and Trade of Turkey, the Permanent International Secretariat of the BSEC, the UNECE and the Turkish Representative of the Konrad Adenauer Foundation. The main elements of the BSEC Declaration on SMEs at the Dawn of the 21st Century include:

- creation of a favourable enabling business environment;
- improvement of legislation and regulation;
- improvement of supporting infrastructure;
- providing diversified financial systems for SMEs;
- strengthening the technological capacity of SMEs;
- strengthening the investment in the whole BSEC region, especially for SMEs, through BSEC Investment Initiative;
- human resource development;
- increase quality awareness to overcome technical difficulties to trade;
- developing stronger, more effective representation of SMEs through public-private dialogue, NGOs and women entrepreneurship;
- creation of a BSEC Working Group on SMEs for systematic exchange of information, best practices and harmonization of action towards the whole-pledge market economy and knowledge based society.⁸

One of the main activities of the BSEC Permanent International Secretariat (PERMIS) is to organize SME-related events in the BSEC region in co-operation and assistance of the Turkish Representative of the Konrad Adenauer Foundation (KAS). Between 1997 and 2005, the UNECE Regional Adviser on Entrepreneurship and SMEs served as adviser to these events and after his retirements he has been providing further technical assistance. So far 37 SME-related events were organized. The last BSEC Workshop on “Social Responsible Entrepreneurship doe SMEs” was held on 18-20 June 2008 in Mos-

⁷ Harald Kreid: CEI Activities for SME support. CEI Technical Workshop on SME Internationalization, 2-4 April, Sezana, Slovenia

⁸ UNECE Press Release as of 5 October 2001. See <http://www.unece.org/press/pr2001/01opa06e.htm>

cow by BSEC PERMIS and KAS. The aim of the Workshop is strengthening a political dialogue between the Governments and non-governmental institutions dealing with SME promotion.⁹

On 22-24 November 2007, the BSEC PERMIS sponsored by KAS in co-operation with the Entrepreneurship Education and Research Network among the Universities of Central and Eastern Europe ERENET organized a specific event analyzing the SME policies in each BSEC country. Special attention was devoted to SEE. Dr. Eriç Dejan, Professor of the University of Belgrade and the Head of Belgrade Banking Academy reviewed the SME sectors in Albania, Bulgaria, Romania and Serbia.¹⁰

Doing Business in south-eastern Europe

Since the foundation of various initiatives the SEE countries have continued to make progress in economic reforms. The process of transition of the former centrally planned economy to the market ones made the most progress, spurred on by their inspiration to join the EU. Bulgaria and Romania already succeeded. Croatia is already on the verge to join the EU. The date of its entrance is rather a question of political decision-making rather than technical bargaining. The country performance is more closer to the *acquis communautaire* as it was in the case of the other two SEE countries.

The *Doing Business* Project developed and maintained by the World Bank analyses and provides objective measures of the business environment – business regulations and their enforcements – across 181 countries. The *Doing Business* data are collected in a standardized way. To start, the *Doing Business* team, with academic advisers, designs a survey. The survey uses a simple business case to ensure comparability across economies and over time -- with assumptions about the legal form of the business, its size, its location and the nature of its operations.

Since 2004 *Doing Business* has been tracking regulatory reforms aimed at improving the ease of doing business by measuring their impact on 10 indicator sets. Nearly 1,000 reforms have been captured since that time. For the fifth year in a row, Eastern Europe and Central Asia has led the world in *Doing Business* reforms—the region accounts for a third of all reforms observed since *Doing Business 2004*. In 2007 Eastern Europe and Central Asia surpassed East Asia and Pacific in the average ease of doing business and has maintained its place this year.

In accordance with the latest World Bank *Doing Business 2008* Report, The former Yugoslav Macedonia and Bulgaria in SEE together with Georgia from the Caucasus are in the group of the first ten top reformers in 2006-2007.¹¹ Eastern Europe and Central Asia, as a region, surpassed East-Asia this year in the ease of doing business. Several of the region's countries have even passed many economies of the advanced EU countries on this score.

The World Bank *Doing Business* Project provides objective measures of business regulations and their enforcement across 178 countries. The Project aims at ranking the economies on their ease of doing business, with first place being the best. A high ranking on the ease of doing business index means the regulatory environment is conducive to the operation of business. This index averages the country's percentile rankings on 10 topics, made up of a variety of indicators, giving equal weight to each topic.

Twenty-six of the Eastern Europe and Central Asia 28 countries implemented 70 regulatory reforms, 30% the number recorded worldwide, between June 2007 and June 2008

As the World Bank states:¹²

Albania with 86 as *Doing Business 2009* rank, “a top reformer globally and regionally, established a public credit registry allowing financial institutions to share credit information and covering 8.3 percent of the adult population. This reform allows banks to better evaluate the creditworthiness of

⁹ Erenet Profile No.11 as of August 2008, See <http://www.erenet.org>

¹⁰ Strategies for the Development of Entrepreneurship and the SME Sector in the Black Sea Economic Cooperation Region. Konrad Adenauer Stiftung, Ankara, 2008

¹¹ See at <http://www.doingbusiness.org/features/Reform2007.aspx>

¹² Reform in Eastern Europe and Central Asia 2007-2008. See <http://www.doingbusiness.org/Reformers/ECA2008.aspx>

potential borrowers, facilitating access to credit for firms and individuals. Albania also strengthened investor protections. A new company law requires that disinterested shareholders approve transactions between interested parties and obligates those parties to disclose all information on the transaction to the public. The law also reinforces directors' duties and requires directors, when found liable, to pay damages and return profits to the company. Starting a business became easier with online publication, reduction of the registration cost, and the consolidation of tax, health insurance, and labor registration into a single application. The corporate income tax rate was reduced from 20 percent to 10 percent effective 1 January 2008." Albania forged ahead in rank +49 and +63 in starting a business.

Bosnia and Herzegovina with 117 Doing Business 2009 rank, "tightened professional requirements for trustees to speed bankruptcy procedures. The corporate income tax rate was reduced from 30 percent to 10 percent effective 1 January 2008. Profit distribution (including dividends) is now tax exempt, and tax losses can be carried forward for five years. The computerization of files at the Land Registry in Sarajevo has sped property registration. As a result, the time required to transfer a title dropped by 203 days. The reform at the Land Registry has also benefited entrepreneurs dealing with construction permits, reducing the time to obtain a cadastre excerpt before construction and to register the newly completed building in the cadastre and land book by 171 days.

Croatia stands with rank as 106, introduced "a new building code came into force in October 2007 and made it easier to deal with construction permits by eliminating five procedures. Even so, the reform led to an administrative backlog for building and occupancy permits, increasing the overall time required by 20 days. Ongoing improvements to port infrastructure sped terminal handling for exports by two days." It is surprising, that the country stand 21 rank back in starting a business. The challenges of launching a business have been deteriorated. The number of steps entrepreneurs can expect to go through to launch, the time it takes on average, and the cost and minimum capital required as a percentage of gross national income (GNI) per capita. It is also a question mark why the business environment of a country just a doorstep distance from the EU has a worse business environment than its neighbouring Montenegro and Serbia.

The former Yugoslav Republic of Macedonia made a big jump and ranks 71 place. "A new law on personal data protection allows borrowers to check their information at the credit registry, improving its quality and accuracy. The government continued to systematically equip courts with electronic case management systems, and the commercial court in Skopje became operational, speeding contract enforcement in commercial matters. The corporate income tax was reduced to 10 percent effective 1 January 2008. A new cadastre law and a staff increase at the cadastre office helped to reduce the time needed to register property from 98 days to 66. The one-stop shop system was updated to carry out the full range of business start-up processes, reducing both the number of procedures and the time required. The time required to export fell from 19 to 17 days and the time to import from 17 to 15 days, thanks to rationalization of the customs fee schedule and permit structure, improved risk-based inspections, simplification of a customs procedure, and the elimination of a document requirement."

Montenegro ranking 90, "created a new public credit registry, increasing the coverage of borrowers from 0 to 26 percent of the adult population. The new registry will facilitate access to credit by providing lenders with credit information on potential borrowers. Obtaining construction permits takes longer compared to last year. Stricter compliance requirements introduced to conform with EU best practices led to an administrative backlog, increasing the time by 51 days."

Serbia Doing Business 2009 rank is 94. "Serbia reduced the property transfer tax from 5 percent of the property value to 2.5 percent. The total cost to register a property fell from 5.37 percent of the property value to 2.85 percent. An administrative backlog at the Belgrade Municipality's Construction Department added 75 days to the time for obtaining construction permits (making it more difficult)."

Table 1. Doing Business 2009 in Western Balkan Countries by the World Bank

	AL	BH	CR	MK	MN	SR
Ease of Doing Business	86/136	119/117	106/107	71/79	90/84	94/91
Starting a Business	67/130	161/153	117/96	12/23	105/97	106/92
Dealing with Construction Permits	170/166	137/150	163/177	152/151	167/143	171/152
Employing Workers	108/109	117/116	146/146	125/130	104/103	91/90
Registering Property	62/56	144/148	109/103	88/94	123/109	97/117
Getting Credit	12/61	59/51	68/61	43/51	43/61	28/25
Protecting Investors	14/168	88/84	126/125	88/84	24/19	70/66
Paying Taxes	143/125	154/144	33/48	27/31	139/134	126/127
Trading Across Border	77/73	55/57	96/103	64/76	125/118	62/61
Enforcing Contract	89/88	123/125	44/44	70/81	130/130	96/96
Closing a Business	181/181	60/61	79/81	129/130	42/44	99/106

Source: The World Bank Group: Doing Business Data 2009.

Remarks:

- i. Code of country names in accordance with the ISO 3166 standard;
- ii. Figures represent Doing Business Rank 2009/2008.; and
- iii. Data for Kosovo are not available.

Doing Business in South East Europe 2008 compares business regulations across seven economies (Albania, Bosnia and Herzegovina, Croatia, Kosovo, The former Yugoslav Republic of Macedonia, Montenegro, and Serbia) in four key areas: starting a business, dealing with licenses, registering property, and enforcing contracts. The study provides comparable data for 22 cities that can inspire reforms at the national and local level and add to the reform momentum of the region. The report shows that differences in local-level regulations and practices or in the implementation of national-level regulations can enhance or constrain local business activity.¹³

The report highlights that, while some economies achieved remarkable progress in improving their investment climate at the national level—Croatia and FYR Macedonia were among the top 10 reformers globally last year—there is scope to extend reforms to the local level. “South East Europe is reforming rapidly to improve the ease of doing business. This report provides city-level data that can inspire reforms at the national and local levels and add to the region’s reform momentum,” said Jane Armitage, World Bank Country Director. Bitola in FYR Macedonia is the top-ranking city measured by the report. “We are pleased that a city here is the top performer,” said Patricia Rader, USAID Mission Director in Skopje. “Business reforms are critical for growth. Investors need predictability, good corporate governance, and contractual law; and the region needs investment to stimulate growth and create jobs.”¹⁴

MAIN FINDINGS OF DOING BUSINESS IN SOUTH-EASTERN EUROPE 2008:

In starting a business, the region has a number of good practices. Vlora’s (Albania) fast and simple business registration process is comparable to the world’s top-25 performers on this indicator. Yet, these practices are not consistent throughout the region. The time it takes to register a business ranges from seven days in Vlora and Shkodra (Albania) to 61 days in Mostar (Bosnia and Herzegovina). The cost differences are even more pronounced, from as low as 3.9% of income per capita in Bitola (Macedonia, FYR) to 79.4% in Prizren (Kosovo).

- Construction licenses are costly throughout South East Europe, averaging 1427% of income per capita -- higher than in most regions of the world and in many new European Union member countries. Local-level requirements drive the differences in the procedures to obtain construction-related authorizations. It is easiest in Osijek, with 13 procedures, and most cumbersome in Zagreb, with 24 procedures, both Croatian cities.

¹³ <http://www.doingbusiness.org/subnational/exploreconomies/SEE.aspx>

¹⁴ http://www.doingbusiness.org/documents/subnational/B08_Subnational_PressRelease_SEEurope.doc

- Despite a similar regulatory framework for property registration across the region, the time, cost, and number of procedures vary due to local administrative practices and taxes (see Table 3). People from the seven economies covered in the report spend four times longer than Slovenians or Bulgarians and pay six times more than entrepreneurs in Poland to transfer a property title. Kosovo is the least expensive economy with regards to the cost to register property -- 0.8% of property value in Prizren and 0.9% in Pristina. This is due mainly to a fixed-fee property transaction tax.
- The region is marked by lengthy contract enforcement processes. Delays are due to case backlog and an insufficient number of judges. But cities do not need to look beyond the region for best practices. The most efficient city is Zrenjanin (Serbia); at 300 days, the process is the same as in the United States and faster than in Denmark.

Source: <http://www.doingbusiness.org/subnational/exploreconomies/SEE.aspx>

Index of SME Development

In order to evaluate the share of the SME sector in transition economies, the Author during his UN advisory services in consultation with the UN regional advisory services in statistics and representatives of international organizations as well as academicians elaborated a complex economic indicator called as Index of SME Development. The UNECE introduced this phenomenon in 1999.

The Index of SME Development incorporates the share of the whole SME sector in the overall performance of the national economy based on:

The Share of Private Ownership;

The Share of SME Sector in GDP, and

The Share of the Labor Force of SMEs in the total labor force of a country. Index of SME Development can be expressed in terms of percentage and/or GDP per capita.

Table 2. Index of SME Development in the SEE Countries based on UNECE methodology

Country	Share of private sector in GDP ¹ [%]	Share of SME sector in GDP ² [%]	Share of labour force of SMEs in total labour force ³ [%]	GDP per capita in current price ⁴ [USD]	Index of SME Development [-]	Index of SME Development [USD]
Albania	75	64	60	2,911	0.288	838
Bosnia and Herzegovina	35	38	53	2,890	0.070	203
Bulgaria	75	39 ⁵	51.5 ⁶	4,089	0.150	613
Croatia	60	44	55	9,611	0.145	1,394
Romania	70	55	57	5,645	0.219	1,236
Montenegro	45	58 ⁷	35 ⁷	3,873	0.091	354
Serbia	55	65.5	56	4,270	0.202	863
The former Yugoslav Republic of Macedonia	55	42	65	3,051	0.150	458

Source: ERENET Database, 2007.

Remarks:

1. EBRD Transition Report 2006; 2. Authors of the current report and UNECE Databank 2004; 3. Authors of the current report and UNECE Databank 2004; 4. Data refers to World Development Indicators database, World Bank, 14 September 2007; 5. Annual Report on SMEs in Bulgaria prepared by the Ministry of Economy and Energy. http://www.mee.government.bg/ind/doc_eco/Annual.Report.on.SMEs.SPECIAL.EN.pdf; 6. National Statistical Institute, Sofia, http://www.nsi.bg/public_e/MSP04.htm; 7. Government of the Republic of Montenegro Directorate for the Development of SMEs Strategy for the Development of SMEs 2007-2010, <http://www.nasme.cg.yu/eng/documents/Strategy%20of%20development%20of%20SME%202007-2010.pdf>

Some experts from the World Bank suggested making a correction by taking into consideration the Share of the Hidden/Gray Economy in the GDP. However, it is difficult to evaluate and no exact methodology is available.

The Index of SME Development is not an absolute term. Since the GDP per capita varies country to country, as higher is the GDP, higher is also this index. However, it provides a good tool for comparative analysis and highlights the trend in changing the SME environment enabling or hindering and depressing the entrepreneurs. It is also an excellent tool for benchmarking group of countries when comparing advanced, medium- and less-advanced transition economies.

Conclusion

It is very interesting to compare the two main indicators: doing business and index of SME development. It is obvious than as larger is the GDP per capita, as biggest is in absolute term the index. However, this does not means that the country has to better entrepreneurial environment for doing business. The worst index is in Bosnia and Herzegovina. It is not surprises in a country with nearly 40% unemployment rate. At time being Montenegro also does not benefit from the separation from Serbia. The fruit of the Albanian Governments seems to become ripe. The situation in Macedonia is difficult. It is time that Government should stand on its own foot and create an enabling legal and regulatory environment which assists entrepreneurship to develop. The most important thing is to understand that the primary task of any Government is the acceleration of its transition process and strengthen its national economy. Only through this can be reached the EU integration and not via versa.

The development of the SME sector in the countries in transition is most effective when activities and assistance are integrated and aimed at three distinct levels:^{15 16}

- strategic level (*policy making*);
- institutional level (*support institutions*);
- enterprise level (entrepreneurs and business entities).

During the last decade SEE Governments created lot of institutions in the region. However, regulatory policies and reduction of the red tape were neglected. Regulatory impact assessments also fall out. As far as the entrepreneurs is concern, the public-private partnership dialogue still missing in the menu of several Government action plan.

The European Commission regularly requests the SEE Government to make a self-evaluation report on the implementation of the European Charter of SMEs. The EC Directorate General for Enterprise and Industry and the OECD Investment Compact for SEE in consultation with the EBRD and the European Training Foundation analysed the SME access to skills and finance as well as the role of education and training in entrepreneurial education in the Western Balkan.¹⁷ In spite of the fact, that this report provide interesting information on the entrepreneurship development in the region, however, first of all the basic issue of legislative environment and start-up conditions should be put on the first place of the priority list of actions according to the CEI and BSEC Declarations on SMEs at the Dawn of the 21st Century.

¹⁵ Antal Szabó, "The role of small and medium-sized enterprises in countries is transition and how to promote them", ECE Advisory Workshop on Industrial Restructuring, Geneva, 8-9 June 1995.

¹⁶ <http://www.unece.org/indust/sme/sme-role.htm>

¹⁷ SME Policy Index 2007. Report on the Implementation of the European Charter for Small Enterprises in the Western Balkan. OECD, EC, 2007.

The Influence of Marketing Activities of Small Enterprises on Economic Growth and Development

Igor Trandafilović, Srdjan Žikić, Marija Vidanović, Suzana Živković¹

ABSTRACT – *The paper shows and describes the complex nature of the effects that marketing activities exercise on small enterprises regarding the economic growth and development within a particular country. Contemporary growth and development of every economy depends on the strength and activities of its entities. The influence of small enterprises on the global economic development in the last few years has been increasing, which further influences the growing interest of economic experts in this branch of economy. Marketing activities of small enterprises are characterized by certain features, which is the characteristic of overall business of these enterprises. Flexibility and innovations as main characteristics of small enterprises have a large influence on the content of their marketing activities. The main goal of small enterprises is satisfying consumers' needs which, as a consequence, has balancing supply and demand, distribution development and cooperation with all stakeholders within one country's economy. However, the marketing of small enterprises is not relevant only to domestic market development, since by generating export to the international market, it improves the country's balance of payments and makes it possible for other domestic enterprises to get in touch with new knowledge regarding the specific characteristics of foreign markets in question. The main characteristic of small enterprises are ideas which are key to success in marketing. The paper shows the key factors of marketing of small enterprises which influence the economic development at both the local and the global level.*

KEY WORDS: *small enterprises, marketing, economic growth and development*

The concept of a small enterprise

The economic growth, restricted by permanent development of new technologies (innovative technologies), innovations and fast economic development, determine great flexibility and innovation of modern enterprises. Marketing, business philosophy and the concept influence the development of small enterprises, making them more flexible and innovative and, consequently, more important for economic development on local as well as on regional level. Thanks to small business volume, small number of employees and small amount of investments, small enterprises are, therefore, more creative, flexible, open and more innovative; they accept new brands more quickly and consider market situation much better. Most of small enterprises are founded in the fields of retail, wholesale and services. Regarding production, small enterprises usually do business in the form of cooperation with medium-sized and large enterprises.

Small enterprises, as a motor of economic development and prosperity, represent a sector which promotes private ownership and entrepreneurs skills, ie. small enterprises are figuratively, a synonym for entrepreneurship. As a rule, a small enterprise is founded by a single person, an entrepreneur, who is both the owner and the manager of the enterprise, so he himself makes all decisions regarding doing business and he himself takes any risks regarding that business. The quality of small enterprises is reflected in the fact that they obtain new jobs, they are more innovative and, thanks to their small business volume, they accept changes more quickly and in that way help big enterprises in effective supplying and distribution., unlike big companies which are slow, more complex and stimulate compe-

¹ Igor Trandafilović, Srdjan Žikić, Marija Vidanović, Suzana Živković, Fakultet za menadžment Zaječar, MEGATREND UNIVERZITET Beograd

tion. Innovation, flexibility and competition are main characteristics that are fully expressed only thanks to marketing activities, and which are slightly more specific, therefore distinctive at small enterprises. The ideas created in small enterprises are significant for the development of big and giant companies in that field, or out of it, therefore they contribute to the development of the whole economy.

It should be mentioned that the definition of a small enterprise differs from country to country because a lot of different factors have influence on the defining the term “ small enterprise ”. One can come to the conclusion that there is no strict classification into big, medium - sized and small enterprises, but if we compare data obtained from different institutions we can come to some kind of definition what a small enterprise is. The definition of a small enterprise given by EU, World Bank and Accounting Law of RS define a small enterprise to be an entity up to fifty employees, owned by an individual, focused on small market segments with small participation on the market.

Marketing activities of a small enterprise

Marketing, as a scientific discipline, is one of the most studied field today. Success of a an enterprise often depends on its marketing activities. Marketing is a very complex process comprising a sequence of activities which contribute to the successful work of a company. The main aim of every company is to satisfy needs of its customers / buyers and to make profit as well. Every enterprise, small, medium - sized or big, tends to get as much profit as it can, to have loyal consumers and to acquire competitive advantages. Marketing philosophy enables a good positioning of a company in the market as well as in the minds of its consumers. Small enterprises are specific in comparison to other companies and it can be said that marketing activities of small enterprises are a significant factor which contributes to the development of these activities in the business world in general.

The specific structure of small enterprises, small number of employee, small amount of invested capital and small business volume make conditions for the enterprise owner to be marketing manager as well. Small business volume makes ideal conditions for innovative and creative business which is one of the primary conditions for successful marketing activities of an enterprise. A simpler organizational structure in comparison with other companies gives small enterprises a possibility of a greater flexibility and an open interactive relationship with the consumers and it is one of the starting points in the development of marketing concept.

One of the main aims of a certain enterprise is satisfaction and loyalty of its customers. The starting point is certainly market research and market survey. The knowledge of market and customers is one of the biggest advantages of small enterprises thanks to the direct and open contact with the consumers. It can be said that the market research is at hand to every entrepreneur and it's up to him to exploit that advantage if he can. Direct contact with the consumers and market circumstances enables managers of small enterprises to make a real estimation of the possibilities and chances the surrounding offers.

Small enterprises do everyday surveys and by doing that they get all available information regarding a certain market segment. Marketing survey is one of the most important activities of the small enterprises managers because it offers information about the market which are usable before and after work.

The activity of small enterprises is in connection with the business done on local level. The influence of globalization forces the subjects of economy activities of one country to do business related to the concepts that are usable beyond the borders of that country as well. Regardless of its size, every enterprise and organization, whatever small size it is, frames its business using marketing mix of all elements depending on the scope of its business. The standard combination of marketing elements consists of four basic fields of marketing mix.

Due to the business volume and certain activities, in small enterprises only a few of these fields are remarkable. The basic combination of marketing mix is consisted of four elements :

product, service
price
distribution channels
promotion.

Small enterprises have a dominant role in the field of distributive channels, retail, wholesale and physical distribution as well as in promotional activities. Activities of small enterprises depend on big organizations and other stock -holders. The importance of small enterprises must not be neglected in the field of production as well, where they represent a great support to the business of big companies. Every wholesaler, retailer as well as manufacturer is a part of a distribution net and the purpose of the net is to move a product from the manufacturer to the customer. Regardless of the product quality, in order to find market for his product, a manufacturer will depend on an agent who will deliver that product to the buyer. In situation like this, the importance of small enterprises and their activities in this field of business is remarkable.

Marketing activities of small enterprises are based on the direct contact with the consumers and service users, ie. on marketing survey. All feedbacks they get after the research and analyse of market segments contribute to making conditions for product and service innovation. It's not a chance that some driving ideas and innovations have come from activities of small enterprises, because small business volume, small number of employees, friendly and innovative surroundings and permanent will for growth and development are fundamental conditions for creativity and a fast decision realization with a greater risk.

Marketing role of small enterprises on economic growth

Good marketing is more and more important having its influence not only on the business of small, medium - sized and big enterprises, but on the whole economy and its development as well. There is an opinion that only big companies use marketing, however the use of marketing is a key factor for the benefit of every organization, especially a small one. In the field of sales, marketing was first accepted by the companies dealing with consumer goods. Nobody should leave out small enterprises and their founders who do their business in the fields of accounting, health care, architecture, law, etc. and who really understand the importance of marketing use.

The aim of these enterprises, organizations, is to achieve positive business results which leads to the satisfaction of customers needs and the needs of organizations themselves. High quality, superior value for the customers and the motivations of all actors in the play, contribute to the development of an economy and its growth.

Marketing use in the small enterprises leads to the stimulation of the customers, therefore, the demands for goods in general, helps in employing a greater number of people and effects the consumers. The aim of marketing use is stimulation for demands, encouragement of consumers to buy and the fulfilment of their needs, while an increasing need for marketing leads to the need for the development of such organizations which will do marketing activities, and consequently, there will be need for more people to be employed.

The activities of small enterprises are mainly expressed in the service sector comprising marketing agencies, advertising agencies, lawyers offices, accounting agencies, doctors, architects, engineers and many other members of business groups who, in the scope of their business, apply marketing concepts in order to satisfy customers needs and make profit.

The presence of small enterprises must not be neglected in the field of production where they represent a great support to the business of big companies. The main aim of marketing in small enterprises is the balance of supply and demand. Small enterprises give support to big companies and cooperate with them, and by doing that they find ways to satisfy needs of the key segments which leads to the fact that all of them are in a position to have benefit: organizations, consumers and the state.

Conclusion

Marketing has a daily influence on consumers and market itself. It is the fact that the activities of small enterprises have increased their influence in recent years. Small enterprises have distinctive elements in their structure and they enable them direct contact with the market what is one of the basic prerequisite for a successful forming of marketing strategies. This way of doing business gives space to creative and innovative way of thinking and creates products and services different from the competitors. Marketing activities represent a development device of the enterprise itself, but of the surroundings, too.

The quality of small enterprises is expressed in their innovations and ideas which have an influence on big and giant companies too, and all thanks to the direct contact with the consumers and their wishes, because the biggest chances for the growth of small enterprises are in innovations. The biggest importance of small enterprises is reflected in the supporting function towards big companies, in taking parts in distribution, in the field of services and in the foreign trade of a country. The wish to satisfy customers needs and the aspiration for permanent growth have a positive influence to the development of marketing activities of all subjects in the surroundings and to the whole economy in general. The importance of small enterprises has been rapidly increasing in recent years.

The activity of small enterprises is usually focused on local level, however, for the last few years their importance has achieved global character. Consequently, it can be said that marketing activities of small enterprises generate export of goods and in that way balance of payment of a country becomes more favourable. All these activities of small enterprises come to the recognition of specific demands of different stock - holders on international level of doing business. Each of these activities and the knowledge can help other companies from the country when they take part in the international market, and all this enables the development of economy in general.

References

- Kotler, P., Keller, K.: *Marketing management*, Pearson Education, New Jersey, 2003.
Milisavljević, M.: *Marketing*, Savremena administracija, Beograd, 2001.
Rakić B.: *Marketing*, Megatrend univerzitet primenjenih nauka, Beograd, 2005.
Siropolis N.: *Small business management*, Houghton Mifflin Company, 1990.

Entrepreneurship Environment in Bosnia and Herzegovina in International Perspective

Bahrija Umihanić¹, Rasim Tulumović²

ABSTRACT – Bosnia and Herzegovina has been a member of Global Entrepreneurship Monitor (GEM) since January 2008. GEM is the world's largest academic research project related to entrepreneurship. It was initiated in 1999 as an initiative of the researchers of London Business School and Babson College from Boston. The research program for Bosnia and Herzegovina is led by a national team that includes the researchers from the Faculty of Economics at Tuzla University as well as the consultants with rich experience in entrepreneurship.

The conceptual framework of the GEM project starts with a hypothesis that entrepreneurship behavior is determined by the way people experience conditions which are relevant for entrepreneurship activities. The entrepreneurship environment analysis is based on the attitudes of experts collected by a half-structured questionnaire for the interview. Experts evaluate entrepreneurial start-up environment, described through nine fields and they identify three strong points, three weak points of entrepreneurship environment in their country and propose three recommendations. The conditions for entrepreneurship activities comprise the availability of financial resources for starting new businesses, government policies and programs for supporting new businesses, the level of education and training for those who are or would like to be entrepreneurs, the approach to professional support services, availability of physical infrastructure, market openness and cultural-social norms. The experts chosen for the interview in Bosnia and Herzegovina are all experienced and with a public reputation in their research field. The research included 36 experts, four for every field.

The work presents the results of the research for Bosnia and Herzegovina, compared to the results of member states within the GEM research. A special attention is given to the positioning of Bosnia and Herzegovina compared to the countries of the West Balkans which are also included in the GEM research.

KEY WORDS: entrepreneurship environment, entrepreneurship activities, Bosnia and Herzegovina (BH), Global Entrepreneurship Monitor (GEM)

Introduction

The official representative of GEM project in Bosnia and Herzegovina is Center for Entrepreneurship Development in Tuzla and its research team conducted the research according to the GEM methodology for the first time for Bosnia and Herzegovina in 2008. GEM research is based on the data gathered from three sources: (a) data gathered by the surveys of the representative samples of the adult population, (b) data gathered by the surveys and interviews of the experts in the field of entrepreneurship and (c) data gathered from standard secondary international databases.

The most significant group of data for a country in GEM project is gathered from surveys of the adult population. Every year, on a random sample of adult population over 2000 interviewees, data are gathered by applying specially structured questionnaire with the aim of measuring entrepreneurial activities at the state level. The manner of gathering data is determined by the conditions of survey conduct-

¹ Bahrija Umihanić, PhD, Associated Professor, Faculty of Economics, University of Tuzla, Unverzitetska 8, 75000 Tuzla, Bosnia and Herzegovina, bahrija.umihanic@untz.ba

² Rasim Tulumović, Mr. Sc., Kronauer consulting d.o.o., Augusta Brauna 12, 71000 Sarajevo, Bosnia and Herzegovina, rasimtulum@yahoo.com

ing (personal interview, postal or telephone survey). The national team in BH has engaged PULS Agency for gathering data, presently the biggest agency for market research and public opinion in the countries of ex Yugoslavia. Together with Strategic Marketing Agency from Serbia, Puls Agency has established Strategic Puls Group which covers entire region of ex Yugoslavia and according to the income it is the biggest network in the region. Adult population survey provides the overview of adults' attitudes towards the entrepreneurship in general population, but it also provides the information on whether they are included in starting businesses or they are owner of some business.

Other relevant data sources in research of entrepreneurial activities are attitudes and opinions of the experts, gathered with the standard questionnaire which comprises several groups of questions related to entrepreneurship environment. The expert sampling is conducted on the basis of their reputation and as such, it is not the representative sample of entrepreneurship experts. For this research implementation, GEM national team in BH has used the method of interview. In order to provide authenticity of gathered data, the interviews were conducted by members of the national team. The national experts are people directly involved in creating main aspects of entrepreneurial framework in BH, and they are: prominent entrepreneurs, politicians, academics, government officials, business development centers executives and others. Although the sample does not fulfill rigorous scientific criteria of representative quality, GEM team made sure that experts from different administrative and geographic levels of Bosnia and Herzegovina are represented. The interviews were conducted with 36 experts from 9 areas of financial support, government policy, government programs, education and training, transfer of R&D, infrastructure professional & business, market openness, access to physical infrastructure, social and cultural norms. According to the GEM methodology, the same 18 experts will be interviewed again for 2009 GEM cycle and 18 should be replaced. Selection of experts is a free choice of national teams, and basic criteria are defined in the methodology.

In order to establish and study the connection between the level of entrepreneurial activity in every state and the macroeconomic conditions, different standardized data are gathered in GEM project from international data sources as: **World Bank, International Monetary fund, OECD, United Nations and others. These data are available to the national teams involved in GEM project.**

Preconditions for entrepreneurship development in Bosnia and Herzegovina

Robust growth of the BH economy from 2007 (6.8%) continued into 2008, yet macroeconomic stability could now be negatively affected by the global financial crisis. The country had 4.363.000 inhabitants in 1991 (last census). It was heavily destroyed during the wars in Balkan from 1992-1995 (over 100.000 dead and 2.000.000 refugees). It is estimated that there are 3,9 million people living in the country today and there are Bosnian communities all over the world (Diaspora). Diaspora is spending and investing euros 2,5 billion annually into the country. GDP in 2007 was euros 10,7 billions.

BiH has borders with Serbia, Montenegro, Croatia and 24 kilometers coastline on the Adriatic Sea. Its landscape varies from high altitude central mountains to arable land in the north and Mediterranean vineyards in the south. There is a plenty of unused natural resources, which are a basis for an economic revitalization of the country (wood-processing, forestry, hydro power energy, coal, metal and non-metal industry, chemical industry, tourism, agriculture).

Bosnia and Herzegovina has 4 levels of administrative power (state, entities, cantons and municipalities) as well as 5 economic regions (not in line with the administrative structure) being promoted by EU. Different administrative powers have been trying to make coordinated SME policies and strategies for years, but progress is still weak. There are a number of single and uncoordinated policy instruments in force. Urban areas are much more developed than rural ones and the most developed part of the country is the Sarajevo area (the capital).

According to tax administration, statistical data and using the EU parameters, we can estimate that there were around 161.295 SMEs in Bosnia and Herzegovina in 2007. Most of the SMEs (93.6%) employ 1-9 people, 5,5% have 10-49 employees and there are only 0,9% employing more than 50 people. External barriers for the development of SMEs are related (among other things) to an inade-

quate legal and institutional framework such as the absence of a specific system for statistical data collection and the lack of a unique SME definition used by administrative regions within the country. It is therefore difficult to be precise about the development of entrepreneurial activity. In the 2009 World Bank Doing Business report Bosnia and Herzegovina was ranked 119 on the list.

However, there is evident positive progress in entrepreneurship education and training, successful e-business models, top class small business support (business incubators and range of business services), and stronger and more effective representation (effective SME networks and structured public/private consultations). The biggest short-term challenge of the country is to create a coherent legal and institutional framework for SME development. Adoption of SME Development Strategy and establishment of SME Development Agency are the most needed short-term objectives.

Main indicators of overall entrepreneurial activity in Bosnia and Herzegovina for 2008

The first GEM research in the country was done in 2008. The possibility of GEM project to provide information on entrepreneurial overview of the countries globally makes its data necessary resource for any serious attempt of studying entrepreneurship behavior world wide. Main activity of GEM project is monitoring and development of indicators for measuring entrepreneurial activity. Every year, GEM project results in publishing indicators of overall entrepreneurial activity and entrepreneurship environment, in the form of global results report (of all involved countries) and national entrepreneurial activity analysis report for every country involved in the project.

One of the most important GEM entrepreneurship activity results is certainly Total Entrepreneurial Activity (TEA) Index. It shows the number of adults on 100 inhabitants involved in start-ups or new companies or both. For Bosnia and Herzegovina it is 9,02 with significant difference between male 11,07 (TEA08MAL) and female 6,94 (TEA08FEM). The rate of entrepreneurial activity of female/male population is represented with the number of adult females/males on 100 adults involved in start-ups or new companies or both.

The number of adults on 100 inhabitants involved in newly established active business, who are expected to own complete or part of the business and who did not receive salary for their work at least three months is 6,42 (SUBOAN08). The number of adults on 100 inhabitants involved in already existing companies as managers or owners who receive salary more than 42 months is 8,7 (ESTBBU08).

Indicators that show the type of motivation for involvement in entrepreneurship activity are very important. That is the how we get the data that the opportunity for activity realization in the early phase is 4,95 (TEA08OPP), and that entrepreneurship activity motivated by necessity is 3,85 (TEA08NEC). Aspiration for growth can be presented as percentage of total entrepreneurship activity which expects 10 or more than 5 vacancies annually five years after the start of the business activity. In Bosnia and Herzegovina, this index is 15,33 (TEA08JOB).

As we already mentioned, Bosnia and Herzegovina participates in GEM project for the first time, so it is not possible to make vertical comparison on the basis of this methodology. Vertical comparison, which will be possible in the next few years, will give Bosnia and Herzegovina opportunity to monitor changes in its environment that is, the effects of applied policies and instruments recommended on the basis of results from the previous years. Having in mind that the process of privatization has not been completed and that Bosnia and Herzegovina must persist **in fulfilling the conditions from EU Association Agreement, it is expected that entrepreneurial activity** indicators will be considerably higher in the next period. However, we can compare some indexes/indicators from BH with other countries.

Table 1. BH indicators in 08 vs. indicators in Slovenia, Serbia and Croatia in 07

TEA08		TEA07		TEA08NEC	TEA07NEC	TEA08OPP	TEA07OPP
BH	Serbia	Croatia	SLO	BH	SLO	BH	SLO
9,02	8,6	7,3	4,78	3,85	0,46	4,95	4,24

Within the neighboring countries, Bosnia exhibited the highest level of entrepreneurial activity according to Total Entrepreneurial Activity (TEA) Index (9,02). The highest rate of entrepreneurial activity in 2007 in Europe was in Iceland (12,5) and the lowest in Austria (2,4). The majority of individuals who became involved in entrepreneurial activity in 2007 in Slovenia decided to start a business in order to seize a promising business opportunity (TEAOPP index is 4,24) and not because they were pushed into it (TEA necessity index is 0,46). The ration between the indexes in Slovenia is 9:1. The ration between these two indexes in Bosnia and Herzegovina (1,3:1) is significantly smaller and it is obvious that people in Bosnia and Herzegovina are 'pushed into businesses'.

What is the experts' opinion on entrepreneurship in Bosnia and Herzegovina?

Entrepreneurship environment analysis is based on experts' attitudes gathered with the half-structured questionnaire for the interview. The questionnaire has 90 questions grouped in 16 topics (presented in the table 3) and possibility to provide 9 open answers.

Experts chosen for the interviews in Bosnia and Herzegovina are people with experience and good reputation in their field of work. The expert sampling comprised 36 experts, 4 experts for each framework. Nine entrepreneurship framework conditions are explained in the Table 2.

Some of the experts are entrepreneurs (8), and some of them are professionally related to entrepreneurship or entrepreneurs' issues as counselors or managers of entrepreneurship support institutions (11), employees in public administration (6), professors (6), bankers (3) and executives of public companies (2).

Table 2. Nine entrepreneurship framework conditions

financial support	Availability of financial resources, equity, loans for new and growing companies, including assistance and incentives
government policy	The way the government policies affect tax policies, regulations and their implementation as neutral, encouraging or discouraging policies for new and growing companies
government programs	Presence of direct support programs to assist new and growing companies at national and local level
education and training,	To what extent is training for creating or managing small new and growing companies incorporated to education and training systems at all levels, what is the quality, relevance and focus of education and training for management of small, new and growing companies
transfer of R&D	To what extent do national research and development programs lead to new market opportunities; and are R&D programs available to small, new and growing companies
commercial and professional infrastructure	To what extent accountancy services, legal or market counseling are present; and to what extent institutions which enable or promote emergence of small, new or growing companies are present
market openness	The scope of business relations protection from constant changes, which prevents new and growing companies to be competitive, find new suppliers, subcontractors and consultants
access to physical infrastructure	Easy access to available physical resources: communication, transport, public utilities, land or premises – with non-discriminating costs for new, small or growing companies
social and cultural norms	To what extent social and cultural norms encourage or do not limit individual activities leading to new forms of managing company or economic activities and accordingly, to greater dispersion of wealth and income

Entrepreneurship environment in Bosnia and Herzegovina has been marked worse than in other European countries involved in GEM research for 2007 since almost all conditions for entrepreneurship activities (90 questions, 16 conditions) were graded negatively and only three positively (out of 17 – topic B is divided in two). On the scale from 1 to 5, 3 marks neutral attitude; grades over 3.01 mark positive attitude and grades from 1 to 2.99 mark negative attitude. Table 3 presents more details on opportunities and capacities for entrepreneurship activity in Bosnia and Herzegovina in 2008 compared to other countries involved in GEM 2007.

GEM World Report for 2008 will be issued on the 15th of January 2009 in Boston, USA. In the table above we compare the data from 2008 GEM research in Bosnia and the data from research in other GEM countries in 2007. There is a possibility that the final GEM report shows some differences due to different data processing methods and application of correction factors. However, we are aware that situation in Bosnia is not bright when it comes to entrepreneurship. A good thing is that experts in Bosnia and Herzegovina think that there are opportunities for entrepreneurs, solid physical infrastructure and positive social status of an entrepreneur.

Table 3. Entrepreneurship framework conditions in international perspective

Entrepreneurship conditions grades	Bosnia and Herzegovina 2008	Countries involved in GEM project 2007		
		Medium grade	Max. grade	Minimal grade
A: Finance	2,2	2,87	3,85	1,91
B1: Government policies – support	1,95	2,62	3,67	1,83
B2: Government policies – regulations	1,68	2,5	3,99	1,45
C: Government programs	1,88	2,69	3,47	1,76
D: Education and training	2,47	2,5	3,43	1,55
E: R&D transfer	1,81	2,56	3,38	1,81
F: Commercial and professional infras.	2,7	3,3	3,99	2,7
G: Market openness	2,46	2,82	3,79	2
H: Access to physical infrastructure	3,08	3,76	4,63	2,95
I: Cultural and social norms	2,19	2,96	4,19	2,32
K: Opportunities for entrepreneurship	3,24	3,44	4,25	2,77
L: Capacity for starting a business	2,04	2,73	3,6	2,16
M: Social status of an entrepreneur	3,14	3,56	4,48	2,87
N: Protection of intellectual property	1,78	3,05	4,37	1,7
P: Attitude toward female entrepreneurship	2,59	3,34	4,2	2,77
Q: Growth of entrepreneurship	2,08	3,11	4,08	2,45
R: Interest for innovation	2,83	3,43	4,25	2,97
Total	2,36	2,98		

The six questions that experts answered with the lowest grade are the following:

- 1,33 for B04 – new firms can get most of the required permits and licenses in a bout a week,
- 1,36 for C01 – a wide range of government assistance for new and growing firms can be obtained through contact with a single agency,
- 1,53 for B01 – Government policies (e.g. public procurement) consistently favor new firms,
- 1,56 for E04 – there are adequate government subsidies for new and growing firms to acquire new technology,
- 1,6 for B05 – the amount of taxes is NOT a burden for new and growing firms
- 1,64 for B07 – coping with government bureaucracy, regulations, and licensing requirements it is not unduly difficult for new and growing firms.

The government policies (B questions – B1: support and B2: regulation) are marked very negatively and Bosnia and Herzegovina is far from satisfactory level.

The six questions that experts answered with the highest mark are the following:

- 4,08 for D07 – entrepreneurs in general need external assistance of their plans prior to start up,
- 3,86 for H03 – a new or growing firm can get good access to communications (telephone, internet etc) in about a week,
- 3,64 for M01 – the creation of new ventures is considered an appropriate way to become rich,
- 3,63 for K02 – there are more good opportunities for the creation of new firms that there are people able to take advantage of them,
- 3,51 for F05 – it is easy for new and growing firms to get good banking services (checking accounts, foreign exchange transactions, letter of credit and the like),
- 3,47 for H02 – it is not too expensive for a new growing firm to get good access to communications (phone, internet etc)

The average mark for education and training (D questions) is only 2,46. However, if the question D07 (the highest mark among Bosnian experts) is excluded, then the average D mark is only 2,23. The question D07 is not related to education and training facilities like other questions and Bosnian GEM Team will propose that D07 question is moved to a more suitable group of questions.

After answering 90 questions, interviewed experts were also asked to name three constraining factors to entrepreneurship development in BH. Factors related to government policies are the biggest constraint – 27,8% as the first choice; 22,2% as the second and 16,7% as the third one. Other factors that are recognized as constraints are presented in the table.

Table 4. Constraint factors for entrepreneurship development recognized by experts

Constraint factors	1. choice	2. choice	3. choice
Political, institutional and social context	13,9%	8,3%	11,1%
Financial support	8,3%	16,7%	13,9%
Capacity for entrepreneurship	11,1%	8,3%	11,1%

Experts were also asked to name three fostering factors to entrepreneurship development. Majority of them find that commercial and professional infrastructure is rather developed and represent the biggest fostering factor – 16,7% as the first choice; 16,7% as the second choice and 8,3% as the third one. It is interesting that a number of those that consider capacity for entrepreneurship as the fostering factor is almost the same as a number of those who consider it as a constraint – 13,9% as the first choice; 11,1% as the second one and 11,1% as the third one.

Most of the experts recommended that the following should be improved:

- Education and training – 27,8% as the first recommendation, 22,2% as the second one and 19,4% as the third one,
- Government policies – 25% as the first recommendations, 22,2% as the second one and 16,7% as the third one.

There were not any or there was only one expert recommending actions in the following fields:

- Research and development,
- Cultural and social norms,
- Work force feature,
- Perceived population composition and
- Political, institutional and social context.

Conclusion

Entrepreneurship is attractive world wide, for people of different age, different education, and different professions. In every country, the entrepreneurship is observed politically, scientifically and professionally. In highly developed countries, entrepreneurship is a life style. There is not better way for the people to show and confirm their creative, innovative and other personal abilities as they can with entrepreneurship.

Global Entrepreneurship Monitor (GEM) is non-profitable academic research consortium and its aim is to create high quality international research data on entrepreneurship activities, available to wide public. GEM is the largest separate study on entrepreneurship activity in the world and it was established by cooperation between London Business School and Babson College. In 1999, 10 most developed countries were included in the research, and in 2008, the number of included countries increased to 42.

Bosnia and Herzegovina was included in this research which provides opportunity to grade the level of entrepreneurship activities in Bosnia and Herzegovina in 2008, and at the same time, they represent challenges for further research and recommendations to all government levels which decide on particular areas. General conditions indicators in Bosnia and Herzegovina point to low level of entrepreneurship activity. Low investments in education, obvious barriers to starting business, high taxes for entrepreneurs, and complex legal procedures for regulating business, non-efficient labor market and separated economic space do not contribute to entrepreneurship activity of the country.

Grades of experts of all areas of entrepreneurship activities are characteristic for countries with low entrepreneurship activity index. Inadequate financial support, poor interest of the responsible institutions for creating more favorable business development environment, inconsistent entrepreneurship support programs at all government levels, insufficient representation or lack of additional forms of education in the area of entrepreneurship, inadequate representation of entrepreneurship in formal education, poor investments in research and development, fragmented and insufficiently qualified infrastructure for providing consultancy and other intellectual services, closed market, underdeveloped physical infrastructure for entrepreneurship development and lack of entrepreneurship culture are some of the characteristics of entrepreneurship activity in Bosnia and Herzegovina in 2008.

Research results within GEM project show that entrepreneurship is important; in many countries it is a key mechanism and economic growth of the country depends on it. The results presented in this paper indicate that it is necessary to create and implement the set of programs and policies in order to improve entrepreneurship activity; their effects will enable higher level of entrepreneurship activity in Bosnia and Herzegovina, and at the same time its economic growth. The final GEM Report for Bosnia and Herzegovina will be published at the beginning of 2008 with updated comparisons with GEM countries in the region and worldwide.

References

- Autio, E. (2006) Global Entrepreneurship Monitor, 2005 Report on High-Expectation Entrepreneurship, London Business School, Babson College, Mazars, USA
- Competitiveness and Innovation Framework Program (2007-2013), Commission Of The European Communities Brussels, 2005. str. 89,
http://europa.eu.int/comm/enterprise/enterprise_policy/cip/index_en.htm
- Green Paper - Entrepreneurship in Europe, Commission Of The European Communities, Bruxelles, Str.26. http://europa.eu.int/comm/enterprise/entrepreneurship/green_paper/index.htm
- Report on the Implementation of the European Charter for Small Enterprises in the Western Balkans – SME Policy Index
2007, http://ec.europa.eu/enterprise/enterprise_policy/charter/2007_charter_docs/2007_western_balkans.pdf

- Report on Bosnia and Herzegovina Progress for 2006 {COM (2006) 649 final text}, Brussels, 18th November, 2006, <http://www.dei.gov.ba>
- Minniti, M; W.D. Bygrave, E. Autio (2006) Global Entrepreneurship Monitor 2005, Executive Report, Babson College, London Business School, UK, USA
- BH Integration Strategies, European Integration Directorate BH. 2006, <http://www.dei.gov.ba>
- Umihanić, B.; Dedić, M.; Basics of Management and Entrepreneurship, Institute for Economy Tuzla, 2004)
- Umihanić, B.; Nuković, A.; Simić, S.; Application of EU Charter for Small and Medium-sized Enterprises at canton level contributes to development of policies of Small and Medium-sized Enterprises at the level of Bosnia and Herzegovina and Western Balkans region, science-research project, Faculty of Economy Tuzla, June 2008.
- GEM Report Slovenia 2007, available at <http://www.gemslovenia.org>

Female Entrepreneurship and Local Economic Growth: A Case of Countries in Transition

By Prof. dr Mirjana Radović-Marković
and
Dr Imani Silver Kyaruzi¹

The following presentation is for the Forthcoming book titled "**Female Entrepreneurship and Local Economic Growth: A Case of Countries in Transition**", edited by *Mirjana Radovic Markovic and Imani Silver Kyaruzi*. The book will be published in *London*, 2009.

Introduction

In recent years, a number of women who are involved in businesses has increased. It is now argued that increasing the number of women entrepreneurs involved in starting new businesses is critical for a country's long-term economic growth. *Female Entrepreneurship and Local Economic Growth: A Case of Countries in Transition* acknowledges the significant impact of women's entrepreneurship on economic growth and job creation. For the countries in transition, the interest on how to stimulate local economic growth through female entrepreneurship is now forming major economic agendas of most countries. Twenty researchers participated in this study, including experts who have focused on models of market economy for countries in transition.

The book offers a number of empirical research findings on women entrepreneurs internationally. Most researchers have concluded that women entrepreneurs are expected to increase rapidly in the next decade and that they are expected to make an important contribution to their nation's economies. The validity of this assumption has been examined to some extent in the data presented in this study.

One of the major findings in this study is the degree to which women engaged in entrepreneurship and entrepreneurial ventures vary across countries. The contextualised research suggests that female entrepreneurship contributes to each country's economic growth using unique skills, resources and practices. To some extent, economic growth of a country is directly correlated to its level of entrepreneurial activity. In particular, there is a high correlation of economic growth and entrepreneurial activity among the countries in transition. Countries that are able to replenish the stock of businesses and jobs and have the capacity to accommodate volatility and turbulence in the entrepreneurial sector are best placed to compete effectively.

Does gender matter? In most transitional countries, women entrepreneurs are fewer as men appear to start their own businesses twice as often as women. It shows that the effects of transitional economies have been particularly sensitive on women. The entrepreneurship gender gap measures the difference between the number of men and the number of women participating in entrepreneurial activity. The data show that among the transitional countries entrepreneurship gender gaps are varied. We can therefore conclude that the gender gap in entrepreneurial activity is greatest in middle-income countries and least in high-income countries.

However, despite the importance of women workers and entrepreneurs to economic growth, women employees receive lower pay than men, even for the same work, and women entrepreneurs are often marginalized in the informal sector. Assistance to women-owned enterprises could generally be delivered through policy-level, industry-level, or enterprise-level approaches. All three approaches to supporting development of women-owned enterprises should make vital contributions to improving eco-

¹ With the Guest editor: Professor Mike Taylor – University of Birmingham, UK

conomic opportunities for women. The most often is enterprise-level approach - a new perspective that emphasizes the fact that women don't have to replicate men's entrepreneurial experience and the masculine mentality of "doing business." Women and investors can see feminine traits and talents as sources of power with valuable advantages for entrepreneurship. Still, in pursuing entrepreneurship, women face many barriers and are exposed to new subordination phenomena, particularly in financing their ventures.

To conclude, it seems that free market forces will continue to put women at a disadvantage in the labour market if the policy fails to correct the situation. Therefore, intervention programs aimed at eliminating the obstacles and simultaneously leveraging distinct female advantages in entrepreneurship are of necessary.

Chapter outlines

1. Setting the Stage: Female Entrepreneurship in Transitional Economies - by *Dr Imani Silver Kyaruzi*
2. Affect and the Gendered Map of Economic Growth – by *Dragos Simandan*
3. Insights into the activities and motivations of women students creating businesses – by *Pauline Kneale*
4. Job values among entrepreneurs and potential entrepreneurs in transition: the impact of gender and social background – by *Nada Štrbac, Ivan Mihajlović, Dragana Živković, and Živan Živković*
5. Innovation and Entrepreneurship in Transition countries: An empirical study of innovative behaviour of Lithuanian entrepreneurs with reference to regional economic development – by *John Sae and Manuela Tvaronaviciene*
6. Incubating and Nurturing Female-Owned Enterprises: Senegales and Tanzanian Experiences – by *Imani Silver Kyaruzi and Chantal Ahoefa Hales*
7. Basic institutional infrastructural support needed for the development of women's entrepreneurship in Serbia – by *Grozdanic R., Savic B; Vucic M. and Cvijović N.*
8. Women's Entrepreneurship, informal economy and SME development policies in Serbia – by *Mirjana Radović Marković*
9. The Role of Entrepreneurship Policies in Africa: The Senegalese Women Experience – by *Chantal Ahoefa Hales*
10. Ways of Knowing, Ways of Leading: American Indian Female Entrepreneurship – by *Linda Sue Warner*
11. 'To be or not to be?': Characteristics of Academic Entrepreneurs and the Role of Government and Higher Education Institutions in Developing Academic Entrepreneurship in Ireland - *Almar M. Barry*
12. Microcredit For Women Entrepreneurs in Ghana: The Case of Women Development Fund in The Accra Metropolis - by *Samuel Duah and Imani Silver Kyaruzi*

SECTION III
ECONOMICS OF KNOWLEDGE AND
THE INFORMATION SOCIETY

Global Standard 1 (GS1): Key E-Business Performance in the Supply Chain Management

Slobodan Acimović, Ivana Stojanović¹

ABSTRACT – *The crucial part of the business information system of modern companies is the technology of automated marking and identifying products and other segments in a work process. In the fifties of the 20th century, the easily legible label with striped signs (bar code), now recognizable for everyone, made possible efficient registration of product types in warehouses and retail stores, thereafter in production processes. After a successful usage in the last decades, the need for a progressive technology of product identification has arisen, the technology that is not only confined to the identification of product types. In order to create a unique system of product identification and tracking, a fully integrated global organization GS1 was formed in 2005 by joining the EAN International (EU) and the Uniform Code Council (USA). Organization GS1 is engaged in the development of global standards and solutions for identifying and tracking every individual item, aiming at the improvement of efficiency in supply chains. A synthesis of the most essential aspect of the GS1 standards application in e-business was presented in this paper. The structure and organization of GS1, its global standard system with key product areas, and GS1 identification keys that support this application were presented in the first part of the paper. The second part was devoted to a brief analysis of the GS1 global standards key product areas, the global standards for bar codes in the beginning, then the global standards for electronic business messaging and the global data synchronization network, until the new global standards system EPC global.*

KEY WORDS: *organization GS1, global standards, key product areas*

Organization and structure of global standard 1 (GS1)

GS1 is a leading global organization dedicated to the design and implementation of global standards and solutions to improve the efficiency and visibility of supply and demand chains globally and across sectors. GS1 is a fully integrated global organization with over 30 years of experience, 104 member organizations representing all points in the supply chain, over a million companies doing business across 145 countries, over 20 represented sectors, and over 5 billion transactions a day². GS1 offers a wide range of efficiency-building supply chain applications and solutions. The GS1's aim is to simplify global trade with linking information and flow of goods. The global trade is complex and brings numberless peculiarities. GS1 projects apply the global standards to improve supply.

The GS1's main activity is the development of the GS1 system, a series of standards designed to improve the supply chain management. Much of the development is initiated by its member organizations. GS1's interests are represented at meetings with: official bodies (such as the United Nations and the European Commission³), international associations and other institutions. Member organizations are usually national associations providing tools and support that enable their own member companies to manage their supply chains and trade processes far more efficiently. The GS1 system is an integrated system of global standards that provides for accurate identification and communication of information regarding products, assets, services and locations. It is the most widely used supply chain standards system in the world.

¹ Slobodan Acimović, Ivana Stojanović, Faculty of Economics, University of Belgrade

² www.gs1.org

³ Authors of this paper have not yet heard that GS1 aspects were discussed in any governmental institution.

Based on GS1 identification keys, a common recurring set of identification keys, the GS1 system is composed of the four key product areas.

The first key product area – global data and application standards for bar codes – uses the globally recognized GS1 identification keys to automatically identify things such as: trade items, locations, logistic units, and assets.

The second key product area – global standards for electronic business messaging – allows rapid, efficient and accurate automatic electronic transmission of agreed business data between trading partners. It is based on the two components: the GS1 EANCOM, and the GS1 XML.

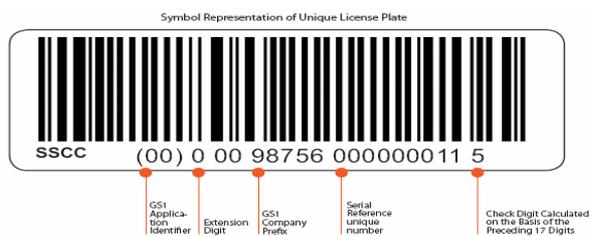
The third key product area is the global data synchronization network (GDSN). It is an automated network, based on global standards, which enables the secure and continuous data synchronization, allowing all partners to have consistent item data in their systems at the same time. The global product classification (GPC) is a key component of the GDSN, enabling effective category management.

The fourth key product area is a new global standards system that combines: radio frequency identification technology, existing communications network infrastructure, and the electronic product code. These standards enable immediate and automatic identification and tracking of an item through the whole supply chain globally, resulting in improved efficiency and visibility of the supply chain.

There are seven GS1 identification keys that support the identification of: items, services, locations, logistic units, returnable containers, etc. The principles, on which basis GS1 identification keys were assigned, ensure unique global numbers that can be used by all trade partners independently of industrial sectors or location, improving efficiency in the supply chain. The GS1 company prefix assigned to a user company allows the user company to create any of the GS1 identification keys like: the global trade item number (GTIN), the global location number (GLN), the serial shipping container code (SSCC), the global returnable asset identifier (GRAI), the global individual asset identifier (GIAI), the global service relation number (GSRN), the global document type identifier (GDTI).

As the name implies, the GTIN helps automate the trading process – basically buying and selling. GTINs are therefore assigned to any item (product or service) that may be priced, ordered or invoiced at any point in any supply chain. The GTIN is then used to retrieve pre-defined information about the item. The key benefit is that information about the item can be retrieved about the product from the GTIN whether it is read in a GS1 bar-code symbol, exchanged *via* a GS1 eCom, or accessed from the GDSN. The GTIN is the core of many business applications, as scanning at the retail point-of-sale (POS). Supply chain total costs cut down with the usage of identical principles for application⁴.

Image 1. Serial shipping container code



The GLN is the GS1 identification key for locations. The GLN can be used to identify physical locations and legal entities when there is a need to retrieve pre-defined information in order to improve the efficiency of communication within the supply chain. The GLN is a prerequisite for the GS1 eCom messaging or retrieving data from the GDSN.

The SSCC is the GS1 identification key for an item of any composition established for transport and/or storage that needs to be managed through the supply chain. The SSCC is assigned for the life-

⁴ Successful practices of the GS1 standards application, especially in the RFID technology area, can be found in examples of successful companies on-line: www.future-store.org, www.metrogroup.de.

time of the transport item, and is a mandatory element on the GS1 logistic label using application identifier 00.

The GRAI is the GS1 identification key for types of reusable package or transport equipment that are considered as an asset. It is used to enable tracking, as well as recording of all relevant data associated with the individual asset or asset reference. The GRAI is assigned for the lifetime of the asset and may be bar coded using application identifier 8003.

The GIAI is the GS1 identification key used in a diverse range of business applications ranging from tracking to recording the life-cycle history of aircraft parts. The GIAI is assigned by the owner of the asset, and may be bar coded using application identifier 8004.

The GSRN is the GS1 identification key used to identify the recipient of services in the context of a service relationship. It is used to enable access to a database entry for recording recurring services. The GSRN is normally assigned by the service provider, and may be bar coded using application identifier 8018.

The GDTI is the GS1 identification key for a document type combined with an optional serial number and used to access database information that is required for document control purposes. The GDTI is assigned for the lifetime of the document type, and may be bar coded using application identifier 253.

GS1 key product areas

The first key product area of GS1 global standards covers global application standards for bar codes. The bar codes and the GS1 identification system have provided benefits to consumers around the world for over thirty years. The most important implementation resource for the bar code identification are the over 100 GS1 member organisations in countries all around the world. Before companies begin to use bar codes, they must create the numbers that go inside bar codes. These numbers are called GS1 identification keys. The first step in building a GS1 key is to obtain a GS1 company prefix from a GS1 member organisation. GS1 company prefixes are used to identify over one million companies today, and form the foundation of unique identification of everything in the supply chain⁵.

After receiving a GS1 company prefix, a company is ready to begin assigning identification numbers to: its trading items (products or services), itself (as a legal entity), locations, logistic units, individual assets, returnable assets (returnable pallets, kegs, tubs), and service relationships. To begin, you should decide what you are bar coding, and whether your bar codes carry static or dynamic information inside themselves. Selecting the right bar code is critical to the success of your bar code implementation plan. The management of the GS1 identification system comes from carefully established rules and relationships administered at different levels around the globe. The process is complex in that the GS1 identification system is used to identify many things, in many places, and in many ways. The GS1 company prefix provides a way for GS1 member companies to uniquely and globally identify things like: trading items, logistic units, locations, parties, and assets. The GS1 global office (GS1 GO) assigns GS1 prefixes to GS1 member organizations⁶.

The GS1 system provides several types of bar code to be used by GS1 members depending on the application. The reasons for this vary but, because different bar code types have different strengths and weaknesses, GS1 selects the bar code that best fits the application. The bar codes used by GS1 include EAN/UPC, GS1 data bar, GS1-128, ITF-14, GS1 data matrix, and composite component.

EAN/UPC is specified for the retail point-of-sale (POS), because it is designed for the high volume scanning environment, used at POS, and in logistics must be printed larger than the “target” size to accommodate logistics scanning. It is limited to carrying GS1 keys and special identifiers for restricted applications like variable measure trade items and internal numbering.

⁵ www.gs1.org

⁶ Serbian association got prefix in 1983, and GS1 company prefix of Serbia is 860. GS1 Serbia then assigns a GS1 company prefix to GS1 members. GS1 Serbia member companies then combine their GS1 company prefix with GS1 defined reference numbers to identify items they sell, ship, or own.

GS1 data bar is a family of symbols that can be scanned at the retail point-of-sale (POS), smaller than EAN/UPC, and can carry additional information such as serial numbers, lot numbers of expiration dates. A subset of GS1 data bar codes designed for use at POS are being considered by the GS1 board task force for future adoption, because GS1 data bar can carry all GS1 keys.

Image 2. GS1-128 (UCC/EAN-128) bar codes



GS1-128 (UCC/EAN-128) can carry all GS1 keys and attributes, but cannot be used to identify items crossing the retail point-of-sale (POS).

ITF-14 can only carry GTINs, can be printed directly on corrugated cartons, but cannot be used to identify items crossing the retail point-of-sale (POS).

GS1 data matrix is the only “2D matrix”, symbol specified for use by GS1, and is becoming increasingly the symbol of choice for many in healthcare. Because GS1 data matrix requires camera-based scanners, it is currently specified for healthcare items not crossing the retail point-of-sale and direct part marking.

Composite component is the only “2D linear” symbol specified by GS1. It is called a component because it is only used with a linear bar code like GS1-128 or RSS ⁷.

The second key product area of GS1 global standards is the GS1 eCom, which provides global standards for electronic business messaging that allow rapid, efficient and accurate automatic electronic transmission of agreed business data between trading partners. The GS1 eCom provides the two complementary standards for business messaging: the GS1 XML, and the GS1 EANCOM. These standards afford a standardized and predictable structure for electronic business messaging, enabling business partners to communicate business data rapidly, efficiently and accurately, irrespective of their internal hardware or software types.

Image 3. E-document



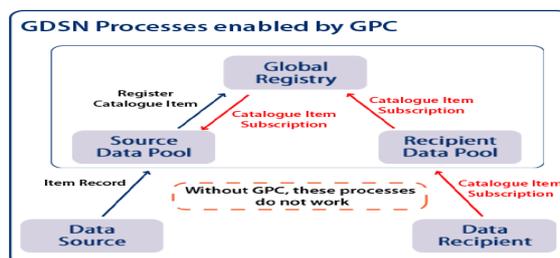
The XML stands for the “extensible mark-up language”. It is designed for the information exchange over the Internet. Within GS1 standards, the XML is used for the electronic data interchange – GS1 eCom. XML standards are not meant to compete with, or replace the GS1 EANCOM – the GS1 standard for “traditional” EDI. They initially addressed different user groups than the GS1 EANCOM, but currently both technologies are being used in parallel. The XML can be implemented by companies from many sectors using any technical configuration anywhere. It is based on many years of business experience. XML standards ensure the group of XML schemes that is used for making example of XML documents and offering confirmation to users during the business message exchange. XML documents are business messages that are equivalent to paper business documents. XML schemes were developed on the basis of UML models for business processes. Such a practice ensures the mod-

⁷ www.gs1.org

els of business message that are syntactical neutral and based on real business procedures. These models can be applied to any technical syntax that allows data exchange, and in data exchange on technology.

The third key product area of GS1 global standards is the global data synchronization network (GDSN). The network is built around the GS1 global registry (GR), GS1 certified data pools (CDPs), the GS1 data quality framework (DQF), and the GS1 global product classification (GPC). With the GDSN, trading partners always have the latest information in their systems. The GDSN connects trading partners to the GS1 GR *via* a network of interoperable GS1 CDPs. Today, the GDSN is being realized by hundreds of retailers and producers all over the world who benefit from using it. The following image shows the procedure of entrance to the GS1 GR⁸:

Image 4. GPC is a key to the global registry



The GS1 GPC is a part of GS1 system, and a key to the entry in the GDSN. Its business goal is the support in purchasing in such a way to enable customers to previously choose the group of appropriate products, and the creation of a common language for managing product categories when possibilities of faster reaction on consumer request are raised.

The fourth key product area of GS1 global standards is the EPC global network that leads the development of industry-driven standards for the electronic product code (EPC) in order to support the use of the radio frequency identification (RFID) in today's fast-moving and information-rich trading networks⁹. The goal is to increase visibility and efficiency throughout the supply chain, and to upgrade the information flow between companies and their key trading partners. EPC global incorporated is the organization entrusted by industry to establish and support the EPC global network as the global standard for real-time automatic identification of information in the supply chain of any company, anywhere in the world. The mission is to make organizations more efficient by enabling true visibility of information about items in the supply chain. As a joint venture between GS1 and GS1 US, the EPC global network leverages a nearly 30-year heritage of a successful partnership in industry. EPC global is a neutral, consensus-based, not-for-profit standards organization.

The EPC global network is a framework that enables immediate, automatic identification and sharing of information on trading items in the supply chain. In that way, the EPC global network will make organizations more effective by enabling true visibility of information about items in the supply chain. Using a combination of technologies and harnessing the power of current information systems, the EPC global network will provide for immediate, automatic, and accurate identification and location of any item in the supply chain of any company, in any industry, anywhere in the world. The concept of the network was conceived by the Auto-ID Centre, a global research team directed through the Massachusetts Institute of Technology, with labs around the world.

Their research effort was supported by more than 100 leading companies¹⁰. Companies and consumers are the ultimate beneficiaries of the EPC global network, as it enables organizations to be more efficient, flexible and responsive to consumer needs. The EPC global network consists of several compo-

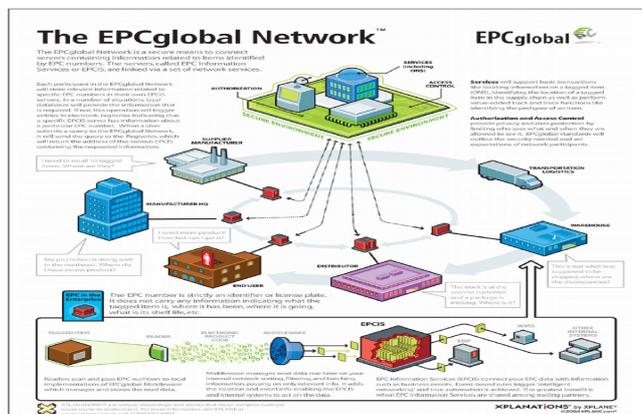
⁸ The membership in the GS1 GR covers numerous sectors in North America, Latin America, Europe and Pacific Asia.

⁹ www.epcglobalinc.org

¹⁰ www.epcglobalinc.org

nents that are projected to offer in joint work maximum visibility in the supply chain. The components are electronic product codes, tags, readers and software that help each segment to communicate with common “language”.

Image 5. The EPC global network



The combination of RFID and Internet technology in the EPC global network ensures two significant advantages: 1) the creation of a unique identifier for each individual item in the global supply chain, with what specific item information exchange is ensured, 2) the eliminating of claim for direct visibility between readers and carriers of identification product numbers – an EPC reader immediately finds out all EPS tags that pass through its radio frequently field. As a result, simultaneous reading of EPC of each item with EPC tag in container, palette or box is possible. That is the network that offers to authorized users, in the real time, product movement data for each individual item.

EPC is an electronic product code that is written in a microchip (tag)¹¹. EPC is located on a tag consisting of microchip and antenna, which is physically attached on a product or whole palette. Identification means that a person reads, by radio waves, the product date on a tag and transmits it into a computer. EPC includes more data than bar codes. It is a series of data that enables the global product identification. EPC structure consists of a global trade item number, serial number for unique product identification, state of origin, place of production, producer, used raw material, date of production, best-before date, etc. The example of EPC is presented on the following image:

Image 6. Tag with the electronic product code



As EPC presents a technological innovation, it is mainly used for marking and identifying highly valuable products and dangerous freights, and in logistic packaging. Its application has already been developed for: needs of goods tracking in real time, the creation of supply chains suitable for demand, a better usage of warehouse space, eliminating danger of product falsify, more rapidly retreat of goods with defect, deficit reduction, and the like¹².

¹¹ *Biznis & finansije* (2007): No. 23, BIF Press

¹² The usage of EPC and RFID technologies is a separate topic. Therefore we will put it aside for some other paper.

Conclusive observations

In contemporary conditions, regarding processes of globalisation and upward trends in world trade interdependence, it is practically impossible to do business without the fast development and application of new technologies and computer science. The e-business is a part of everyday life, and is essential to the management areas dealing with resource allocation and optimum assortment of each item in the supply chain.

It would be impossible to manage the wide range of items entering the production of any commodity, as well as territorially and time dispersed networks of supply, without an integrated system of product marking that is recognizable all over the world. Today, such a system is the GS1 organization. An increasing number of companies, organizations and institutions are adopting EPC global standards, and tagging their products with EPC tags or requiring their suppliers to do so. Those who make use of the EPC global network will see increasing opportunities for reducing distribution costs and improving efficiency and competitiveness, along with the global consolidation of supply-chain technologies and the growth of the EPC global network. These innovative applications offer early returns on investments¹³.

Whether someone is a manufacturer, retailer or some other partner within the supply chain – whether his/her business is small, medium or large – there is no better time to begin taking advantages of GS1 standards, the EPC global network and RFID technology. A wide array of private, public, for-profit and not for-profit companies and institutions has cleared the path towards global standards that will meet universal business objectives. The result of this work and the dedication of companies (such as the ones listed in these pages) will be an extraordinary progress in the supply-chain visibility and management, ultimately leading to increased profitability and better customer experiences.

This paper was written to present GS1 key aspects in short for all domestic companies that are already doing business in the global work partition, or want to do so in future. Perhaps, the basic message of this paper could be as follows: the using of some GS1 forms could not be misunderstood by domestic companies as unnecessary expenses or some kind of faddishness (fashion consciousness); GS1 forms are seen as the technological language of supply chains. Some domestic firms have already recognized the necessity for and the benefit from some kind of GS1 forms (especially the bar code technology, but more and more the RFID). Others have been already waiting for the fall in prices of GS1 forms, while the rest (unfortunately, the most of domestic firms) is not even thinking of GS1 possibilities.

It is expected that Serbian firms – in compliance with their financial possibilities and managerial knowledge – will start to apply new electronic technologies in supply chains. But, the Serbian government must show an explicit interest for the GS1 application expansion. In such a way, the new knowledge will be animated, and that would be a good basis for more strongly export expansion, which is necessary for the growth of the entire domestic economy.

References

- Aćimović, S. (2007): Dimensions of Strategic Positioning of the Supply Chain Management, International Conference “Contemporary Challenges of the Theory and Practice in Economics”, Faculty of Economics, University of Belgrade
- Aćimović, S. (2006): Understanding the Supply Chain, *Ekonomski anali*, No. 170, Belgrade
- Biznis & finansije* (2007): No. 23, BIF Press
- Chorpa, S., Meindl, P. (2004): *Supply Chain Management*, Pearson Prentice Hall
- Christopher, M. (2005): *Logistics and Supply Chain Management*, Prentice Hall
- Cohen, S., Roussel, J. (2005): *Strategic Supply Chain Management*, McGraw-Hill
- www.gs1.org
- www.gs1yu.org

¹³ Through wide-ranging impacts on production, backlog, tracking defects and tampering, minimizing recalls consequences, managing expiration dates and promotion logistics and more.

www.future-store.org
www.metrogroup.de
www.epcglobalinc.org
www.wikipedia.org

Regional Differences in Human Capital: The Case of Croatia

Ana Aleksić, Fran Galetić, Ivana Načinović¹

ABSTRACT – *Human capital is lately in many discussions recognized as the most valuable asset held by an organization. Measuring human capital and determining its influencing factors is in the focus of interest for many professionals. Because of the intangible character of human capital it is very difficult to measure precise the value of this type of firm's asset. The paper explores regional differences in the value of human capital in Croatia. A model that can help to explain different factors that can have an impact on the value of human capital in Croatia is developed. This model is based on the econometric analysis using the investments in education and the unemployment rate as independent variables. Human capital plays an important role in the process of economic growth, and this is the reason why societies engage themselves in its further development.*

KEY WORDS: *human capital, Croatia, econometric model*

Introduction

Along with the changes in the global economy and trends in business, a shift from old to new economy occurred. No longer tangible assets such as capital and land play major part in determining the company's success. Today's companies are doing business in knowledge society. In such conditions knowledge becomes the basic economic resource (Pulić, Sundać, 2001). Companies' success is no longer determined by the assets they possess; rather it is determined by what they know and can do. Business has become more knowledge-intensive and less capital-intensive (Kolaković, 2003). Human capital is not important only for business, it is important for overall growth and development of a country; therefore many governments, through public policy, are engaged in the human capital formation.

Industrial society, where the primary source of wealth was machinery, is giving place to a knowledge society, where the source of power is human capital. The new economy is based on companies that depend on information and knowledge. Capital owners of physical assets are facing challenges in this new environment. They used to control the economy by owning the physical (tangible) production factors. However, these days, as a result of global tendencies, the people who are not closely tied to original capital owners possess a significant part of production factors. As intellectual elements get more focus, the management of the complex mix of production factors becomes more difficult. It is becoming more obvious that the proportion, as well as the importance of tangible assets is gradually decreasing among production factors, while the importance of intellectual assets is continuously increasing (Boda, Lőrincz, Szilávik, 2008).

Competitive advantage does not come only from different product combinations and markets in certain industry. Contrary, it is made by the difference in organizational resources of different kind. Since resources cannot always be transferred or copied, to find the true source of competitive advantage we have to look inside the company, and not into its environment (Pulić, Sundać, 2001).

Intellectual asset is used as a synonym for intangible assets that have significant effect on business success, but it is not explicitly defined in the balance sheet. "Intellectual" means that the source of this capital is knowledge that can be seen in the material forms as plans, programmes, databases, manuals, corporation standards, computer knowledge – explicit knowledge, and non-material forms as knowledge, visions, abilities of problem solving, leadership, culture, experience – tacit knowledge. The goal

¹ Ana Aleksić, Fran Galetić, Ivana Načinović, University of Zagreb, Faculty of Economics and Business

of every company is to transform tacit, non-material knowledge into material, explicit knowledge that than represents company's ownership and is no longer transferable.

Human capital is much more than just the number of employees; it is the collective sum of the attributes, life experience, knowledge, inventiveness, energy and enthusiasm that people choose to invest in their work. Intellectual capital represents the sum of everything that everyone in the company knows – which contributes to the company's competitiveness on the market. It is the intellectual material – knowledge, information, intellectual property, experience – that can be used in the welfare creation. It represents the sum of collective knowledge, experience, expertise, abilities and skills of company on how to make better results, give better services or create other intangible values for the company, and how knowledge can be transformed into profit.

Human capital is often explained along with the term intellectual capital; thus the difference must be explained. OECD (1999) defines intellectual capital as “the economic value of two categories of intangible assets of a company”; that is, structural and human capital. Structural capital refers to organizational and customer capital: for instance, to proprietary software systems, distribution networks, and other goodwill. On the other hand, the human capital theory, we concentrate on, defines the part of intellectual capital that is based on human resources. The human capital theory is well founded both theoretically and empirically, and can be generalized and adapted to constitute a solid platform for the analysis of intellectual capital.

Human capital defined

Human capital can be defined through all employees with their individual and collective knowledge, abilities, attitudes, behaviour, emotions and experience. However, a complete definition can be given only when considering that the value creation occurs when one form of capital transforms into another. Therefore, employees become and can be considered as human capital when they – by transforming their knowledge, experience and abilities – contribute to an active value creation. Meaning that they have applied their knowledge, in alliance with organizational goals, for the purpose of achieving optimal market results (Pulić, Sundać, 2001).

Competent and skilled employees are considered to be the crucial part of the company. Salaries, bonuses and additional education no longer represent expenses – but investments (Pulić, Sundać, 2001). By giving new ideas on how to use physical objects, people can stimulate production, make new opportunities for increasing profit and finally affect the economic growth (Kolaković, 2003).

Romer (1990) argues that what is important for growth is the integration not into an economy with a large number of people but rather into one with a large amount of human capital. The most interesting positive implication of his model is that an economy with a larger total stock of human capital will experience a faster growth. The model also suggests that low levels of human capital may help explain why growth is not observed in underdeveloped economies that are closed, and why a less developed economy with a very large population can still benefit from the economic integration with the rest of the world.

Human capital can also be defined through three major categories (Jelčić, 2004). The first category comprises professional competencies that individuals have, social competencies that are presented in relationships with other people, and commercial competencies that refer to employee's ability to govern his/her actions in the value creation. The second category includes economic relations that have to be differed from social relations, since their ultimate goal is to have value creation relationships. The more the employees have greater value creating relationships, business success will be greater. The third category is composed of existing individual and group value systems.

Human capital is prior to other elements of intellectual capital. At the same time, environment inside the company, corporate culture and leadership help in creating organizational climate that enables development of human capital. However, in sustaining human capital and making it a collective knowledge that stays in companies' permanent ownership, it is necessary to develop structural capital. Struc-

tural capital consists of two major capital categories. The first category, organizational capital, consists of organizational structures and design, informational and communicational channels, management system, financial and accounting systems and other systems supporting the creation and sustention of intellectual capital. The second category refers to customer capital that is created through customers' relationships and customers' databases, and that is, in some cases, expanded to relationships with suppliers and partners. In explaining the complex relationship between these categories of intellectual capital it is useful to consider the next chain of value creation: whenever human ability, human capital, creates new business processes, structural capital, results will be seen in a better final service for customers and an increase in their loyalty, customer capital (Kolaković, 2003).

Managing intellectual capital, and therefore human capital, considers focused activities towards the future, strengthening abilities by eliminating weaknesses. If a company wants to efficiently manage intellectual capital over time it has to develop and conduct certain phases of successful intellectual capital management. The initial phase begins with the development of consciousness about the importance of the intellectual capital as a resource. The second step visualizes and categorizes the intellectual capital of the company. After examining the existing situation, future goals, key intangible factors and priorities are defined, as well as critical factors that have to be primarily advanced. Altogether they are integrated in the existing business strategy. The third phase defines the way to manage the key factors, depending on the strategy, culture, employees, technology and market. The fourth phase establishes and implements measurement systems for monitoring the performance of intangible factors. As the upgrade of the former phase it is necessary to introduce a new system of reporting, which will direct employees and inform them so they can adjust their actions with the current situation. In the last phase it is necessary to motivate employees to take an active role in the management of intellectual capital. In that sense company's management can accept a suitable vision, mission, strategy, policy, as well as the short-term goals, and disperse them inside the whole company (Jelčić, 2004).

Quantifying human capital

The gap between the firm's tangible assets and market value is growing. The firm's value cannot be calculated solely, based on financial results; it must be based on a more sophisticated measure – the value of human skills and knowledge that employees acquire on the job, through training and experience, which increases employees' value in the marketplace.

In numerous occasions human capital is enumerated among critical sources of competitive advantage; however, it is very difficult to express it in numerical terms. In fact, the value of human capital is estimated in different ways, so the question how do we quantify the value of this asset must be answered. The human capital theory presumes that when people invest in themselves – through the accumulation of formal education, skills, productive knowledge and information – generally intangible human capital is created with the potential of increasing their owner's productivity. Nerdrum and Erikson (2001) propose the incidence of human capital on earnings in the form of equation. Net real earnings (E) to a human capital investor are equal to his/her basis earnings (B) plus the gross returns from his/her human capital investment (R) minus their costs (K), $E=B+R-K$.

Human capital is not like other capital, so there is no widely used measure for human capital. In Croatia, the Centre for intellectual capital provides annual reports with estimates of the intellectual and human capital value. The reports are based on the two measures that can be used as the indicators of human capital value: the value added, and the human capital investments. Both measures are calculated on the basis of a firm's financial statements, and thus can be compared across different firms. The value added is calculated as the total income minus the cost for goods and services purchased on the market. The idea behind this measure is that it captures human capital as the amount of a firm's revenue created solely on intangible assets – dominantly employees' skills and knowledge. The second indicator of the human capital value is the amount of investments into employees for salaries, education, training etc. In our study we used the value added as a representative of the human capital in use. Another measure used is the intellectual capital efficiency, an index also provided by the Centre for intellectual capital, that shows the efficiency in the use of intellectual capital.

Abowd *et al.* (2003) measure the human capital value as the return to both observed and unobserved worker characteristics; hence, it is derived from a wage accounting framework that can distinguish between person's and firm's specific factors. There are also some complex models; for instance, Wei (2008) measures individual human capital as *per capita* market lifetime labour income and defines the model with several forces that influence it: gender, age, educational attainment, average market labour income for employees, employment rate, the percentage of those individuals with educational attainment studying for a higher educational attainment, the index of years taken to obtain a higher educational qualification, average years to complete the study, real income growth rate and the discount rate.

Schiemann (2008) explains that there are, in fact, the two ways of measuring human capital. The static approach seeks for describing the value of human capital with a standardized number indicator that could be included in the balance sheet. An alternative approach is provided by the concept of "People's Equity", which includes the three components: the alignment of the workforce with the business strategy, the capabilities to meet customers' requirements, and the engagement of the workforce (the levels of raw energy, commitment and advocacy).

Equally important when measuring human capital is determining the factors that have an influence on the development of this asset. Measuring human capital will never be as straightforward as calculating the value of tangible assets because there are simply too many variables involved in human capital. In this paper we developed a model that helps to understand the value of human capital in Croatia.

Methodology of research

The analysis of all data is performed by using the multiple regression model, which is not linear. Squared model fits better the variables examined here than the linear one. The regression model used is based on the method of least squares. This method suggests that the difference between the real and expected values of the dependent variable is the smallest possible (Maddala, 2006, Šošić, 2006):

$$\sum_{i=1}^n (y_i - \hat{y}_i)^2 \rightarrow \min$$

The method of least squares is based on the following assumptions:

- the expected values of errors are zero,
- the variances of errors are constant,
- all errors are independent.

Because of these assumptions, the method of least squares is today the most used one in the econometric analyses. The method of least squares is often characterized as BLUE (Best Linear Unbiased Estimator), because its estimators have desirable optimal properties.

The regression model used in this paper consists of the two independent variables, so the whole model is the following:

$$y_i = b_0 + b_1 x_{i1} + b_2 x_{i2} + e_i$$

The data for econometric model analysed in this paper are the secondary data taken from the Centre for intellectual capital, the Croatian bureau of statistics and the Croatian national bank. The data used from the Centre for intellectual capital are value added and intellectual capital efficiency. The Croatian bureau of statistics and the Croatian national bank published the data about the investments in education, number of inhabitants and unemployment rate. All data are analysed by counties for the year 2005 (Croatia is divided into 21 counties).

All econometric analyses are done using the Eviews-software.

Model

The model developed and analysed here is based on the data shown in the following table.

Table 1. Data used in the analysis

County	Value added (VA)	VA per capita	Investments in education	ICE	Inhabitants	Unemployment rate
Zagrebačka	7,293,305,750	22,587	58,519,000	2.45	322,900	0.129
Krapinsko-zagorska	2,394,672,806	17,290	28,842,000	2.43	138,500	0.121
Grad Zagreb	75,318,535,834	96,045	21,6675,000	2.56	784,200	0.078
Sisačko-moslavačka	2,023,348,996	11,342	19,115,000	1.73	178,400	0.263
Karlovačka	1,854,733,539	13,668	12,574,000	2.02	135,700	0.241
Varaždinska	4,283,893,741	23,577	31,002,000	2.15	181,700	0.116
Koprivničko-križevačka	2,408,231,633	19,854	6,378,000	1.96	121,300	0.161
Bjelovarsko-bilogorska	1,692,824,805	13,246	53,748,000	1.93	127,800	0.249
Primorsko-goranska	8,211,478,288	26,914	59,037,000	1.99	305,100	0.123
Ličko-senjska	496,157,368	9,578	31,433,000	2.26	51,800	0.220
Virovitičko-podravaska	944,105,572	10,513	9,859,000	2.02	89,800	0.287
Požeško-slavonska	1,031,638,740	12,325	10,756,000	2.33	83,700	0.211
Brodsko-posavska	1,747,787,210	9,999	46,857,000	2.10	174,800	0.276
Zadarska	2,784,984,890	16,267	77,987,000	2.50	171,200	0.201
Osječko-baranjska	5,318,912,548	16,391	80,050,000	2.10	324,500	0.242
Šibensko-kninska	1,358,070,746	11,892	20,675,000	1.91	114,200	0.235
Vukovarsko-srijemska	1,979,598,043	9,918	49,727,000	2.27	199,600	0.294
Splitsko-dalmatinska	9,118,924,790	19,018	126,880,000	1.99	479,500	0.214
Istarska	8,112,676,994	38,303	48,971,000	2.49	211,800	0.080
Dubrovačko-neretvanska	3,031,305,332	24,192	36,380,000	2.13	125,300	0.179
Međimurska	2,610,442,176	22,085	32,562,000	2.14	118,200	0.140

Sources: Centre for intellectual capital, Croatian bureau of statistics, Croatian national bank

The aim of developing a model is to show which variables influence the value added in the intellectual capital, and what are the strengths and directions of that influence. Different models were tested during the analysis, but the model that best fits is the model that has the two independent variables: the investments in education and the unemployment rate. The model is shown in the next table.

Table 2. Analysis of the model

Dependent Variable: VA

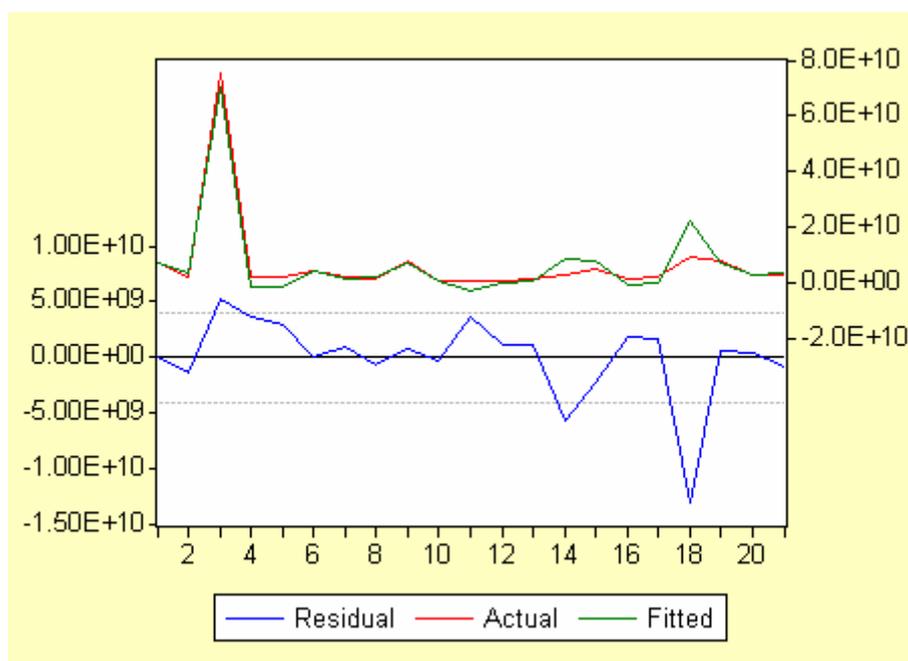
Method: Least Squares

Sample: 1 21

Included observations: 21

VA = C(1) + C(2)*INV^2 + C(3)*U

	Coeffi.	Std. error	t-statistic	Prob.
C(1)	6.77E+09	3.03E+09	2.231804	0.0386
C(2)	1.40E-06	9.25E-08	15.16317	0.0000
C(3)	-3.37E+10	1.41E+10	-2.391962	0.0279
R-squared	0.943309	Mean dependent var.		6.86E+09
Adjusted R-squared	0.937010	S.D. dependent var.		1.59E+10
S.E. of regression	3.99E+09	Akaike info-criterion		47.18423
Sum of squared resid.	2.87E+20	Schwarz criterion		47.33345
Log likelihood	-492.4344	Durbin-Watson statis.		1.992951

Graph 1. Actual and predicted values

The model with all parameters calculated is:

$$VA = 6,770,000,000 + 0.0000014 \cdot Inv^2 - 3,370,000,000 \cdot U + e_i$$

This can be shown in a more acceptable way as:

$$VA = 6.77 \cdot 10^9 + 1.4 \cdot 10^{-6} \cdot Inv^2 - 3.37 \cdot 10^{10} \cdot U + e_i$$

All analysed variables in this model are significant at the significance level of 5%. R-squared is 94%, which is the proportion of variability in a data set that is accounted for by a statistical model. Adjusted R-squared is 93%, so there is no big impact of the number of independent variables on the R-squared. Considering the fact that there are the two independent variables, this can be accepted as good. Durbin-Watson is 1.99, which is very close to the value of 2 that is considered as desirable.

Table 3. Autocorrelation test

Sample: 1 21
Included observations: 21

Autocorrelation	Partial correlation	AC	PAC	Q-statis.	Prob.	
.	.	1	0.003	0.003	0.0003	0.987
*	*	2	-0.092	-0.092	0.2155	0.898
.	.	3	-0.021	-0.021	0.2278	0.973
.	.	4	0.020	0.011	0.2387	0.993
.	.	5	0.002	-0.002	0.2388	0.999
*	*	6	0.066	0.069	0.3794	0.999
.	.	7	0.031	0.032	0.4120	1.000
*	*	8	0.097	0.111	0.7650	0.999
.	.	9	0.003	0.013	0.7655	1.000
.	.	10	0.001	0.020	0.7655	1.000
.	.	11	0.000	0.005	0.7655	1.000
.	.	12	0.000	-0.007	0.7655	1.000

Table 3. shows the residual test for autocorrelation. From this analysis it is obvious that there is no autocorrelation in our model. This can easily be seen in the last column, where all probability values are high.

Table 4. Heteroscedasticity test

White heteroscedasticity test				
F-statistic	2.981972	Probability	0.051258	
Obs.*R-squared	8.969015	Probability	0.061879	
Test equation				
Dependent variable: RESID^2				
Method: Least squares				
Date: 11/12/08; Time: 22:02				
Sample: 1 21				
Included observations: 21				
Variable	Coeff.	Std. error	t-statistic	Prob.
C	-1.42E+20	6.64E+19	-2.130337	0.0490
INV	7.91E+11	4.58E+11	1.726425	0.1035
INV^2	-1,322.503	2,183.158	-0.605775	0.5532
U	1.29E+21	7.41E+20	1.737924	0.1014
U^2	-3.05E+21	1.93E+21	-1.579795	0.1337
R-squared	0.427096	Mean dependent var.	1.37E+19	
Adjusted R-squared	0.283870	S.D. dependent var.	3.69E+19	
S.E. of regression	3.13E+19	Akaike info-criterion	92.81990	
Sum of squared resid.	1.56E+40	Schwarz criterion	93.06860	
Log likelihood	-969.6090	F-statistic	2.981972	
Durbin-Watson statistic	1.780958	Prob. (F-statistic)	0.051258	

White heteroscedasticity test, presented in Table 4, shows whether there is heteroscedasticity in the model. At the level of confidence of 5% there is no heteroscedasticity in the model we have developed here.

Considering all this information, the conclusion is that this model is good and suitable for explaining the human capital in Croatia.

The parameters from the analysis can be interpreted. 6,770,000,000 is the value added without the investments in education and with the zero unemployment rate. 0,0000015 is the average rise of the value added when the squared investments increases by one. The change in the unemployment rate of 1% will decrease the value added by 33,700,000 on average.

Next table shows the correlation between analysed variables.

Table 5. Correlation between analysed variables

Correlation	Value added	Investments in education	ICE	Number of inhabitants	Unemployment rate
Value added	1	0.880584488	0.284272774	0.117663709	0.094447327
Investments in education		1	0.381582152	0.979400816	-0.411865728
ICE			1	-0.010192103	0.904291173
Number of inhabitants				1	-0.322197833
Unemployment rate					1

The highest positive correlation exists between the number of inhabitants and the investments in education. This correlation is 0,979, which means that these two variables almost perfectly move together. Other strong positive correlations are those between the ICE and the unemployment rate (0.904), and between the value added and the investments in education (0.881). Lower positive correlations exist between the ICE and the investments in education, as well as between the ICE and the value added.

The unemployment rate is negatively correlated with the investments in education, as well as with the number of inhabitants. In both cases, there is no strong negative correlation. The number of inhabitants and the ICE are not correlated at all.

Discussion and conclusion

There has been an increasing awareness that fewer organization's assets are tangible and can be included in a traditional balance sheet. Different items – such as brand, intellectual capital, culture, workforce skills and innovation – are becoming dominant forces in shaping an organization's current and future success. A term human capital has been developed to describe the significance of these assets for firms.

In this paper we explored the value of human capital in Croatia. The value added was used as an indicator of the human capital value. The data show that there are great regional differences in the value of human capital. For instance, the City of Zagreb (Grad Zagreb) has more than 10 times greater *per capita* value of human capital than the County of Ličko-senjska. This situation is not encouraging at all, and seeks for an immediate action to increase the value of human capital in Croatian underdeveloped regions.

The intellectual capital efficiency is an index we used to indicate how the intellectual and human capital is used. The difference among regions is not as high compared to the value added *per capita*. For instance, the region with the highest index, the City of Zagreb has index 1.48 times higher than the region with the lowest index: the County of Sisačko-moslavačka. These data are encouraging, as they indicate that most regions use their intangible capital with similar efficiency. The major problem is that human capital in general needs to be developed in some regions.

In the second step of our research we developed a model that shows variables that have some influence to the value added, as well as the strength and direction of that influence. The model includes the investments in education and the unemployment rate as significant variables of influence to the creation of value added. The model was tested for autocorrelation, heteroscedasticity and correlations between variables and all indicators show that we can use the model as representative.

The model presented shows that the investments in education have a positive impact on the human capital creation, measured by the value added. However, at the same time the model shows that an increase in the unemployment rate could have a negative impact on the value of human capital.

Human capital is capital of the future. Firms that have not already adopted the phrase “our people are our greatest asset” will surely do so in the future. Human capital is a part of new and evolving science, thus firms will be forced to invest in human capital equally as in tangible assets such as technology, premises, promotion etc. It is just recently that firms have started to behave as they really find their employees as a source of competitiveness on the market. In Croatian context, our research shows that there are great regional differences in the value of human capital, at least according to the measure of value added that we used. Governmental institutions should use the model we proposed and invest in education to improve the state of human capital in some regions.

Human capital is a way of viewing people as critical contributors to an organization's success. The development of human capital in the future will depend upon many different factors, and the model we proposed could surely be upgraded with additional data. The model in current form gives an idea in which direction the future research should go.

References

- Abowd, J. M., Lengermann, P. A., McKinney, K. L. (2003): *The Measurement of Human Capital in the U.S. Economy*, technical paper, <http://lehd.did.census.gov/led/library/techpapers/tp-2002-09.pdf>
- Boda, G., Lőrincz, J., Szlávik, P. (2008): How to be More Efficient in Managing Intellectual Capital: An Overview of Various Techniques, *The Icfai University Journal of Knowledge Management*, Vol. VI, No. 5, pp. 61-79
- Centre for intellectual capital (2006): *Intelektualni kapital: Uspješnost na nacionalnoj, županijskoj i poduzetničkoj razini 2006*, <http://www.cik-hr.com/start.htm>
- Croatian bureau of statistics, www.dzs.hr
- Croatian national bank, www.hnb.hr
- Jelčić, K. (2004): *Priručnik za upravljanje intelektualnim kapitalom u tvrtkama*, Hrvatska gospodarska komora, Zagreb
- Kolaković, M. (2003): Teorija intelektualnog kapitala, *Ekonomski pregled*, Vol. 54, No. 11-12, pp. 925-944
- Maddala, G. S. (2006): *Introduction to Econometrics*, Wiley
- Nerdrum, L., Erikson, T. (2001): Intellectual capital: a human capital perspective, *Journal of Intellectual Capital*, Vol. 2, No. 2, pp. 127-135
- OECD (1999): *Measuring and reporting intellectual capital: experience, issues and prospects*, proceedings of international symposium, June, Amsterdam
- Pulić, A., Sundać, D. (2001): *Intelektualni kapital – ključni resurs 21. stoljeća*, International business consulting centre, Rijeka
- Romer, P. M. (1990): Endogenous Technological Change, *Journal of Political Economy*, Vol. 98, No. 5, pp.71-102
- Schiemann, W. A. (2008): From Crunching Numbers to Counting Human Capital, *Financial Executive*, Vol. 24, Issue 4, pp.53-55
- Šošić, I. (2006): *Primjenjena statistika*, Školska knjiga, Zagreb
- Wei, H. (2008): Developments in the estimation of the value of human capital for Australia, *OECD Workshop on the Measurement of Human Capital*, Turin, 3-4 November, http://www.oecd.org/document/39/0,3343,en_2649_33715_41153767_1_1_1_1,00.html

The Okun Law and its Application to the Portuguese Economy¹

João Sousa Andrade²

ABSTRACT – We know from experience that weak economic growth increases the unemployment rate. In 1962 Okun proposed to measure potential output in terms of unemployment gap. From this relation a direct link between increase in unemployment and output growth was deduced, known as the Okun Law. This Law is one of the pillars of empirical macroeconomics. One of the problems of this Law is the iteration between the variables involved and the non-stationarity of these variables. As a consequence we must be careful with the stability and also with the possible asymmetry of Okun's Law. We apply these ideas to the Portuguese economy in order to estimate a Okun Law. We can conclude by the temporal stability of a dynamic formulation of the Law, although we also conclude by the presence of an asymmetric, but not very important, behaviour of the Law.

KEY WORDS: Okun Law, cycles, participation rate, stability and asymmetry

Introduction

The periods of weak economic growth are responsible for unemployment rate increase. The reversal of the conjuncture creates the expectation of a decreasing rate of unemployment. At the same time, the statistical supply of labour is not independent of the conjuncture so this interdependence creates a complex understanding of the evolution of the unemployment rate.

We want to answer to the question of how much the Portuguese economy should grow in order for the unemployment rate to be constant. We divide this study into two parts. In the first part we present and comment the Okun Law, which is at the center of this type of concern, and we insist in the interdependencies that are important for it but are normally excluded in the formulation of the Law. In the second part we propose an application to the Portuguese economy. We search for a stable linear model, and then we propose the existence of asymmetry in the empirical relation. After solving the problem of asymmetry we conclude.

The Okun Law: presentation and meaning

Okun (1962) has suggested as a measure to potential output the following formulation:

$$Y^P = Y[1 + 0,032 \cdot (U - U^*)],$$

obtained from the relationship between actual output (Y) and unemployment rate gap (U-U*). The value of U* has been taken by Okun as equal to 4%³. This value may refer to the concept of NAIRU, the natural rate of unemployment, or simply to a "Benchmark Unemployment Rate" (Lovell (2004),

¹ I thank Pedro Bação and Adelaide Duarte for the comments and suggestions that they did me. But only the author is responsible for the omissions or inaccuracies, which may still exist.

² João Sousa Andrade, GEMF – Faculdade de Economia – Universidade de Coimbra

³ In Okun (1962) words: "that four percent unemployment is a reasonable target under existing labor market conditions", p.98 cited in Attfield and Silverstone (1998). When Okun has developed his relation the Council of Economic Advisers of Kennedy had proposed a target of 4% for unemployment (Lovell (2004)). It's also interesting to remember that William Vickrey in his presidential address to the AEA, in 1993, has made the reference to a value of 1.5%.

p.351). The idea was to obtain a measure of potential output⁴. This formulation has a further advantage, to remind politicians the gains in production resulting from the reduction of unemployment⁵. Dornbusch, Fischer and Startz (2001) present it as representing the loss of welfare associated with the rise in unemployment by reducing production and global demand. The relation 3 / 1, which represents the idea that a reduction in the unemployment rate of 1% would require a growth rate of 3%, was very appealing to economists and politicians⁶. Through this understanding the door was open to what came to be known as the Okun Law: a stable relationship between the unemployment rate and the output growth rate. Based on the effects of employment on production, *mutatis mutandis*, we can connect a reduction on unemployment with output⁷. This is no much more than an empirical regularity and it was classified by Blinder (1997) as one of the features of the nuclear model of the economy⁸. This robust empirical generalization⁹ "is one of the most reliable generalizations that macroeconomists have found" (Hall and Taylor (1988), p. 136).

The indirect calculation of potential product, proposed by Okun, has the merit of its simplicity, but as soon emphasized by Thurow and Taylor (1966), the problem of its estimation bias should not be ignored. In addition to a problem of omission of variables, which we will see below, the Okun relationship has some other difficulties. One of them, associated with its initial formulation is that the empirical estimation of the relationship requires to set the value of U^* , as Perloff and Wachter (1979) said, "The goodness of the fit of the equation can not be used to determine which of the many (U^* , Y^*) pairs is the "correct" one" (p.115). Moreover, this formulation implies frequently reductions of the potential product of the economy¹⁰. The high unemployment in Europe, in the 70s, it was hardly reconciled with this relationship¹¹. Another problem is that the consequences of a change in unemployment should not be derived from the estimation of the consequences of a variation of the product. We know from basic econometrics, if we have $Y = \beta \cdot X + \varepsilon$ and $X = \alpha \cdot Y + \mu$, then $\alpha = \frac{1}{\beta} \cdot \rho^2(Y, X)$.

That is, it will be indifferent either estimation if the correlation is perfect $\rho(Y, X) = 1$ ou -1 ¹². An alternative interpretation to the calculation of the potential product was suggested by Thirlwall (1969). From $dy = \alpha - \beta \cdot dU + \varepsilon$, where y is the logarithm of real output and d its variation, we could take α as representing the natural rate of growth. This interpretation had not, however, much success in the literature.

Specification of the Law

After the criticism of Plosser and Schwert (1979) the Law of Okun has one of the following formulations¹³:

$$U - U^* = \alpha - \beta \cdot y^c + \varepsilon$$

$$U^c = \alpha - \beta \cdot y^c + \varepsilon$$

$$dU = \alpha - \beta \cdot dy + \varepsilon$$

Where U^c and y^c represent deviations from the trend. The first one is derived directly from the presentation of Okun, the second is an adaptation in terms of cyclical fluctuations and the third seeks to pre-

⁴ Okun (1962), pp. 136-7 and Kahn (1996).

⁵ See Prachowny (1993).

⁶ Gordon (1984) and Gordon (1990) have proposed a relation of 2/1.

⁷ As had insisted Prachowny (1993).

⁸ See also Silvapulle, Moosa and Silvapulle (2004).

⁹ Hoover (2001).

¹⁰ See Attfield and Silverstone (1998).

¹¹ See Knoester (1986).

¹² In the example of Plosser and Schwert (1979), where they take the first differences of unemployment rate and of the logarithm of the output, the coefficient of the first variable for the USA, from 1953:I to 1979:IV, increases from 1.58 to 3.32.

¹³ Where β will be designated by "Okun coefficient".

vent some of the problems posed by the second. Obviously, in terms of estimation, any of those equations has to be adapted to the dynamic aspects of the data generating process under study. The β coefficient is very sensitive to the actual specification of the model, the dynamic structure, the method of estimation and the calculation of the cyclical values, when it is the case¹⁴.

It is surprising that a relationship for the calculation of potential output has evolved into a relationship that requires the prior calculation of potential output. The method used for calculating the cyclical values varies widely from study to study. Watts and Mitchell (1991) used a trend with the highest values of the evolution of the product. Most authors have used the Hodrick-Prescott filter¹⁵. The methodology proposed by Harvey (1985) and Harvey (1989) has been used by several authors, such as Sögner and Stiassny (2002), Moosa (1997), Silvapulle, Moosa and Silvapulle (2004) and Cuaresma (2003). The Baxter-King filter has been less used¹⁶, as well as the Beveridge-Nelson¹⁷. The first two formulations of the Okun Law introduce an extra element of uncertainty: the presence of cyclical values of the output and the value of the natural rate of unemployment¹⁸. In addition to this problem, we must insist that they ignore what happens to the unemployment rate as a result of the evolution of the potential output. As we shall see below, some of the problems of stability of the β coefficient are the result of ignoring long-term behaviour. We should not ignore that the decomposition between potential and cyclical product is not a simple question of separation between two independent components. As was so clearly written more than 3 decades ago by Thurow and Taylor (1966), "Whatever the chosen unemployment target, potential GNP after a period of business cycles will not necessarily be the same as if the economy had been continually operating at full employment. This occurs since the growth of the capital stock would presumably differ under these two conditions. Thus, above potential output, there is additional output that would have existed had the capital stock grown continually at full-employment rates." (p.359). This interdependence weakens the first two relations.

Interdependence and stability of the Law

The application of the *mutatis mutandis* principle raises problems of interdependency between variables that affect the stability of the relationship. Let us analyse some of these relationships, sometimes omitted, which affect the value of β : relationships between employment, labor force and unemployment, in a dynamic context, characterizing the supply and demand of labour - Weber (1995) and Sögner and Stiassny (2002); variations of the use of productive capacity - Watts and Mitchell (1991) and You (1979); variations in productivity - Altig, Fitzgerald and Rupert (1997) and Kahn (1996) and his cyclical fluctuations - Hultgren (1960); changes of human capital and working time - Farsio and Quade (2003) and You (1979); the cyclical evolution in the participation rate - Thirlwall (1969)¹⁹; the labour hoarding phenomenon - Thirlwall and Ireland (1970) and Sögner and Stiassny (2002); the different protection policies of employees Sögner and Stiassny (2002), Blanchard (1999), Moosa (1997), Kaufman (1988), Weber (1995) and Apergis and Rezitis (2003) - which ultimately may be the result of increased international competition or the attempt to reduce the gap between *insiders* and *outsiders* of the labour market; and the evolution of the *hysteresis* in the unemployment rate - Sögner and Stiassny (2002).

While empirical research in terms of dynamic processes can solve some problems²⁰, we can not expect that all of them are miraculously solved. When the interdependences pointed out by the authors are not

¹⁴ See Moosa (1997). However You (1979) arrives to the conclusion that the method employed to obtain the potential output was not relevant for the results of the model.

¹⁵ See, among others, Apergis and Rezitis (2003), Gordon (1987), Prachowny (1993) e Cuaresma (2003).

¹⁶ See, for example, Apergis and Rezitis (2003).

¹⁷ See, among others, Attfield and Silverstone (1998) and near this filter, Evans (1989b) and Evans (1989a).

¹⁸ Or a benchmark value, as we saw above. See the long paper of Franke (2006).

¹⁹ See the reply and the counter-reply about the proposal of this author, Monhollon and Cullison (1970) and Thirlwall and Ireland (1970).

²⁰ See Kahn (1996) about the question of productivity evolution.

explicitly considered we have a serious problem of instability of the β coefficient because there is no reason why the relationship will be stable over time²¹.

The argument of instability is an argument to empirical refutation. If instability is rejected we can conclude either that the omission of those relations does not affect the value of the parameters of the Law, or they are not important, or because their effects were offset.

In general, during the post-war period the coefficient is decreasing, meaning that the same reduction in the unemployment rate was achieved with increased output growth rates, and countries with greater protection of employment have smaller values, such as France and especially Japan.

Econometric estimation: non-stationary variables and non-linear relations

The econometric methodology we know today allows the study of relations that are not spurious²². The first of the relations, presented above, is likely to be a regression of a variable with unit root, $I(1)$, on a stationary variable, $I(0)$. Obviously, in this case the coefficient of Okun can not be stable or constant. Similarly the last equation should lead to include an error term, ECM, in the event of the two variables (U and y) being $CI(1,1)$ ²³. For Gordon (1984) one of the problems is that normally we search a value for β with inadequate models. Obviously, if there is a relation of co-integration between U and y , the interpretation of coefficient of Okun is not obvious. Attfield and Silverstone (1998) propose to interpret the *old* β in terms of the error (ECM) coefficient. But this proposal ignores the interdependence between the variables of a VECM (vector auto-regressive error-correction mechanism) model as Johansen (1995) advocates it. That is, in these cases we should study the effects of shocks on the two variables involved to be able to take into account the interdependence of short and long term.

The issue of instability does not end in variations of the β coefficient because there is also the possibility of its asymmetry. The idea that the contraction phase of the cycle could be more abrupt than the expansion was exposed by Keynes (1936). Neftci (1984), Rothman (1991) and Brunner (1997) have confirmed this idea for product and unemployment. A simple regard of cycles figures confirms, in general, the same idea.

Courtney (1991) showed that the imposition of symmetry leads to underestimate the increases in unemployment during contractions and the reverse during expansions. It is thus obvious that if we are in presence of symmetry it ignorance can cause serious errors for stabilization policies²⁴. Several factors have been identified as responsible for this asymmetry: the replacement of factors over the cycle, Courtney (1991); the evolution of the rate of participation and changes in the distribution of the sector growth rates, Courtney (1991) and Palley (1993); the existence of problems of mismatch between sectors and regions, Mayes and Virén (2002) and Aguiar and Martins (2005); the possibility of asymmetric responses in terms of creation and destruction of jobs, in face of shocks, due to different costs of adjustment, Campbell and Fisher (2000), Harris and Silverstone (2001) and Aguiar and Martins (2005); and still the possibility that employers, for various reasons, react more strongly to bad than to good news, Silvapulle, Moosa and Silvapulle (2004). The presence in the economy, of efficiency wages in different sectors could also be a source of this asymmetry.

Most studies that keep the existence of asymmetry retained the cyclical evolution of the product as explanatory variable and the values of this as signalling that asymmetry²⁵. A considerable number of papers support empirically the presence of asymmetry²⁶.

²¹ There are several authors that agree with the instability of the coefficient, either temporal, or long term, or cross-section within different countries. See Okun (1980), Davenport (1982), Thurow (1983), Gordon (1984), Nguyen and Siriwardana (1988), Adams and Coe (1989), Lee (2000) and Farsio and Quade (2003).

²² For a list of empirical studies see Apergis and Rezitis (2003) and also Silvapulle, Moosa and Silvapulle (2004).

²³ With a unit root and being co-integrated. See Watts and Mitchell (1991).

²⁴ See Silvapulle, Moosa and Silvapulle (2004), Harris and Silverstone (2001) and Virén (2001).

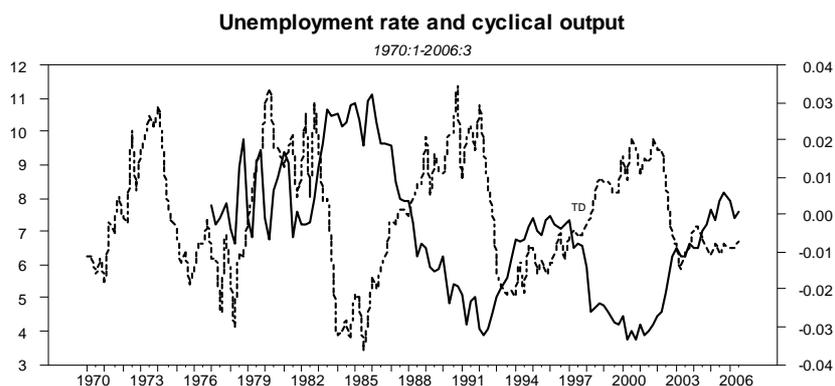
²⁵ In general, the value of zero for this variable. This means that cyclical output was divided in two variables, one with positive values and the other with negative ones.

An application to the Portuguese economy

The evolution of unemployment and production

In Portugal, similar to what is happening in other economies, we see an abrupt decline on the descending compared to the ascending phase, and an inverse relationship between the rate of unemployment and the cyclical output. In Figure 1 we have the cyclical output on the right scale; their values are in logarithms and were obtained from the potential output calculated through the Hodrick-Prescott filter²⁷.

Figure 1.



Tests of stationarity of the variables

Econometric estimation depends of the stationarity characteristic of the variables. We will apply conventional tests to our variables: ADF²⁸, Perron²⁹, to structural breaks, and KPSS³⁰ tests. All these tests were applied to the participation rate (*TXA*), unemployment rate (*U*)³¹ and output (*y*), in levels and first differences. The variables in levels should be taken as integrated of order 1, *I*(1), and in first differences we can take them as stationary, *I*(0).

The behaviour of the participation rate and the unemployment rate

One of the issues in the empirical evaluation of the Okun Law is the interdependence between the cyclical evolution of the economy and the supply of labour that will ultimately determine the value of the unemployment rate. As we can see in Figure 2, where the values of the participation rate are at left and the quarterly variations of the output (in logs) at the right scale, it is obvious the inverse relationship between the two. A slowdown of the economy coexists with a growth in the rate of participation. In Figure 3 we have the relation between the participation rate and the unemployment rate. Once again the counter-cycle evolution of the participation rate is obvious and so also the supply of labour.

²⁶ See Acemoglu and Scott (1994), Schettkat (1996), Bodman (1998), Gomme (1999), Lee (2000), Sögner (2001), Virén (2001), Cuaresma (2003) and Silvapulle, Moosa and Silvapulle (2004).

²⁷ We use the λ equal to 1600. We have quarterly data. The end points correction was made with an ARIMA(3,1,0) for the forecasting of 3 years. Our series for output goes from 1970:1 to 2006:3 and for unemployment from 1977:1 to 2006:3. For the output, from 1970 to 1976, we used a series created from the Industrial Production Index, intermediary products. For the unemployment rate before the quarterly inquiry we use a transformation of semester to quarterly data (Duarte and Andrade (2000)).

²⁸ Dickey and Fuller (1979). For all the tests applied in the paper see Hamilton (1994).

²⁹ Perron (1997).

³⁰ Kwiatkowski, et al. (1992).

³¹ For a exhaustive paper about the presence of a unit root on the unemployment rate, Duarte and Andrade (2000).

Figure 2.

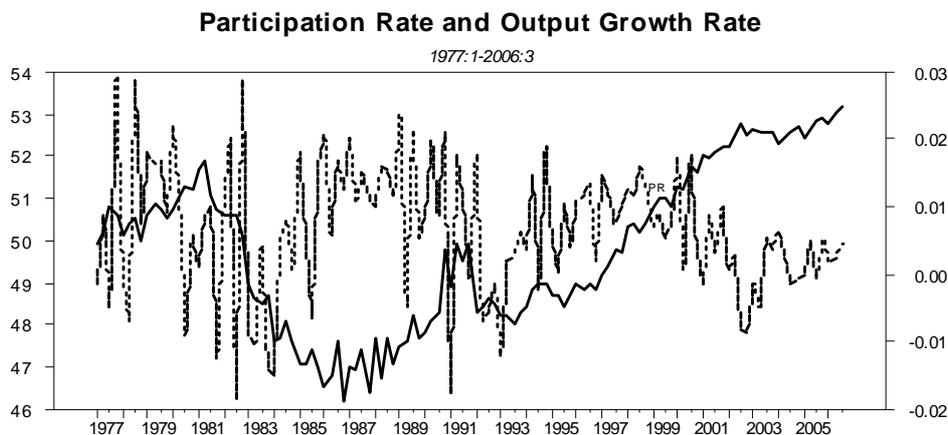
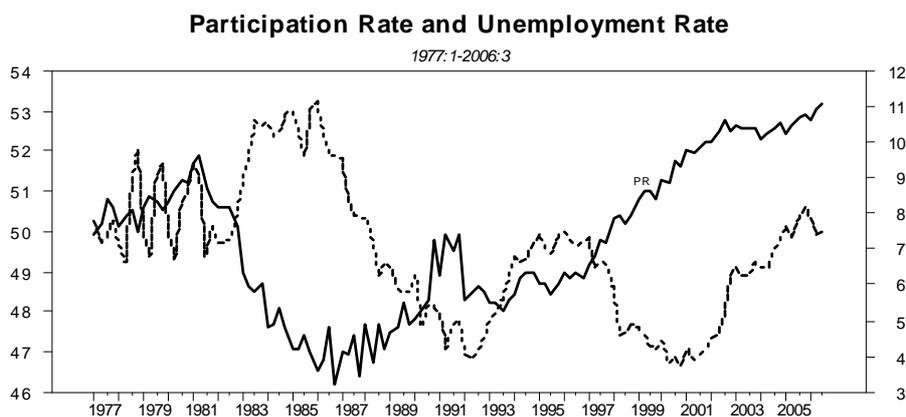


Figure 3.



We think that the presence of strong interdependencies between them it's obvious. Between TXA and dy and between TXA and U , a VAR model is adequate to represent interdependencies between the two pair of variables³². By the criterion of Schwarz³³ (SC) criteria we got 3 lags for the order of the VAR. In the case of the VAR with the participation rate and the unemployment rate, this last variable was not cause³⁴ of the participation rate. For this reason we retain only the model with the participation rate and the quarterly variation of output. After obtaining the VAR model and by a parsimonious choice we have a Near-VAR model reproduced in Table 4³⁵.

In both equations we don't have problems of auto-correlation of errors of order 1 to 4 (AR (1-4)), but the errors have not a Normal distribution. The two variables have a dynamic of interdependences that can be seen by the exclusion of no causation between them, by the traditional or by the concept of instantaneous causality³⁶.

³² We apply 3 quarterly dummy variables when we estimate models in levels.

³³ Lütkepohl (2004), p. 111.

³⁴ By a F test for the bloc exogeneity.

³⁵ Null hypothesis of non restrict model.

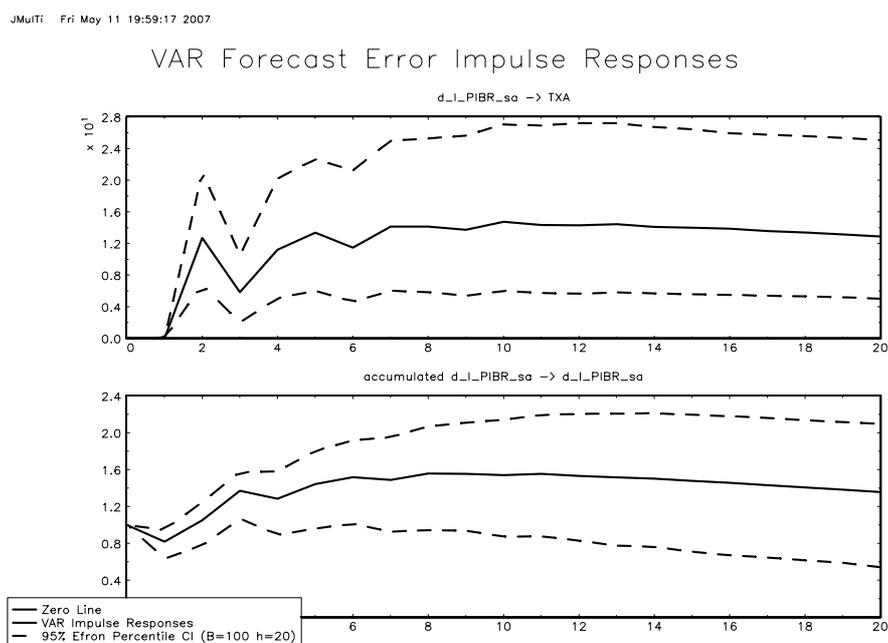
³⁶ Lütkepohl (2004), p. 147.

Table 4: VAR Coefficients

Var	TXA	dy
TXA_1	0,642 ***	
Dy_1		-0,183 **
TXA_2	0,357 ***	
Dy_2	12,681 ***	0,199 **
TXA_3		-0,001 **
Dy_3		0,4 ***
Constant		0,062 ***
LR	c(2,6)=2.93	

Based on the Near-VAR model we simulate a shock of 1 on the variable dy and tried to see its accumulated effects on the participation rate and on the evolution of the output itself. As is clear in Figure 4³⁷, a shock on this variable has positive long effects on the participation rate, thereby increasing the supply of labour.

Figure 4.



In summary, a unit shock in dy ³⁸ on period 1 leads to a growth of 13.38 in the participation rate at the end of 4 and a half years³⁹. These results are the translation of the importance of economic developments on the participation rate and at the same time of a great inertia of the evolution of output⁴⁰.

We can say that the unemployment rate has changed because employment has changed but also because the supply of labour⁴¹ also has changed. However another interdependence must also be considered as we will see below.

³⁷ Which can be identified as a growth rate of 100%.

³⁸ See last footnote.

³⁹ The 95% confidence intervals confirm the idea that the shocks have important effects.

⁴⁰ I(1) variable, as we saw above.

An estimation of the Okun Law for the Portuguese economy

As a result of what we have just said we study the relation between changes in unemployment and output (dU and dy) for the Portuguese economy⁴².

As we can see by a cross-correlation study, dU is related with the past values of dy , while the opposite is not true. This result leads us to take a relationship of current changes in unemployment on past changes of output. The model is confirmed by a VAR (3)^{43 44} where the influence on dy of shocks in dU are not different from zero. In a Near-VAR version, dU is even excluded from the equation of dy . In the face of all these results we concentrated our research on a dynamic model of dU in dy . We retain two models (A and B) for changes in unemployment using the Schwarz criterion (SC). Table 5 presents the results.

	A		B	
Constant	0.00232	***	0.00161	**
dU_2	-0.38971	***	-0.35408	***
dU_4	0.20438	**	0.23205	*
dy	-0.11263	*	-----	
dy_1	-0.16928	***	-0.17519	***
dy_2	-0.17902	***	-0.20362	***
dy_4	0.11597	*	0.14161	**
σ	0.0057		0.0057	
SC	-10,114		-10.121	
AR(1)	0.308		0.32	
AR(1-4)	4.419		4.599	
RESET(2)	3.566		2.138	
ConstLP	0.001956	***	0.001439	**
BetaLP	-0.291022	***	-0.211396	***
Wald	13.925	**	8.701	**

The tests for auto-correlation (AR) and specification (RESET⁴⁵) are given as Chi-square. The last three lines concern the long-term estimation: we have the *constant*, the coefficient on dy and the test of the null hypothesis of the long-term representation, a Wald test given as a Chi-square of order 1. The Model A is better in purely economic terms, since there is no reason to exclude the influence of contemporary product on unemployment. The B model has the advantage of the best information criterion and is more appropriate for forecasting. Both models reject the existence of problems of auto-correlation and also of the linear specification. In terms of long term, the annual growth of the product that is neutral in terms of unemployment ($dU = 0$) is 2.716%⁴⁶ in the first model, and 2.751%⁴⁷ in the second. Both models give similar values in terms of output growth for a constant unemployment rate.

The recursive coefficients using 20 observations for the first estimation and the associated interval of $\beta \pm 2 \cdot \sigma_\beta$, as well as the three types of Chow tests⁴⁸, prove that the model is stable.

⁴¹ Change of the participation rate.

⁴² That kind of relation is actually supported by papers proposing a relatively constant NAIRU for Portugal. See Marques (1990), Luz and Pinheiro (1993), Marques and Botas (1997), Gaspar and Luz (1997) and Dias, Esteves and Félix (2004).

⁴³ We follow the choice given by the Schwarz criterion.

⁴⁴ The two variables, in levels, are not co-integrated. So, the hypothesis of a VECM, or simple ECM equation is excluded.

⁴⁵ We have included the square and the cubic of estimated values.

⁴⁶ Calculated from $[1+(0,001956/0,291022)]^4-1$.

⁴⁷ Calculated from $[1+(0,001439/0,211396)]^4-1$.

⁴⁸ They are the "1-Step", the "Break-point" and the "Forecast", all of them F tests, Chow (1960). See Hendry and Doornik (1996), p. 232-3.

There are no reasons to doubt of the robustness of the model obtained to represent the Okun Law in Portugal. These conclusions are also obtained for Model B.

Linear or non-linear model?

Model B is preferable for forecasting. Based on this model we want to investigate the possibility of the existence of a non-linear, or even asymmetrical, formulation for the Okun Law in Portugal.

We started by investigating the behaviour of the errors of this model. The correlation between their own lags excludes any relationship between them, leading apparently to accept a linear relationship to the Okun Law. However, the square of errors⁴⁹ leads to the presence of dependency among its values. This last result doesn't reject the presence of non-linearity. A ESTAR or LSTAR are not justified for the data. Only a TAR type model was obtained, but the gains in terms of information criteria are very small.

Conclusion

As we said at the beginning of this paper the Okun Law occupies a prominent place in the nuclear model of the economy. Being an empirically regularity obtained by *mutatis mutandis* from our knowledge of production and employment, the study of this Law involves issues that are mainly empirical in nature. We have presented the Okun Law as has been created and developed, its usual specifications, the interdependence problems, or the identification of the model, which may cause the instability of the empirical relationship and the problems related to the presence of unit roots and the possible asymmetry. Taking these points into consideration we tried to apply them to the Portuguese economy.

We insisted that the unemployment rate follows the cyclical evolution of output or the output growth. We insisted also to the mutual dependency between the supply of labour and the evolution of output. To avoid spurious empirical relations we studied the characteristics of stationarity of the series involved in this paper and we applied appropriate econometric methods. The fact that the participation rate is influenced permanently by the evolution of output (without decomposition) and that the state of conjuncture affect long term behaviour of output, led us to decide to study the Okun Law as a relationship between changes in unemployment and output. This option does not invalidate the emergence of the problems of instability and so it was given particular attention to the stability of the estimated model. We found that the rate of growth (annualized), which does not create unemployment is 2.7%. After this result we questioned the linear representation of the Okun Law. We concluded that we could opt for the creation of different regimes. In one of the models with a regime interpreted as a negative economic environment we saw that this negative conjuncture can affect radically the response of the unemployment rate to output changes. Nevertheless the gains in terms of information are not significant, I we must retain the more classical formulation..

References

- Acemoglu, Daron and Andrew Scott (1994), "Asymmetries in the cyclical behaviour of UK labour markets". *Economic Journal*, 104:427, pp. 1303-23.
- Adams, Charles and David Coe (1989), "A Systems Approach to Estimating the Natural Rate of Unemployment and Potential Output for the United States". *IMF Working Paper*, 89.
- Aguiar, Alvaro and Manuel Martins (2005), "Testing the Significance and the Non-linearity of the Phillips Trade-off in the Euro Area". *Empirical Economics*, 30:3, pp. 665-91.
- Altig, David, Terry Fitzgerald and Peter Rupert (1997), "Okun's Law Revisited: should we worry about low unemployment". *Economic Commentary*, 15, pp. 1-4.

⁴⁹ See Enders (2004).

- Apergis, Nicholas and Anthony Rezitis (2003), "An examination of Okun's law: evidence from regional areas in Greece". *Applied Economics*, 35, pp. 1147-51.
- Attfield, Clifford and Brian Silverstone (1998), "Okun's law, cointegration and gap variables". *Journal of Macroeconomics*, 20:3, pp. 625-37.
- Blanchard, Olivier. (1999), *Macroeconomics*. New Jersey: Prentice Hall International.
- Blinder, Alan (1997), "A Core of Macroeconomics Beliefs ?" *Challenge*, 40:4, pp. 36-44.
- Bodman, Philip (1998), "Asymmetry and duration dependence in Australian GDP and unemployment". *The Economic Record*, 74:227, pp. 399-411.
- Brunner, Allan D. (1997), "On the dynamic properties of asymmetric models of real GNP". *Review of Economics and Statistics*, 79: 2, pp. 321-26.
- Campbell, Jeffrey R. and Jonas D. M. Fisher (2000), "Aggregate Employment Fluctuations with Microeconomic Asymmetries". *American Economic Review*, 90:5, pp. 1323-45.
- Chow, Gregory C. (1960), "Tests of Equality Between Sets of Coefficients in Two Linear Regressions". *Econometrica*, 28:3, pp. 591-605.
- Courtney, Hugh George. (1991), *The Beveridge curve and Okun's law: a re-examination of fundamental relationships in the United States*. MIT: PhD thesis.
- Cuaresma, Jesús Crespo (2003), "Okun's Law Revisited". *Oxford Bulletin of Economics and Statistics*, 65:4, pp. 439-51.
- Davenport, Paul (1982), "Technical Change and Unemployment". *Journal of Post Keynesian Economics*, 1, pp. 34-50.
- Dias, Francisco Craveiro, Paulo Soares Esteves and Ricardo Mourinho Félix (2004), "Uma Nova Avaliação das Estimativas da NAIRU para a Economia Portuguesa". *Boletim Económico, Banco de Portugal*, 10:2, pp. 41-50.
- Dickey, David and Wayne Fuller (1979), "Distribution of the Estimators for Time Series Regressions with a Unit Root". *Journal of the American Statistical Association*, 74:366, pp. 427-31.
- Dornbusch, Rudiger, Stanley Fischer and Richard Startz. (2001), *Macroeconomics*. New York: McGraw-Hill.
- Duarte, Adelaide and João Sousa Andrade (2000), "Histerese da taxa de desemprego de equilíbrio — uma aplicação ao caso português". *Notas Económicas*, 14, pp. 10-36.
- Enders, Walter. (2004), *Applied Econometric Time Series*. Hoboken: John Wiley & Sons.
- Evans, George (1989a), "A Measure of the U.S. Output Gap". *Economic Letters*, 29:4, pp. 285-89.
- (1989b), "Output and Employment Dynamics in the United States: 1950-1985". *Journal of Applied Econometrics*, 4, pp. 213-37.
- Farsio, Farzad and Stacey Quade (2003), "An Empirical Analysis of the Relationship Between GDP and Unemployment". *Humanomics*, 19:3/4, pp. 1-6.
- Franke, Reiner (2006), "Themes on Okun's Law and Beyond." Bernard Schwartz Center for Economic Policy Analysis: New York.
- Gaspar, Vítor and Sílvia Luz (1997), "Desemprego e Salários em Portugal". *Boletim Económico, Banco de Portugal*, 3:4, pp. 27-32.
- Gomme, Paul (1999), "Shirking, Unemployment and Aggregate Fluctuations". *International Economic Review*, 40:1, pp. 3-21.
- Gordon, Robert (1984), "Unemployment and Potential Output in the 1980s". *Brookings Papers on Economic Activity*, 2, pp. 537-64.
- (1987), *Macroeconomics*. Boston: Little Brown.
- (1990), *Macroeconomics*. Glenview: Scott, Foresman/Little, Brown Higher Education.
- Hall, Robert and John Taylor. (1988), *Macroeconomics*. New York: Norton & Co.
- Hamilton, James. (1994), *Time Series Analysis*. Princeton: Princeton University Press.
- Harris, Richard and Brian Silverstone (2001), "Testing for asymmetry in Okun's law: crosscountry comparison". *Economics Bulletin*, 5, pp. 1-13.
- Harvey, Andrew (1985), "Trends and Cycles in Macroeconomic Time Series". *Journal of Business and Economic Statistics*, 3:3, pp. 216-27.
- (1989), *Forecasting, Structural Time Series and the Kalman Filter*. Cambridge: Cambridge University Press.
- Hendry, David and H Jurgen Doornik. (1996), *Empirical Econometric Modelling Using PcGive 9.0*

- for *Windows*. London: International Thomson Business Press.
- Hoover, Kevin. (2001), *Methodology of Empirical Macroeconomics*. Port Chester, New York: Cambridge University Press.
- Hultgren, Thor (1960), "Changes in Labor Cost During Cycles in Production and Business". *National Bureau of Economic Research*, Occasional Paper 74.
- Johansen, Soren. (1995), *Likelihood-based Inference in Cointegrated vector Auto-Regressive Models*. Oxford: Oxford University Press.
- Kahn, George (1996), "New Estimates of the U.S. Economy's Potential Growth Rate". *Contemporary Economic Policy*, 14:4, pp. 1-16.
- Kaufman, Roger (1988), "An International Comparison of Okun's Law". *Journal of Comparative Economics*, 12:2, pp. 182-203.
- Keynes, John Maynard. (1936), *The General Theory of Employment, Interest and Money*. London: Macmillan.
- Knoester, Anthonie (1986), "Okun's law revisited". *Weltwirtschaftliches Archiv*, 111, pp. 657-65.
- Kwiatkowski, Denis, Peter C. B. Phillips, Peter Schmidt and Yongcheol Shin (1992), "Testing the Null Hypothesis of Stationary Against the Alternative of a Unit Root: How Sure Are We That Economic Time Series Have a Unit Root?" *Journal of Econometrics*, 54:1-3, pp. 159-78.
- Lee, Jim (2000), "The Robustness of Okun's Law: evidence from OECD countries". *Journal of Macroeconomics*, 22:2, pp. 331-56.
- Lovell, Michael C. (2004), *Economics with Calculus*. River Edge: World Scientific Publishing Company.
- Lütkepohl, Helmut 2004, "Vector Autoregressive and Vector Error Correction Models", in H. Lütkepohl and M. Krätzig eds., *Applied Time Series Econometrics*. Cambridge: Cambridge University Press, pp. 87-158.
- Luz, Sílvia and Maximiano Pinheiro (1993), "Desemprego, Vagas e Crescimento Salarial". *Boletim Trimestral, Banco de Portugal*.
- Marques, Carlos (1990), "Produto Potencial, Desemprego e Inflação em Portugal". *Banco de Portugal, Working Paper*, 2.
- Marques, Carlos and Susana Botas (1997), "Estimation of the NAIRU for the Portuguese Economy". *Banco de Portugal, Working Paper*, 6.
- Mayes, David G. and Matti Virén (2002), "Asymmetry and the problem of aggregation in the euro area". *Empirica*, 29:1, pp. 47-73.
- Monhollon, Jimmie R and William E Cullison (1970), "Okun's Law and the Natural Rate of Growth: Comment". *Southern Economic Journal*, 37:2, pp. 231-2.
- Moosa, Imad A. (1997), "A Cross-Country Comparison of Okun's Coefficient". *Journal of Comparative Economics*, 24:3, pp. 335-56.
- Neftci, Salih (1984), "Are economic time series asymmetric over the business cycle?" *Journal of Political Economy*, 92:2, pp. 307-28.
- Nguyen, D. T. and A. M. Siriwardana (1988), "The Relationship Between Output Growth and Unemployment: a re-examination of Okun's Law in Australia". *Australia Economic Review*, 81, pp. 16-27.
- Okun, Arthur (1962), "Potential GNP: its measurement and significance". *American Statistical Association, Proceedings of the Business and Economic Statistics Section*, pp.98-103, reprint in *The Political Economy of Prosperity*, W. Norton, New York, 1970, pp.132-45.
- 1980, "Postwar Macroeconomic Performance", in M. Feldstein ed., *The American Economy in Transition*. Chicago: University of Chicago Press.
- Palley, Thomas (1993), "Okun's law and the asymmetric and changing cyclical behaviour of the USA economy". *International Review of Applied Economics*, 7:2, pp. 144-62.
- Perloff, Jeffrey and Michael Wachter 1979, "A Production Function-nonaccelerating Inflation Approach to Potential Output: Is measured potential output too high?" in K. Brunner and A. Meltzer eds., *Three Aspects of Policymaking, knowledge, data and institutions*. Amsterdam: Carnegie-Rochester Conference Series on Public Policy, Morth-Holland, pp. 113-63.
- Perron, Pierre (1997), "Further evidence on breaking trend functions in macroeconomic variables". *Journal of Econometrics*, 80:2, pp. 355-85.

- Plosser, Charles and William Schwert 1979, "Potential GNP: Its Measurement and Significance. A Dissenting opinion", in K. Brunner and A. Meltzer eds., *Three Aspects of Policymaking, knowledge, data and institutions*. Amsterdam: Carnegie-Rochester Conference Series on Public Policy, North-Holland, pp. 179-86.
- Prachowny, Martin F. J. (1993), "Okun's Law: Theoretical Foundations and Revised Estimates". *The Review of Economics and Statistics*, 75:2, pp. 331-36.
- Rothman, Philip (1991), "Further evidence on the asymmetric behaviour of unemployment rates over the business cycle". *Journal of Macroeconomics*, 13:2, pp. 291-8.
- Schettkat, Ronald (1996), "Labor market flows over the business cycle: an asymmetric hiring cost explanation". *Journal of Institutional and Theoretical Economics*, 152, pp. 641-53.
- Silvapulle, Paramsothy, Imad Moosa and Mervyn Silvapulle (2004), "Asymmetry in Okun's Law". *Canadian Journal of Economics*, 37:2, pp. 353-74.
- Sögner, Leopold (2001), "Okun's law: does the Austrian unemployment-GDP relationship exhibit structural breaks?" *Empirical Economics*, 26:3, pp. 553-64.
- Sögner, Leopold and Alfred Stiasny (2002), "An Analysis on the Structural Stability of Okun's Law - a cross-country study". *Applied Economics*, 14, pp. 1775-87.
- Thirlwall, Anthony (1969), "Okun's Law and the Natural Rate of Growth". *Southern Economic Journal*, 36:1, pp. 87-9.
- Thirlwall, Anthony and Norman John Ireland (1970), "Okun's Law and the Natural Rate of Growth: Reply". *Southern Economic Journal*, 37:2, pp. 232-4.
- Thurow, Lester and Lester Taylor (1966), "The Interaction between the Actual and Potential Rates of Growth". *The Review of Economics and Statistics*, 48: 4 pp. 351-60.
- Thurow, Lester. (1983), *Dangerous Currents: The State of Economics*. Oxford: Oxford University Press.
- Virén, Matti (2001), "The Okun curve is non-linear". *Economics Letters*, 70:2, pp. 253-7.
- Watts, Martin and William Mitchell (1991), "Alleged Instability of the Okun's Law Relationship in Australia: An Empirical Analysis". *Applied Economics*, 23:12, pp. 1829-38
- Weber, Christian E. (1995), "Cyclical Output, Cyclical Unemployment, and Okun's Coefficient: A New Approach". *Journal of Applied Econometrics*, 10:4, pp. 433-45.
- You, Jong Keun (1979), "Capital Utilization, Productivity, and Output Gap". *The Review of Economics and Statistics*, 61:1, pp. 91-100.

Strategic Management Planning as a Tool in Advanced Local Governments

Zvonko Brnjas¹, Dejan Erić, Ivan Stošić²

ABSTRACT – *The challenges the local governments (LGs) are facing in contemporary developed societies are getting larger and more complex. LGs have to deal with tasks relating to fulfillment of certain parts (in certain cases of a whole) of some of the key public functions which are arranging the life in local communities: land use of urban planning, organization and management of public services (like local water supply system, solid waste disposal, waste water treatment, public cleaning, maintaining and managing of city green areas, organizing distant heating system, etc.) along with some of conventional local governmental (administrative) functions. In the recent years, one of the LG functions, which is certainly becoming one of the most important one, is – an active role in economic development initiating through attracting the foreign investors, encouraging the self-employment process, SMEs development, etc. In such conditions, the strategic management planning becomes an essential tool that “managers” of local governments are using in order to provide efficient use of local governments resources and their long-term prosperity.*

KEY WORDS: *local governments’ competencies, SMEs development, local economic development, environment strategic analysis, strategic goals, strategy, strategic management and planning*

Introduction

The strategic planning as a management tool has been developed in the sixties of the last century, first of all within the corporative business environment. Later on, its development encompassed other organizations and institutions out of business sector, characterized by complexity and dynamics. In some countries, the local governments’ foundation and development make them complex, with heterogeneous organizational structure, with variety of competencies that is realized on respectable geographical area with big population. Thus, the local governments are similar to big, complex corporations.

The local governments (municipalities) in Serbia are characterized by organizational and economical sustainability: their population varies from 10 to 100 thousand and the budget estimates from several thousand to 20 million euros. Due to reforms, initiated in 2002, the Law on Local Governments, and a number of related laws, (especially Law on Budget System), and other legislation, - the local community competencies in Serbia are considerably enlarged, with increased budget resources.

The only local community that is the exception is the City of Belgrade, with population of almost 2 million, and the budget of over 600 million euros. Belgrade consists of 17 city municipalities.

Such organized local governments present the environment where the strategic planning and management got very important role and implementation.

Definition & importance

The strategic planning in local governments’ specific environment could be defined as a systematic process in which, the local authority, together with local economic subjects from other society seg-

¹ Zvonko Brnjas, PhD, Belgrade Banking Academy, Belgrade, Serbia

² Dejan Erić, PhD, Ivan Stošić, PhD, Institute of Economic Sciences, Belgrade, Serbia

ments, and citizens – define important issues and make real goals, tasks and strategies for their realization. The strategic planning is a mighty tool in local economic development planning, especially in one of its segments and its most important part – capital investments defining and realization. This is just the domain where the strategic planning can be used also as a management tool in setting the key issues in many local governments in Serbia. The authority system organization in Serbia, in this domain, enables local governments (municipalities) in Serbia relatively great competencies and obligations.

Assumptions for successful strategic planning process in local governments

The strategic management and planning process is very complex and demanding both, in respect to its technical characteristics (methods, techniques, information base, etc.) and its internal and external political characteristics (relations among participants in the process). 1. The strategic planning process in local governments comprises the expectations, aspirations and interests of various authorities' levels of different functions and in countries in transitions such Serbia, this refers to interests of different political options on public scene, on local level, and complete political scene.

Thus, it is necessary (to make planning process successful) to fulfill some basic pre-conditions. They will differ in some details among certain local governments depending on their characteristics. The heads of planning process at local level have to be flexible in solving some problems because as a process result some changed issues can occur, based on different interests of participants. So, it is necessary to adjust the process to a local level in all crucial aspects: technical, political and cultural. This especially refers to the following factors:

Technical Capacities – Beside the expert knowledge of the problems, the knowledge of all local participants about their role and position in a planning process is essential. The current planning models comprise the inclusion of a number of subjects into the process, and if they are not ready to do it on adequate way, in spite of made efforts, the results could be very weak. Therefore, they should begin with trivial things, such as the presentation of elementary concepts and techniques, along with strategic planning terminology to process participants.

Realistic Approach – Starting from the local community characteristics, especially available resources, the expected results of the process should be realistic and achievable. If the expectations are great, and expected goals above real achievement, very soon, the complete process can become a failure, so beside wrongly spent resources, the fact that the strategic planning concept will be put away as unnecessary and useless innovation (bid'at) is even worse.

Connection with other Management Processes – The strategic planning process in a local community should be incorporated into other planned processes, that is, its result (strategic plan) must be a real base for all other plans, especially budget one, then capital investments plan, certain functions development plan (culture, education, etc.).

Strategic planning manageable model in local governments

Strategic management and planning techniques are part of management practice of many local communities in developed Western countries. Its practical implementation, of course, differ in certain details, depending on a community characteristics such as their size, legal frame, that is, competencies division among various governmental levels, community dynamics, (prosperous vs. community in decline), subjective behavior of authorities and decision makers (aspiration level, personal; management style, etc.).

In the following lines the strategic planning manageable model in local communities, based on some of these experiences – is analyzed. It represents one of the possible approaches. In methodological sense, this model could be implemented through four main groups of activities, that is, four following phases:

Current state analysis

Future development trends defining

Strategic alternatives formulating
Implementation of the formulated strategies

Current state analysis

The main goal and expected result of this planning phase is to set the state of development (the starting point of the planning process), and specially the available resources of the local community. Based on the result of such an analysis decisions on future development priorities of a local community could be made. In is common situation that the ambitions and expectations of stakeholders (authorities, decision makers and citizens) are bigger than real possibilities. Very often the goals in the field of large number of areas of social and economic life are set as priorities. The good analysis of current state goal should be reduced on selecting limited number of areas of local community future development r, which can be controlled and managed. Having in mind the size and economic power of Serbian municipalities, this number should be three, and no more than 5 priority areas of development. In general, this approach should be based on market demands, raw materials location, expert staff and other resources, which most of Serbian local governments has an access to.

Focusing on several key development fields, in which the local community has comparative development chances, energy and resources concentration are provided and chances for realization of planned goals are greater. Anyway, this policy should be carried out carefully in order to escape the other extremity – the community future attachment to one or two fields. Some municipalities in Serbia often attach their development to one industry, that is, one company. During the prosperity period of these companies, the governments also flourished, but in critical periods of companies, the communities found themselves in heavy crisis.

The current state analysis should be realized in the following three logical steps:

a) Analysis of current natural, economic human and other resources

This phase requires the establishment of ever-possible qualitative data base which will illustrate the available resources in local community. The base is expected to be enough broad to encompass the information about all resources and, concise enough to make the analysis efficient so it can offer the relevant information. The information that should be gathered and organized in one unique base, accessible and suitable for analytical analysis are: settlements populations, age, birthrate/mortality, net migrations, school enrollment data, employment (total number of labor active inhabitants, qualification structure, employment by sectors, unemployment, average earnings by sector,), economic indicators (data on business activities of large and small enterprises, entrepreneurs , agriculture) etc. This information are for specific time that is the empirical rule- the time range of historical analysis should correspond to the projection period. If that period is ten years then historical analysis should encompass that period.

b) Local community unfulfilled requirements analysis

In this phase, it is necessary to make some kind of local community requirements inventory, which is usually done through structural communication process with subjects that are holders of services in certain activities and service users. Thus, the community urban development requirements (completion level of urban documentation, lack of certain types of local infrastructure etc.) will be defined through communication with institutions in charge for servicing in this domain and their users (potential investors, construction firms and finally the citizens). The local community requirements in the field of education will be defined through the communication with schools and other educational institutions such as education centers, private schools, etc.) and, of course, the service users, that is, students and their parents. All aspects of social life: culture, public health, sport, recreation etc. should be analyzed in a similar way. The analysts have an access to many techniques and methods from survey organization, interviews, to public discussions in which the citizens can express their attitudes and opinions on concrete issues regarding local governments.

c) Collected data analysis and final evaluation of local community current state

Upon collected data on available resources, requirements identification and specific preferences of local subjects, follows the phase of their analyzing as an essential preparation for local community long term development trends defining. If we want to think about future development trends, we have to understand the data on local community current state –its advantages, weakness, chances and threats. For this type of analysis, the analysts can rely on so-called SWOT analysis. It is the strategic analysis on external and internal weak and strong points in local community position. Nowadays the methodological frame of this analysis is mostly used as a technique in strategic management and planning. It helps to identify the current and future chances and threats from the surroundings (external factors) on one side and advantages and weaknesses (internal factors) on the other side. The vision, mission and goals are defined according to confrontation of internal advantages and weaknesses and chances and threats.

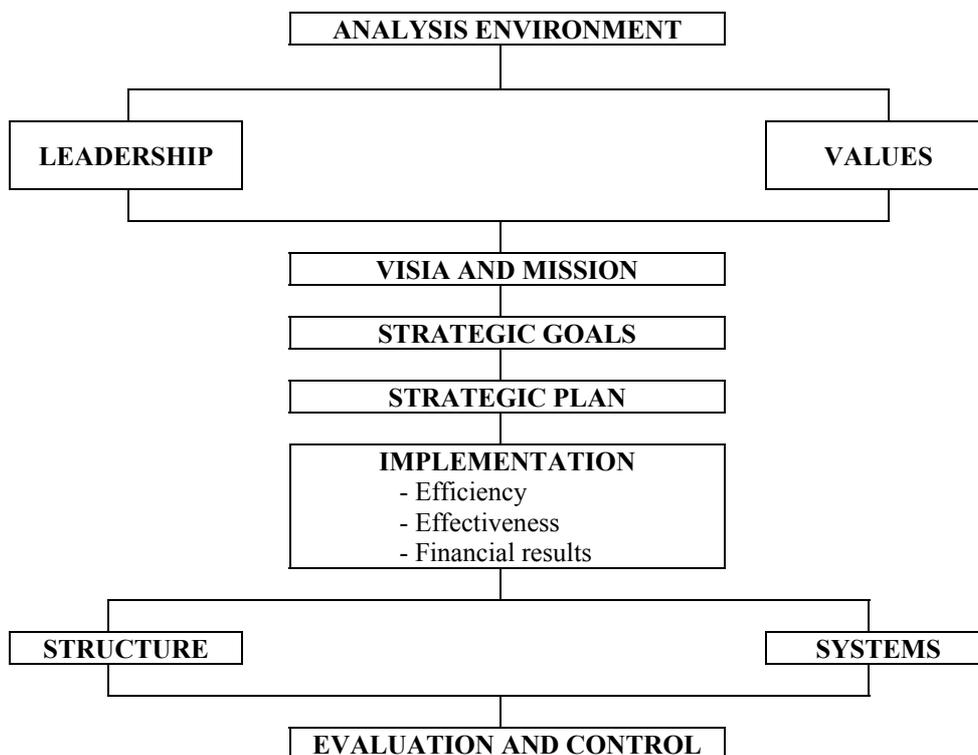
Defining of future development trends

The first phase of strategic planning encompasses the analysis of local community, its potentials, powers, weaknesses, chances and threats. The next phase of planned process refers to local community long-term development trends defining. This part could be realized in two steps:

a) Local Community Mission and Vision Formulation

The mission and vision are the factors, which define the local community existence and functioning as well as its image in 15, 20 or more years in future. Sometimes this step in strategic planning process can be critical although it seems simple. In practice, it often gets the characteristics of intellectual training where the local governments representatives, through “brain storming” exercise decide on best mission and vision formulation. The following steps in planning process (strategic and operational goals defining depend on the process implementation and that means the general trends of local community in the following long-term period.

Strategic Planning Manageable Model in Local Governments



b) Defining of strategic and operational goals coordinated with mission & vision

This step comprises the local community mission and vision, seen in six strategic goals. The main characteristics of well-formulated goals are: 1. Motivation so they initiate the subjects, which will later participate in their implementation, 2. Coordination-all objectives, should be directed towards the realization of exceptional mission and vision. 3. Time schedule- objects realization plan must be precisely scheduled. 4. Relevance – goals should initiate actions (strategies) which will lead to their realization (not any other goals). 5. Specificity and accuracy- goals must defined clearly and understandable to all planning process partners, 6. Accomplishment – The goals have to be realistic and attainable in defined time and space with available resources along with the efforts of working groups and citizens. The insubstantial goals could easily discredit the whole process and affect the key factors in local community to reject the strategic planning as a useless and expensive exercise.

Strategy formulation

The next step after defining the mission, vision and development goals of local community is to define strategies that will contribute to their realization and upon planned period, the local community will finally find itself in desired projected position.

The former two phases analyzed the local community possibilities, its advantages and weaknesses, offered ‘chances’ but also “threats” and risks. These analyses support identification of local community strategy and goals for that strategy realization. This is the crucial phase in planning process, which demonstrates most distinctly the changed position and role of local governments in modern societies, (especially in countries in transition), in new reformed authorities organization. In former periods, the local governments in these countries (Serbia still belongs to them), were more or less so called “administrative additional support” of central administration, which only carried out the political decisions on a local level. In modern, developed, democratic world, a local community main function is to fulfill the interests of its citizens.

This phase includes the following steps:

- Define the necessary resources for strategies realization
- Estimate the local community capacities necessary for strategic goals implementation
- Develop activities plan for goals realization.

Having in mind the history of local community, environment and available resources, the community decides on those strategies and strategic goals realization that proved to be adequate in analysis in order to carry out already defined mission and vision. The local community strategies defining which lead to goals realization in its mission, is the most important factor. The strategy should be precise and measurable in execution; it must refer to issues important for the local community, it should set up realistic challenges and finally its realization should be conducted in advanced time.

Strategy implementation

In this phase, all process components are activated and all resources (material, financial, human) are in the function of realizing the set up goals. Regarding the local community’s strategies, spending the budget resources for development is realized in this phase. Depending on how well the job was done in previous phases, the implementation should be efficient (with the lowest costs), and effective (with best possible results), that will provide the high level of services, good results and good financial results for the local community. The significant component of this phase is evaluation and strategy realization control that enables the planned implementation process. In case of any disagreements, the corrective measures will be undertaken.

Process sustainability

In the final phase of this very demanding process, the managers and participators face the greatest challenge- it is necessary to avoid the situation when the strategic planning process is only the theoretical exercise with no effects on real life, or just a simple trial, with no intention of future realization. In order to realize the main goals, the local community should establish a special operational group – team for strategic planning, composed of local organizations and institutions representatives as well as local administration managers (e.g. managers of municipality administration, urban planning, economic development, personnel development, public services etc.). Beside this team, the process sustainability depends on specific rules and some key elements and /or properties:

Process managers should insist on transparency – the public and media have to be informed about planning results

Process should be carried out according to, in advance, defined and clear procedures- all steps should be constantly monitored, so in future, it can be easily reconstructed and hand the experiences down.

Planning process is to be monitored and evaluated continually, experiences summed up, certain promotions proposed

Beside symbolic and verbal gestures, the local community should support the process by allocating the budget for planned process in order to keep the integrity and long-last planning and realize the expected goals.

Conclusion

With the ever-growing complexity of global environment and its constant turbulence, the modern societies face the problem of more responsible respect for future. The local governments deal with a number of problems: restructuring of activities requires the implementation of human knowledge and high technology (wherever it is possible), more flexible way of authorities' organization, greater innovations and citizens' participation in solving various issues.

The strategic management and planning is a modern management tool, which has become irreplaceable in complex systems and organizations. It is still being developed in big complex corporations, but its implementation and importance are also crucial in other environments and local governments. Furthermore, the implementation of advanced sophisticated management techniques has become one of the key assumptions of local governments' effective management in developed modern societies.

The strategic planning is a way to define the local community main priorities for the period longer than 10-15 years, and to provide that all resources (financial, human, etc.) are synchronized, defined and focused on unique development goals realization. We should have in mind both, "hard" goals realization, expressed through economic development indicators (economic growth level, employment, infrastructure, etc.) and "soft" side that refers to management of part of political process: coordination of interests and local community stakeholders needs, starting from those on top to every individual citizen.

The authority organization system in Serbia enables the local governments (municipalities) very significant role in people's life, starting from public services, some key public functions, and important role in local economic development. Such competence and responsibilities require from local authority organs to put their management capacity on a very high level, which will be in accordance with modern society's demands. The implementation of strategic management and planning is one of the most important elements of this process.

References

- Zvonko Brnjas, „Strategijski Menadžment, teorijske osnove sa primerima iz prakse“, Privredni preglad, Beograd, 2000.
- Dejan Erić, Ivan Stošić, Zvonko Brnjas, „Strategijski menadžment u agrobiznisu“, Čigoja štampa, Beograd, 2007.
- Dejan Erić, „Uvod u menadžment“, Ekonomski fakultet i Čigoja štampa, Beograd, 2000.
- Dejan Erić, "Budget kao instrument planiranja i kontrole" – Poslovna politika Mart-April 2001., str. 29-35
- Ivan Stošić, Dr. S. Janosevic – „Change Management In The Process Of Restructuring Of Enterprises In Serbia“, »International Conference of the school of Economics and Business in Sarajevo«, Sarajevo, 12 i 13 Oktobar 2006 – ICES 2006, Izdavač Univevesity of Sarajevo School of Economics and Business, Bosna i Hercegovina, 2006. godina, strana 315-317 .
- Ivan Stošić, mr Ivana Domazet – „Strategijske alijanse-faktor unapredenja međunarodne konkurentnosti“, »X jubilarni simpozijum Symorg«: IZAZOVI EVROPSKIH INTEGRACIJA, Zlatibor, 7 i 10 juni 2006 – Zbornik Abstrakta, Izdavač Fakultet organizacionih nauaka, Beograd, 2006. godina, strana 89.
- Bland, Robert L., and Irene S. Rubin, (1997), *Planning and Budgeting for Capital Improvements*, edited by Robert L. Bland and Irene S. Rubin,. Washington, D.C.: International City/County Management Association (ICMA).
- Caiden, N.; Wildavsky, (1974), *Planning and Budgeting in Poor Countries*, A. John Wiley, Eds.; New York.
- Vogt J., (2004), *Capital Budgeting and Finance*, Washington, DC: International City/County Management Association (ICMA).
- City of Austin: Strategic Plan for 2004-2005*, (2006) City of Austin, Texas, USA.
- City of Lewiston: Strategic Plan for 2002*, (2001), Lewiston, Maine, USA.
- Government of the District of Columbia, FY 2005 Propose Budget and Financial Plan – FY 2005-2010 Capital Appendices*, (2004), District of Columbia, USA.

Accounting Case as an Application of the Graph Theory

Jozef Bucko, Vladimir Gazda, Radoslav Tušan¹

ABSTRACT – *Conventional view on accounting is based on recording of particular double-entry accounting records. This view emphasizes chronological consecutiveness of accounting records. Proposed model of accounting case record with graph theory utilization emphasizes structure flow of values and gives the technical apparatus of graph theory at disposal.*

KEY WORDS: *accounting case, circulation, digraph of account case*

Introduction

The first application at once and the beginning moment of graph theory development was the Euler's solution of well-known problem of walk by seven bridges from the year 1736. The first application of graph theory was Critical Path Method application in composite proceedings control of production facilities building-up and in new chemical products development in 1957. Graph theory later development brought a lot of new applications based on various typical problems from graph theory. A lot of models and algorithms of their solutions were theoretically described. Graph theory applications were developed mostly by D. G. Malcolm, J. H. Roseboom, C. E. Clark, W. Fazar, L. R. Ford, D. R. Fulkerson and others 0000.

Practical application of graph theory was dealt by experts from University of Žilina 0 (Slovakia), who formulated a lot of transporting issues. Coloring of graphs, graph decomposition and planar graph attributes and their application, deal mathematicians at Faculty of Science UPJŠ in Košice 0,0.

Applications of flow or circulation algorithms in receivables and liabilities matching area defined Gazda in 0. Later, 0 using of circulation algorithm and application of the theory of games he defined an equilibrium price at complicated local structure of producers and sellers. Gazda and Janotka in 0 dealt with problem of information linkages generated by sellers on buyers.

Submitted papers contain a view on accounting case as a problem formulated by means of circulation at oriented graph. This way is mediated a strong apparatus of graph theory through prism we can accept an accountancy as such.

Basic principles of accounting²

Accounts

Accounting case in theory of accounting is defined as: "accounting cases are realia which are objects of accounting and about which are accounting taken. Accounting record is lettering or technical recording of accounting case" (Šlosár, Šlosárová 2005). Each account consists from Debit side (Dr.) and Credit side (Cr.) on which are values of accounting records accumulated during the period. Accounting case represents increasing or decreasing³ of accumulated value of accounted records on debit side and

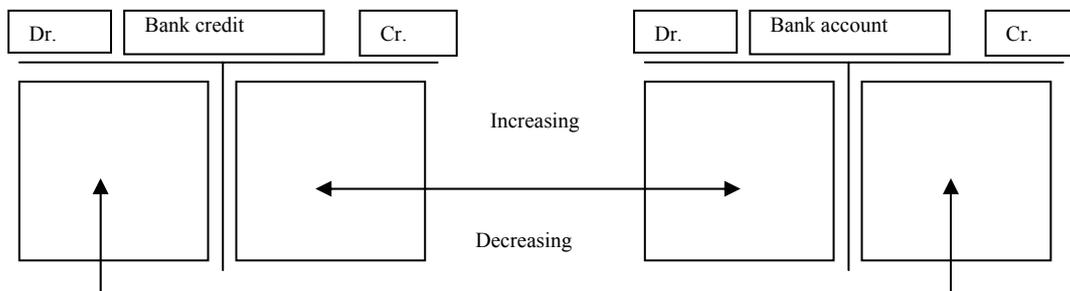
¹ Jozef Bucko, Vladimir Gazda, Radoslav Tušan, Technical University in Košice, Faculty of Economics

² Owing to interpretation simplify is an accounting issue introduced in simplified form. Basic principles have remained the same.

³ The posting of negative values means decreasing of value.

credit side of correlative accounts, at particular accounting record value. By reason of using a graph theory we will understand and use the term accounting case as certain qualified set of accounting records.

Picture 1. Accounts, accounting record (receipt of credit and its repayment example)



By reason of accounting principles observance let decompose set⁴ \mathcal{U} of all accounts on:

Set of **expense accounts** N , by which creation and increase of expenses during the accounting period has been recorded on the debit side of an account,

Set of **revenue accounts** V , by which creation and increase of revenues during the accounting period has been recorded on the credit side of an account,

account h , called **income account** (income summary) and it has special importance at the end of the accounting period,

accounts s^z , s^k called opening balance account, ending balance account respectively, they have special importance at the beginning and at the end of the accounting period,

all other accounts we distinguish for an asset account (set A) and a liability account (set P).⁵

We distinguish recording from technical point of view:

at **the end of the accounting period** (asset and liability accounts closing – calculating their balances and transferring them on ending balance account),

between two accounting periods (transfer from ending balance account to opening balance account),

at **the beginning of the accounting period** (ending balances of asset and liabilities accounts from previous accounting period are transferred by opening balance account on their opening balances of current period; ending balance of retained earnings account is imputed on opening balance of another special liability account⁶),

during the accounting period (standard accounting cases recording).

Opening balance of an account

Opening balance of an account means:

balance on the debit side of an account at the beginning of the accounting period in case of asset account,

balance on the credit side of an account at the beginning of the accounting period in case of liability account,

zero balance on both sides of an accounts in case of expense and revenue accounts.

⁴ In this part of paper we could replace the term *set* with another term, e.g. group. We prefer the term *set* because of a later application of graph theory. We understand the term *set* intuitive.

⁵ $\mathcal{U} = N \cup V \cup A \cup P \cup \{h\} \cup \{s^z\} \cup \{s^k\}$ is disjoint union of sets $N, V, A, P, \{h\}, \{s^z\}, \{s^k\}$.

⁶ This account is called retained earnings of previous periods.

Balance of an account

Balance of an account⁷ means:

- in case of expense accounts amount of all accounting records on the debit side of an account, which were realized during the accounting period,
- in case of revenue accounts amount of all accounting records on the credit side of an account, which were realized during the accounting period,
- in case of asset accounts amount difference of accounting records of debit less credit side of given account,
- in case of liability accounts amount difference of accounting records of credit less debit side of given account,
- in case of income account amount difference of accounting records (turnovers) of credit less debit side of given account,
- in case of ending balance account amount difference of accounting records (turnovers) of debit less credit side of given account.

Balance sheet accounts

Ending balance account serves for closing of one accounting period. It has recorded ending balances of asset accounts on its debit side in asset classification, and on the credit side it has recorded ending balances of liability accounts and ending balance of income account.

Picture 2. Opening balance account and ending balance account

Dr.	Opening balance account	Cr.	Dr.	Ending balance account	Cr.
Owners' equity Share capital Capital funds Profit reserves Retained earnings Profit/loss for the year Liabilities Provisions Noncurrent liabilities Current liabilities Suppliers Employees Bank loans and borrowings Bank loans Accruals and deferred income Total owners' equity and liabilities	Receivables for subscribed share capital Noncurrent assets Intangible assets Software Tangible assets Property, plant and equipment Financial investments Shares, bonds Current assets Inventory Raw material, Goods Noncurrent receivables Current receivables Trade receivables Financial assets Cash, bank accounts Accruals and prepayments Total assets	Receivables for subscribed share capital Noncurrent assets Intangible assets Software Tangible assets Property, plant and equipment Financial investments Shares, bonds Current assets Inventory Raw material, Goods Noncurrent receivables Current receivables Trade receivables Financial assets Cash, bank accounts Accruals and prepayments Total assets	Owners' equity Share capital Capital funds Profit reserves Retained earnings Profit/loss for the year Liabilities Provisions Noncurrent liabilities Current liabilities Suppliers Employees Bank loans and borrowings Bank loans Accruals and deferred income Total owners' equity and liabilities		

⁷ Balance of an account is common term for ending balance of expense/revenue accounts and asset/liability accounts.

Opening balance account serves for opening of new accounting period. It is so-called “mirror account” to ending balance account. It has recorded balances of asset accounts in asset classification on its credit side transferred from previous accounting period and on the debit side it has recorded ending balances of liability accounts. Further, at the new accounting period, balances are transferred on particular accounts (i.e. asset account balance is posted on credit side of opening balance account and dual on debit side of particular asset account; balance of liability account and balance of income account is posted on debit side of opening balance account and dual on credit side of particular liability account and income account).

Equilibrium of both sides of opening balance account and ending balance account

Important attribute of both accounts is a fact that cumulative amount on debit and credit side is in **equilibrium**. This attribute result from double entry of each accounting record, from income value definition as a difference between balances cumulative of revenue accounts and expense accounts, and from a fact that income (profit or loss) rise from accounting operations encompassing expense and revenue accounts.

Income account

Income account serves for realizing of accounting records at the end of accounting period. Ending balances of expense accounts are recorded on debit side of income account and ending balances of revenue accounts are recorded on credit side of income account.

Accounting at the beginning of the accounting period

Accounts are open at the beginning of the accounting period (without turnovers from previous accounting period), whilst opening balances of asset accounts and liability accounts are established through accounting operation, wherein:

- in case of asset accounts is value of ending balance from previous accounting period posted on credit side of the opening balance account and dually on debit side of asset account,
- in case of liability accounts is value of ending balance from previous accounting period posted on debit side of the opening balance account and dually on credit side of liability account.

Income account, expense accounts and revenue accounts are not effected at the beginning of the accounting period – their debit side and credit side have zero cumulative.

Picture 3. Income account

Dr.	Income Account	Cr.
Operating expenses Materials consumed Goods sold Profit from operating activities		Operating Revenues Sales
Financial expenses Interest expense Profit from financial activities		Financial revenues Interest income
Profit from ordinary activities		
Tax on income from ordinary activities Net profit (loss) from ordinary activities		
Extraordinary expenses Extraordinary profit (loss)		Extraordinary revenues
Net profit (loss) for the period		

Accounting during the accounting period

Accounting records **during the accounting period** are accounted in compliance with the principles of duality. Accounting records on asset and liability accounts are posted on both sides of account, accounting records on expense accounts are posted on debit side, and accounting records on revenue accounts are posted on credit side. Accounting records on ending balance account and on income account are not accounted.

Accounting at the end of the accounting period

At the end of the accounting period are accounts closed and accounts balances are posted:

- on credit side of income account and dually on debit side of original revenue account - in case of revenue accounts,
- on debit side of income account and dually on credit side of original expense account – in case of expense accounts,
- ending balance from debit side of income account on credit side of ending balance account - in case of recognized profit,
- on debit side of ending balance account and dually on credit side of original asset account,
- on credit side of ending balance account and dually on debit side of original liability account.

Accounting between two accounting periods

Balance values of accounts are transferred from ending balance account on opening balance account between two accounting periods in that manner:

- balance values of asset accounts are posted on credit side of ending balance account and on the debit side of opening balance account concurrently,
- balance values of liability accounts are posted on debit side of ending balance account and on the credit side of opening balance account concurrently,
- passive balance value of profit and loss account is added from debit side of ending balance account to balance of retained earnings account on credit side of opening balance account.

Digraph of accounting case

Let U be a set of all accounts to use in account case. **Correspondence of accounts** is order pair of accounts $[u_i, u_j]$, where u_i is account, which is count to side Dr and u_j is account, which is count to side Cr. Let $E \subset \{[u_i, u_j] | u_i, u_j \in U, u_i \neq u_j\}$ be a set of accounted correspondence.⁸

Let $x: E \rightarrow \mathbb{R}$ be a function mapping every correspondence of accounts $([u_i, u_j])$ the weight (financial value) of the concrete accounting notation. If any correspondence of accounts appears more time in the accounts case, the weight of this correspondence of accounts is amount of simple weights of simple correspondence of accounts.

⁸ If any concrete correspondence appears more times in accounts case, thus in the set of correspondence of accounts appears only once.

Let U be considered the set of vertices, E denoted the set of oriented edges and the function x associates label (weight) with every edge of E , then $G = (U, E, x)$ will be denoted **digraph of accounting case**.

Accounting case as a circulation in the digraph

Let U be a set of vertices, E be a set of oriented edges and $x \rightarrow \mathbb{R}$ be a mapping. $G = (U, E, x)$ be a weighted digraph. Mapping x is a **circulation** in the digraph G , if for every vertex of U holds:

$$\sum_{j \in U^+(i)} x(j, i) = \sum_{k \in U^-(i)} x(i, k), \quad (1)$$

where $U^+(i)$ is the set of vertices u_j such that edge from u_j is oriented to vertex u_i (**input of vertex u_i**), and $U^-(i)$ is the set of vertices u_k such that edge from u_i is oriented to vertex u_k (**output of vertex u_i**).

Theorem 1: *Evaluation (association) of edges in digraphs of account case is circulation*

Proof: Opening balance on debit and credit side of asset and liability accounts, of expense and revenue accounts, and of profit and loss account equates to zero. At the end of accounting period the difference of turnover cumulative on both account's side equates to zero in case of each mentioned accounts, and at the end of accounting period must be realized the condition of circulation for each of these accounts. Hence, it is sufficient to prove the circulation condition is valid for balance sheet account also.

Let we described the condition (1) for asset and liability accounts and profit and loss account

$$\sum_{j \in U^+(i) \setminus \{s^2, s^k\}} x(j, i) + x(s^2, i) + x(s^k, i) = \sum_{k \in U^-(i) \setminus \{s^2, s^k\}} x(i, k) + x(i, s^2) + x(i, s^k)$$

$$\text{For } i \in A \cup P \cup H, \quad (2)$$

The condition (1) holds for expense and revenue accounts. By aggregation of equations (2) over all accounts besides beginning and ending balance account we have equation:

$$\sum_{i \in U \setminus \{s^2, s^k\}} \left(\sum_{j \in U^+(i) \setminus \{s^2, s^k\}} x(j, i) \right) + \sum_{i \in U \setminus \{s^2, s^k\}} (x(s^2, i) + x(s^k, i)) =$$

$$\sum_{i \in U \setminus \{s^2, s^k\}} \left(\sum_{k \in U^-(i) \setminus \{s^2, s^k\}} x(i, k) \right) + \sum_{i \in U \setminus \{s^2, s^k\}} (x(i, s^2) + x(i, s^k))$$

or

$$\sum_{i \in U \setminus \{s^2, s^k\}} (x(s^2, i) + x(s^k, i)) = \sum_{i \in U \setminus \{s^2, s^k\}} (x(i, s^2) + x(i, s^k)),$$

From this equations follows

$$\sum_{i \in U \setminus \{s^2, s^k\}} (x(s^2, i) - x(i, s^2)) = \sum_{i \in U \setminus \{s^2, s^k\}} (x(i, s^k) - x(s^k, i)),$$

and it is another formulation of turnover equability on both sides of opening balance account, respectively ending balance account (see p. 2).

Example:

Company registered following items of asset and liability at the beginning of the accounting period:

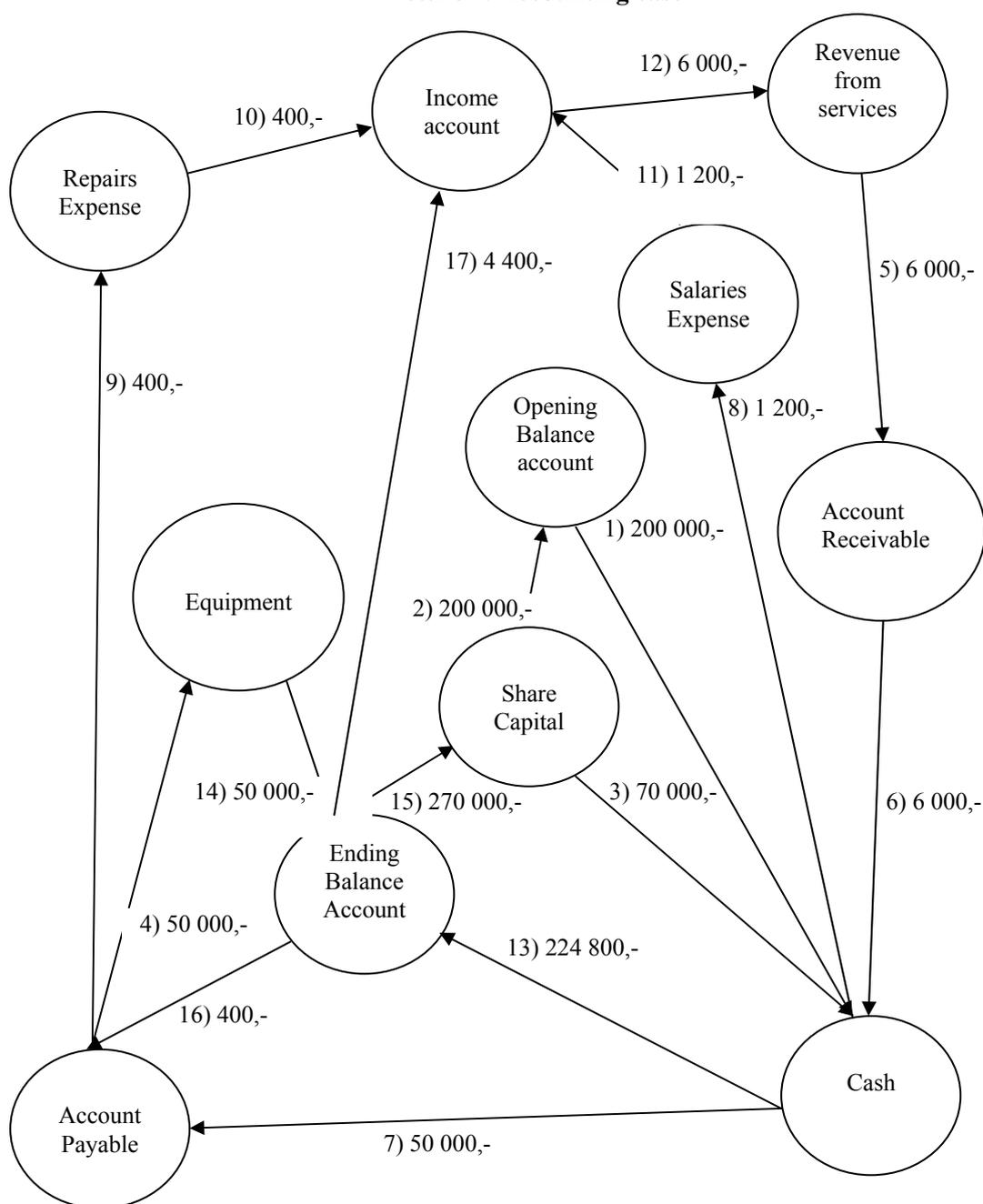
Cash: 200 000,-

Share capital: 200 000,-

Opening balances of Cash and Share capital are opened using the Opening balance account:

1., 2. Posting of opening balances of accounts	
3. Issuance of new shares for cash	70 000,-
4. Purchased equipment on account	50 000,-
5. Provided services for customers	6 000,-
6. Collected cash from customers on account	6 000,-
7. Paid for equipment purchased	50 000,-
8. Paid salaries of employees	1 200,-
9. Repairs expense incurred on account	400,-
10. Closing of account and balance transfer on income account	400,-
11. Closing of account and balance transfer on income account	1 200,-
12. Closing of account and balance transfer on income account	6 000,-
13. Closing of account and balance transfer on ending balance account	224 800,-
14. Closing of account and balance transfer on ending balance account	50 000,-
15. Closing of account and balance transfer on ending balance account	270 000,-
16. Closing of account and balance transfer on ending balance account	400,-
17. Calculating of profit and balance transfer on ending balance account	4 400,-

Picture 4. Accounting case



Conclusion

In papers we formulated an accounting case by means of graph theory apparatus as a circulation in directed graph. It was proven that model of classical accounting case record is equivalent with its circulation formulation in oriented graph from logical aspect. In further development of presented theory it will be interesting to point on formulation of few accounting cases in one accounting period, or to generalize this method on few accounting periods.

References

- AHUJA, R. K., MAGNATTI, T. L., ORLIN, J. B., *Network Flows. Theory, Algorithms, and Applications*. Prentice Hall, 1993. Englewood, N.J. ISBN 0-13-617549-X.
- CLARK, C. E., "*The Optimism Allocation of Resources Among the Activities of a Network*," J. Indust. Eng., Vol. 12, pp. 11-17, (1961).
- DIESTEL, R., *Graph Theory*. Springer-Verlag, Heidelberg, 2005. ISBN 3-540-26183-4.
- FORD, L. R. and FULKERSON, D. R., "*A Simple Algorithm for Finding Maximal Network Flows and an Application to the Hitchcock Problem*," Canadian Journal of Mathematics, Vol. 9, pp. 210-218, (1957).
- FORD, L. R., Jr. and FULKERSON, D. R., "*Flows in Networks*," Princeton University Press, Princeton, New Jersey, pp. 151-169, (1962).
- GAZDA, V. *Mutuals Debts Compensation as Graph Theory Problem*, In: Kohlman, S. – Tang, S. (Eds) *Mathematical Finance*. Basel-Boston-Berlin Birkhauser Verlag 2000. p. 162 – 167. ISBN 3-7643-6553-6.
- GAZDA, V. *On a Location Monopoly of the Retail Outlets*. In: Muresan, A. – Curt, P. – Andrada Filip, D. (Eds) *Competitiveness and European Integration*. Cluj - Napoca, Universitatea Babeş-Bolyai 2007. p. 43 – 49. ISBN 978-606-504-012-0.
- GAZDA, V. – JANOTKA, M., *Information on Price - Point of View of Retailers and Consumers*. Manuscript.
- HUDÁKOVÁ STAŠOVÁ, L. *Manažérske účtovníctvo*. Ekonomická fakulta, Technická univerzita v Košiciach, 2008. ISBN 978-80-553-0072-6.
- JENDROĽ, Stanislav - MIHÓK, Peter: *On a class of hamiltonian polytopes*. In: *Discrete Mathematics*. vol. 71 (1988), p. 233-241. ISSN 0012-365X.
- MALCOLM, D. G., ROSEBOOM, J. H., CLARK, C. E. and FAZAIR, W., "*Application of a Technique for Research and Development Program Evaluation*," *Operation Research*, Vol. 7, pp. 646-669, (1959).
- MIHÓK, Peter: *Additive and hereditary properties of graphs are uniquely factorizable into irreducible factors*. In: *Journal of Graph Theory*. vol. 33 (2000), p. 44-53. ISSN 0364-9024.
- NEČAS, J. *Grafy a jejich použití*. SNTL, Praha, 1978.
- PALÚCH, S. *Teória grafov*. Žilinská univerzita. 2001. ISBN 80-7100-874-5.
- ŠLOSÁR R., ŠLOSÁROVÁ A., *Podvojný účtovníctvo pre podnikateľov*. 2005. IURA Edition. ISBN 80-8078-043-9.

A Comparative Analysis of Internet Banking in Bosnia and Herzegovina and Serbia

Marija Čutura, Igor Živko¹

ABSTRACT – In an effort to satisfy the needs of clients, the banks have to ensure the needed information on banking products and services through their web sites, more effective purchase of banking products and services as well as distribution of products and services. In performing such activities, a bank has to take into account the quality of provided services through the Internet, e-services. Santos (2003) defined e-service quality as overall customer assessment and judgment of e-service delivery in the virtual marketplace. E-service quality is perceived from the aspect of pre- and post using of web site. Service quality is a key determinant in differentiating service offers and building competitive advantages, since the costs of comparing alternatives are relatively low in online environments (Grönroos et al., 2000; Santos, 2003). In view of these developments, service quality is a crucial issue in Internet banking. The purpose of this paper is to compare the Internet banking in Bosnia and Herzegovina and Serbia. A content analysis was conducted for selected banking web sites to determine the availability of the Internet banking basic services and also the existence of the different features offered by banking web sites in these two countries. Three main dimensions of e-service quality are included in the research: informational, communicative and transactional. Results of this study provided potential possibilities for certain improvements of e-services quality in particular as well as web site quality in general.

KEY WORDS: web sites, Internet banking, e-service quality, Bosnia and Herzegovina, Serbia

Introduction

The banks recognize the significance of changes in their surrounding considering the fast growing of information technology and number of its users. Information technology in a theory of bank management represents one of five key factors affecting the subsistence of banks in the financial services industry. Application of information technology dramatically changes bank products and services and at the same time distribution channels of bank services and products bringing along innovations like: e-money, e-banking and e-commerce. Information technology is taken into account by the business policy of banks during profit earning, risk management and strategic planning. Using information technology a bank can reach a broader circle of its clients and offer them different products and services even in places distant from branch offices by way of electronic communication devices like Internet.

The opportunities that Internet offers to the banks as a media are multiple:

- attraction of a large number of consumers “pull media”;
- direct and constant communication „digital media“, flexible communication: one-to-one, one-to-many, many-to-many;
- identification of individual needs of consumers that can be recorded and used in prospective dialogue with a client;
- communications with clients around-the-clock.

The positive impacts of Internet for a bank can be summarized as: cost reduction of advertising, attraction of traffic on bank web site, global strengthening of brand, improvement of products branding, spreading of clients' base and sales increase. On the other side, the banks are releasing the client of

¹ Čutura Marija, Živko Igor, Faculty of Economics University of Mostar, Bosnia and Herzegovina

spatial and temporal attachment to branch office and standardization of service quality. Internet application in the banks as a communication tool and business operation with clients changes thinking of the quality of traditional bank service supplied in a branch office.

Internet banking service quality

The service quality is a key of competitive advantage in today's business environment and it is very important for banking industry. The quality of supplied service can be defined in terms of objective and perceptive characteristics. The quality objective characteristics of traditional service can be time of provision service, time of calling, rates of allocation of credit applications and like. The perceptive characteristics of service are hardly to measure and differ from person to person. The quality of services is more or less in the eye of beholder (Madu and Madu, 2002). First attempt to measure the quality of services was developed by Berry and Parasuraman (1991). They identified five dimensions for measuring the quality of services (reliability, responsiveness, assurance, tangibles and empathy)². E-service is conceptualized as an interactive information service (Rowley, 2006) that provides a means by which a firm can differentiate its service offering and build a competitive advantage (Santos, 2003). Key themes within e-service quality literature include the dimension and measurement of e-service, elements of the web experience and the relationship between web experience, trust, customer satisfaction, intention to purchase, and loyalty (Rowley, 2006). In challenging business conditions the nature of banking services is changed by the basic point of Internet banking - allowing customer to have direct access to their financial information and undertake financial transactions without the hassle of going to the bank. Virtual operations in e-commerce generally, and Internet banking particularly are purely service oriented but without a human element and so the complexity of the service quality is even higher in this context. They have been numerous studies identifying the key service quality dimensions in traditional banking environment, but relatively little literature has investigated service quality attributes in Internet banking industry. Jun and Cai (2001) based on literature review and their research agenda identified the following three broad conceptual categories related to Internet banking service quality: 1) customer service quality: reliability, responsiveness, competence, courtesy, credibility, access, communication, understanding the customer, collaboration, continuous improvement; 2) online system quality: contents, accuracy, ease of use, timelines, aesthetics, security and 3) banking service product quality: product variety/diverse features.

The use of Internet, by way of three techniques or tools: e-mail, web site and direct electronic marketing in contact with a client, provides a possibility of improvement of banking services quality in general. Considering Smith and Chaffey's (2005) approaches some activities are imposing in which the banks can use the Internet in building of e-banking services quality:

1. perfect tool for promotion of financial institution providing information on the financial position of a bank through its corporate web site,
2. new media of promotion and informing of clients on products and services, providing information in general on a bank and its historical development,
3. new tool in marketing research – survey,
4. development of new banking products and services – on-line services of insurance, on-line brokerage services,
5. advantages in transactions with clients – decreases costs to clients on searching and accessing the banking services; time saving, fast and continuous access of information, better cash management
6. changing of customers behavior and their expectations,
7. access to new markets, entry to new markets, geographical expansion of market and changing of market environment.

² *Reliability* is ability to perform the promised service dependably and accurately. *Responsiveness* is willingness to help customers and provide prompt service. *Assurance* is knowledge and courtesy of employees and their ability to convey trust and confidence. *Tangibles* is appearance of physical facilities, equipment, personnel and communication materials. *Empathy* is caring and individualized attention provided to each customer.

Methodology and sampling

The purpose of this paper is to compare the Internet using in banking system in Bosnia and Herzegovina and Serbia. Analysis is done with regard to study Hamid *et al.* (2007). First level of the comparison is carried out by investigating the availability of basic services of Internet banking in Bosnia and Herzegovina and Serbia. Secondly, the comparison is also carried out by investigating the different features offered by banking institutions in both observed countries. Using content analysis and comparison as a methodological approach, secondary data are used to determine the differences and similarities between both countries with respect to Internet banking. A content analysis is conducted for selected banks during September and October 2008. Sampling is done by using lists of banks from the official web sites of Central banks of both countries. As the key criteria for choosing banks for analysis was does bank offer or not offer e-services to the clients. Only banks, who offer any kind of Internet banking services³ to their clients, are used for the analysis.

Research findings

In Bosnia and Herzegovina and Serbia banks are still the most important part of the financial system, while other segments are still underdeveloped. These are “bank dominated” financial systems, which means that banks (credit institutions) have central position in the financial system⁴. Because of their dominant position, banks role in financial intermediation process between creditors and debtors enables banks to develop new channels for offering services. Bosnia and Herzegovina and Serbia banking sector have a number of common characteristics:

- number of banks in transition countries has been decreasing as result of process of consolidation⁵,
- bank privatization and changes in ownership structures⁶,
- increasing concentration and competition between banks and non-banking financial institutions⁷,
- changes in the bank ownership had great influence in the introducing of the new banking products (different credit forms and savings products, e-banking, on-line brokering, on-line insurance, weather information).

Availability and type of services and features offered by banks in Bosnia and Herzegovina and Serbia

The analysis comprehends 56 banks in both analyzed banking sectors (26 banks in Bosnia and Herzegovina and 30 banks in Serbia). Table 1 shows percentage of the banks who offer Internet banking service to their clients in respect of total number of banks in both observed countries.

Table 1. Availability of Internet banking services in Bosnia and Herzegovina and Serbia

³ Internet banking or online banking is defined as the use of Internet as a remote delivery channel of banking system services via the WWW. On the other hand, PC banking is defined as a home banking whereby consumers supplied with a financial software package on disks, allowing consumers to fill in details offline and then to send them into the bank over the bank's private network (Hamid *et al.*, 2007). This research includes only Internet banking services.

⁴ For example, the banking system asset amounted 81.4% of GDP in Bosnia and Herzegovina, while in Serbia was 67%.

⁵ Number of banks in Bosnia and Herzegovina has been decreased in period 2000-2007 from 55 to 32 banks, in Serbia from 81 to 37.

⁶ In Bosnia and Herzegovina share of foreign capital in 2007 reach 83% in total capital ownership, while in Serbia share of foreign capital was 70.8%.

⁷ HHI for Bosnia and Herzegovina in 2007 was 890 in Serbia in same years was 617. Share of banks in total assets of financial system B&H in 2007 was 80% in Serbia 62.9%.

Internet banking services offered by banks	Availability	
	Banks in B&H (%)	Banks in Serbia (%)
Number of banks in banking system	100 (32)	100 (34)
Number of banks with active web site	96	88
E-banking services for all type of clients	96	88
E-banking services for only business clients	23	6
E-banking for retail	73	93

Source: Authors

In Bosnia and Herzegovina six banks do not have websites, in Serbia four banks. For each dimension and level of interactivity, the percentage of banks that offers investigated information or some other data on website are calculated in the research and presented in previous table.

According to the analysis in study provided by Hamid *et al.* (2007) the following table (Table 2) is divided into 3 different categories: (1) Ease of Use (Informational), (2) Textures (Transactional) and (3) Extra Mile Service (Communicative). The first category implies “the physical features in Internet banking system”. While the second category mean “the features assisting customers’ transactions”. The third category means “the added values offered by banks”.

It is very important to notice that banks in Bosnia and Herzegovina and Serbia offer classic set of services which include basic e-banking opportunities for retail and corporate clients. But for example, just a few banks in both analyzing banking sector have on their web site on-line bank demo or guidelines for using e-banking services, possibilities to see most frequent questions or information about time in which order from e-banking can be realized. Also, in just a few banks in both banking sector client can online fill up applications and request for credits, e-banking and different kind of credit cards. Speaking in the context of methodological categorization can be said for both countries that any of three analyzed level of e-banking: informational, transactional and communicative is not developed enough. There are some differences between the countries in the informational level of e-services where banks from Serbia have better results. Considering the transactional level of e-services banks from both countries are similar, only in two cases in this category banks from Serbia have better result (opportunities to apply for loan and mortgages and apply for credit and debit card). In case of communicative level of services banks from both countries do not offer almost anything of the services or features in intention to build the added values for their clients. These facts lead to the conclusion that Internet banking in both countries does not have needed level of the quality. Also, it is obvious that for the most of the services and features banks still use traditional bank branch, and in both banking sectors domination of traditional channel of delivering banking services and features is immanent. So, the problem of the development of e-banking in both countries could be marked as: absence of stimulations and instructions for using e-banking services, bigger importance of traditional delivery channel in comparison with e-banking, and undeveloped financial instruments and environment.

To use Internet banking in full marketing capacity banks from both countries should do more in developing of functions of Internet as a media for promotion and informing their clients – general bank information and bank history, employment information, interest rate quotes, financial calculator and current and local news. Also, in banking sector of both countries Internet should be more used as an instrument in market's research – e-poll questionnaires for detecting new demands for different kind of features and services. Internet should enhance clients and potential clients (web visitors) for giving suggestions about possibility of improvements of bank services and quality of interactivity with the clients through the account information access, application for services, personal finance software application, etc.

Table 2. Types of services and features offered by banks in Bosnia and Herzegovina and Serbia

Internet banking services and features offered by	Availability
---	--------------

banks	Banks in B&H (%)	Banks in Serbia (%)
Easy of use (Informational)		
1. Language options	96,00	88,00
2. Online banking demo	3,81	6,76
3. Comprehensive FAQ	7,69	13,33
4. Online transaction hours	7,69	16,67
Textures (Transactional)		
5. Check your balances and statements online	100,00	100,00
6. Card service	84,00	100,00
7. Fund transfers	100,00	100,00
8. Transfer funds between accounts at different branch	100,00	100,00
9. International funds transfer	100,00	100,00
10. Transfer funds to third party account	100,00	100,00
11. Bill payment	100,00	100,00
12. Order cheque and book request	-	-
13. Manage savings and current account	100,00	100,00
14. Apply for loan and mortgages	7,79	36,70
15. Able to replay loan and mortgages	-	-
16. View statement and account balances	-	-
17. Request for bank statement	-	-
18. Fixed deposit placement	-	-
19. Stop cheque	-	-
20. Request for stop cheque payments	-	-
21. Standing order or direct debit	-	-
22. Apply for credit and debit card	23,08	50,00
23. Credit and debit car payment	84,00	100,00
24. Historical records	100,00	100,00
25. E-phone banking on the Internet	-	-
26. Web shopping on the Internet	-	-
27. Change users d and password	-	-
Extra mile service (Communicative)		
28. E-mail support	7,96	3,3
29. Online business		3,3
30. Online investment		-
31. Online insurance		-
32. Online application form		-
33. Online flight ticket payment		-

Source: Authors

Conclusion

Commercial uses of the Net recently have become the fastest growing part of the World Wide Web (WWW), and Internet banking revolutionize the current traditional banking industry and offers more opportunity to meet better customer services through enhanced interaction, data mining and customization (Hamid *et al.*, 2007). Within recent years there has been a concerted Managing Service Quality effort by banking institutions to increase the number and range of services provided online. From the other side changes in the life style, extensive working time along with quite high familiarity with technology, especially in case of the younger population, are conditions who are more then enough for developing and offering different kind of Internet services and features by the financial institutions, especially banks. Also, according to the Global Internet Usage Statistics, European nations with the fastest increases in number of Internet users in 2007 were Albania (up 18,738% to 266,000) then Bosnia and Herzegovina (up 13,471% to 950,000). The Statistical Office of the Republic of Serbia has, for the second time, conducted two surveys on the use of information – communications technologies in 2007. The surveys were conducted according to the methodology of EUROSTAT and covered the territory of the Republic of Serbia. The results show that 26.3% of the households in the Republic of Serbia have the Internet connection, which is an increase of 7.8 % in relation to 2006. According to the

Internet World Stats, Serbia has the usage growth of 275% from 2000 to 2008. The usage statistics are the key for analyzing the fastest-growing online consumer segments and its potential for using e-services generally and in banking sector in particular. But it seems that situation in practice of e-banking business in the observed countries is not quite responsive in the context of fast growing rate of Internet users. From the previous analyses can be generally concluded that:

most of the banks offer basic opportunities of e-banking,
range of e-banking services and features is not developed satisfactorily,
banks do not have developed techniques for stimulating their clients in using e-banking,
banks do not use Internet in full capacity for communication and market activities,
banks should do much more in improvement of the quality of e-banking.

Also it can be said that, Bosnia and Herzegovina and Serbia are suitable for further e-banking developments due to the increase of Internet and PC users in the last few years. From the other side, as an important barrier for development of Internet banking could be a matter of the security of e-transactions in large institutional and legislative context. Services provided by banks through the new channels of distribution should be institutionally and legislatively tuned and contain security mechanisms for allowing of e-transactions protecting. Additional barrier to the further development of e-banking in the whole region could be, also, the lack of client's trust in banks and even more in Internet banking, especially in consideration with a current financial situation in the world.

References

- Hamid, M.R.A, Amin, H., Lada, S. and Ahmad, N. (2007), A comparative analysis of Internet banking in Malaysia and Thailand, *Journal of Internet Business*, Issue 4, pp. 1-19.
- Herington, C. and Weaven, S. (2007), Can banks improve customer relationships with high quality online services?, *Managing Service Quality*, Vol. 17 No. 4, pp. 404-427.
- Madu, C.N. and Madu, A.A. (2002), Dimensions of e-quality, *International Journal of Quality & Reliability Management*, Vol. 19 No. 3, pp. 246-258.
- Berry, L.L and Parsuraman, A. (1991), *Marketing Services – Competing through Quality*, The Free Press, New York, NY.
- Jun, M. and Cai, S. (2001), The key determinants of Internet banking service quality: a content analysis, *International Journal of Bank Marketing*, 19/7, pp. 276-291.
- Rowley, J. (2006), An analysis of the e-service literature: towards a research agenda, *Internet Research*, Vol. 16 No. 3, pp. 339-359.
- Santos, J. (2003), E-service quality: a model of virtual service quality dimensions, *Managing Service Quality*, Vol. 13 No. 3, pp. 233-246.
- Smith. P.R. and Chaffey D. (2005): *eMarketing eXcellence: at the heart of eBusiness*. Butterworth Heinemann. Oxford. UK. 2nd edition
- <http://www.cbbh.ba> [Accessed 20.10.2008.]
- <http://www.nbs.yu> [Accessed 20.10.2008.]
- http://webrzs.statserb.sr.gov.yu/axd/en/dokumenti/ICT/2007/ICT_2007_saopstenje.pdf
- http://globaleconomy.suite101.com/article.cfm/global_web_growth_usage_statistics
- <http://www.internetworldstats.com/stats4.htm#europe>

Taxpayer Services as a Part of E-Government

Mališa Đukić¹

ABSTRACT – Literature states that governments across the world are facing problems of responding to public demand for more efficient and effective government functioning. E-government - use of information technologies by government agencies that has the ability to transform relations with citizens, businesses, and other forms of governments - may bring benefits such as increased transparency, greater convenience and cost reductions. In the field of public finance, providing taxpayer services online is an example of e-government functioning. The paper focuses on examining taxpayer services in the frame of e-government and comparing them with taxpayer services in Serbia with an aim to provide recommendations to Serbian government for improving existing and introducing new services and thereby increasing the capacity of Serbian e-government.

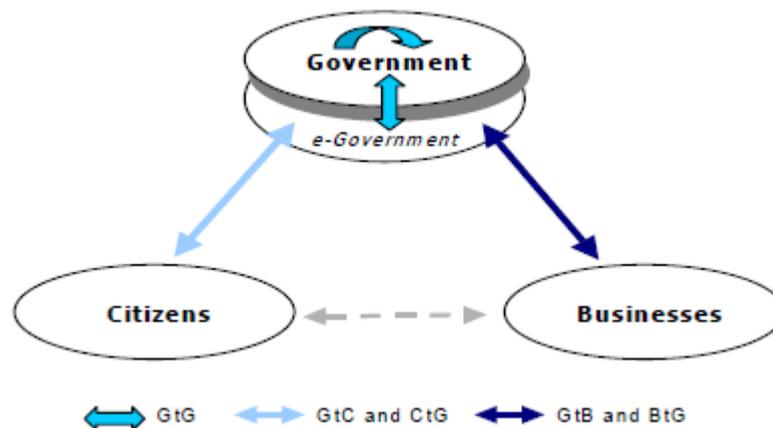
KEY WORDS: e-government, taxpayer services, public finance

Importance of e-government

E-government could be defined as a transaction that involves the government and that is carried out, even partially, using electronic means. E-government can also be defined as a use of information technologies by government agencies that has the ability to transform relations with citizens, businesses, and other forms of governments. OECD studies have shown that e-government improves efficiency by the use of Internet-based application which can generate savings on data collection, transmission, provision of information and communication with customers. Additionally, services can be improved by e-government which adopts customer focus and provides online services to citizens and businesses. Nevertheless, e-government may help achieve specific policy outcomes and contribute to economic policy objectives.²

Taking into account the channels of communication, three types of e-government channels can be distinguished: (1) government to government, (2) government to citizens and vice-versa, (3) government to business and vice versa which is presented in the following illustration.

Illustration 1. Channels of communication of e-government



Source: Graafland-Essers, Irma, Eteddgui, Emile (2003), pp 5.

¹ Mališa Đukić, Belgrade Banking Academy, Belgrade

² OECD (2003), pp 11-12

Importantly, each channel assumes two way communication. Such a communication provides interactive approach to e-government functioning which is of great importance for satisfying both citizens and businesses. As presented in Illustration no. 1, e-government is a part of government which implies active role of government itself for developing e-government capacity.

European Commission has produced a methodology which provides e-government indicators for benchmarking e-Europe³. In establishing indicators for e-government, the focus was on the demand side, i.e. the bottom-up reality of citizens' and businesses' contacts with government. The methodology distinguishes services for citizens and for businesses. The tables 1 and 2 present an overall picture of basic public services for benchmarking purposes. The document identifies twelve basic e-government services that are to be provided to citizens and eight basic services that are to be provided to businesses. The four stages are possible levels of services whereby stage 1 implies that only information is available online; stage 2 refers to the existence of interaction (for instance, downloading of forms); stage 3 assumes two-way interaction (for example: processing of forms including authentication); and stage 4 implies the possibility of concluding a transaction (case handling; decision and delivery as well as payment). In the tables, the number next to the service description states the maximum possible stage.

Table 1. Basic public services for citizens

Service description	Stage				
	0	1	2	3	4
1 Income taxes: declaration, notification of assessment (4)					
2 Job search services by labour offices (3)					
3 Social security contributions (3):					
• Unemployment benefits					
• Child allowances					
• Medical costs (reimbursement or direct settlement)					
• Student grants					
4 Personal documents (passport and driver's licence) (3)					
5 Car registration (new, used and imported cars) (4)					
6 Application for building permission (4)					
7 Declaration to the police (e.g. in case of theft) (3)					
8 Public libraries (availability of catalogues, search tools) (3)					
9 Certificates (birth and marriage): request and delivery (3)					
10 Enrolment in higher education/university (4)					
11 Announcement of moving (change of address) (3)					
12 Health related services (interactive advice on the availability of services in different hospitals; appointments for hospitals) (4)					

Source: European Commission, (2001), eGovernment indicators for benchmarking eEurope, Brussels, pp 2-4

Table 2. Basic public services for businesses

Service description	Stage				
	0	1	2	3	4
1 Social contribution for employees (4)					
2 Corporation tax: declaration, notification (4)					
3 VAT: declaration, notification (4)					
4 Registration of a new company (4)					
5 Submission of data to statistical offices (3)					
6 Customs declarations (4)					
7 Environment-related permits (4)					
8 Public procurement (4)					

Source: European Commission, (2001), eGovernment indicators for benchmarking eEurope, Brussels, pp 2-4

³ European Commission (2001), *eGovernment indicators for benchmarking eEurope*, Brussels, pp 2-4

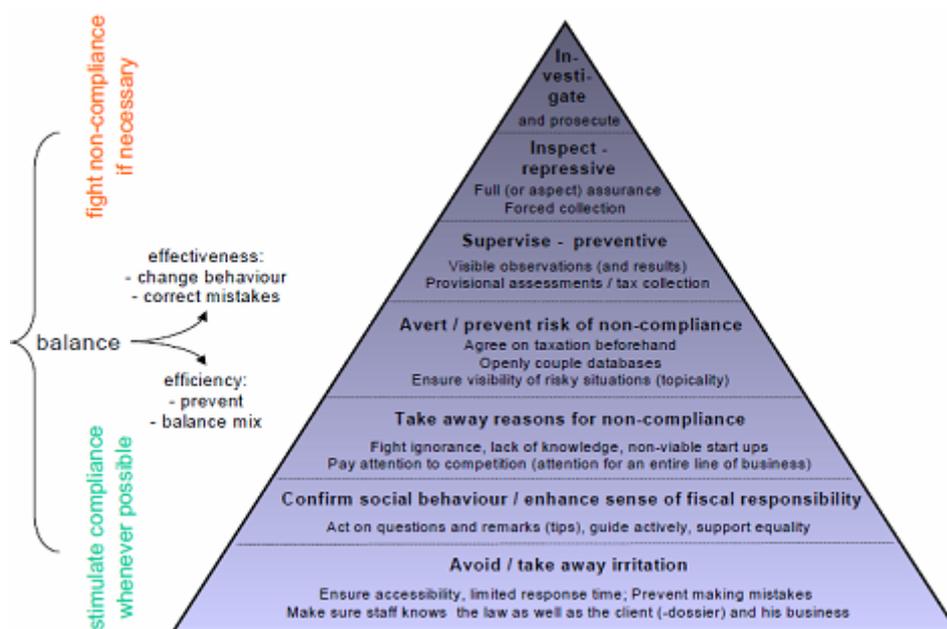
For the purpose of this paper, several lines of the table 1 and 2 are highlighted. The ones which are highlighted are possible online taxpayer services that e-government may provide to citizens and businesses, namely for income tax, social contribution of employees, corporate tax and value added tax. One should note that such taxpayer services can reach stage 4 which implies a possibility of fulfilling tax obligations completely online without a need to go to a tax administration office, nevertheless, without a need to call a tax officer.

Taxpayer services

To present a way of improving the collection of public revenues, International Bureau of Fiscal Documentation tax experts developed the so called tax administration attention pyramid (see Illustration 2). The pyramid implies that more effort should be made for encouraging compliance whenever possible than for fighting non-compliance.

Ways of encouraging voluntary tax compliance vary from avoiding or taking away irritation of taxpayers, acting on questions and remarks to taking away reasons of non-compliance by fighting ignorance, lack of knowledge and preventing the risk of non-compliance. As a matter of fact the ways of encouraging voluntary tax compliance are in effect possible taxpayer services or results of providing such services.

Illustration 2. Attention pyramid of a tax administration



Source: International Bureau of Fiscal Documentation, Internet, <http://www.ibfd.org/>

Nowadays tax administrations confront the traditional taxpayer's vision of an individual subject that is to comply with his/her tax duties with a modern vision of a citizen with taxpayer rights and not only taxpayer obligations. This new approach should lead to a creation of a modern tax administration that is to consider the establishment of a balanced relationship with citizens. The relationship implies knowing which difficulties a taxpayer faces when fulfilling tax duties. Knowing the difficulties, tax administration would be able to provide practical solutions that will result in improved voluntary tax compliance. Providing taxpayer services is to be considered as a taxpayer right and a tool to reduce the indirect tax burden. The provision of taxpayer services should be designed according to the principle of serving citizens.

On the other hand, it should be noted that taxpayer services depend on the simplification of tax regulations, time periods for tax refunds and solving complaints. A tax system based on self assessment increases taxpayers' indirect tax burden and is associated with a higher risk of involuntary non tax compliance derived from the lack of knowledge of complex tax regulations.⁴ In this case, the provision of taxpayer services is designed to reduce the taxpayers' indirect tax burden and to improve voluntary tax compliance. The higher the level of indirect tax burden and tax complexities, the greater the responsibility of tax administration to provide high quality taxpayer services.

There are two prevailing concepts regarding the types of taxpayer services⁵. The first one refers to providing tax information services while the second one is related to providing tax assistance services. Tax information services are services provided by a tax administration with an aim to solve taxpayers' doubts about tax regulations and tax procedures. Once the doubts are resolved, taxpayers should comply with the tax system.

Tax assistance services are services provided by a tax administration with an aim to comply with taxpayer duties, or in other words, services provided to ease the process of fulfilling tax obligations. In this case, it is not necessary to solve taxpayer's doubts because tax administration partly fulfils some of taxpayer's duties by for instance pre-filling the tax returns online.

On the tax administration side, provision of taxpayer services results in several benefits.⁶ Saving time and government money is an advantage of providing such services. There are no costs of printing tax return forms. Tax administration staff is not required to manually input data in tax administration system. As services are available online, there are no postal expenses. Improving quality is an additional reason to provide taxpayer services by letting taxpayers to enter or edit existing data by themselves. Software used for services eliminates a possibility of accepting an incorrectly completed tax return. Last but not the least, tax administration is able to check the consistency of data provided online by comparing it with the data obtained from third parties, such as banks or businesses.

On the side of taxpayers, consumption of taxpayer services is beneficial as well. It reduces administrative costs of running a business as well as the cost of salaries. Instead of hiring an accountant for fulfilling certain tax obligations, a well trained secretary can perform such activities using taxpayer online services. Depending on a country, e-filing of tax returns may bring additional benefits such as shortened refund periods or extended tax declaration deadlines.⁷ Estonia is a country with unique taxpayer and customs related services for citizens and businesses.⁸ In the following part of the paper, provision of taxpayer services in Estonia and Serbia is analysed.

Online taxpayer services in Estonia

In Estonia, taxpayer and customs related online services are called the e-tax and e-customs. E-tax and e-customs is the electronic service desk of the Estonian Tax and Customs Board on the Internet that offers 24 hours a day, seven days a week 22 services for natural persons and more than 40 services for legal persons. The electronic service desk allows communication in both tax and customs matters through one secure gate and is a unique solution in Europe in the field of electronic tax services.

With the help of the e-tax and e-customs it is possible to file tax returns and customs declarations, view different personal information about the tax amount payable and taxes paid as well as social security information. Apart from that the electronic desk provides an opportunity to fill in the tax refund or transfer applications, send messages and inquiries to the Tax and Customs Board and obtain an-

⁴ Peragon, Luis (2007), pp 5.

⁵ Peragon, Luis (2007), pp 7.

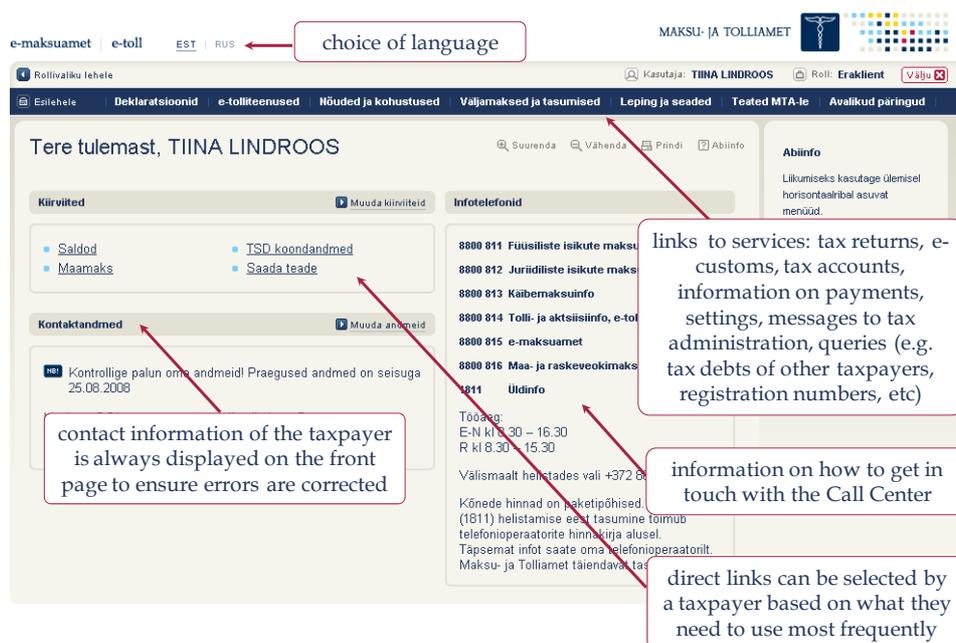
⁶ Estonian Tax and Customs Board (2008), e-Tax/e-Customs services provided via the Internet, Maksu-Ja Tolliamet, Tallinn.

⁷ Forum on tax administration taxpayer services sub-group (2006), *Strategies for Improving the Take-up Rates of Electronic Services*, OECD, Paris.

⁸ The Estonian tax administration and customs administration merged into one organisation, the Estonian Tax and Customs Board. For this reason, it provides not only tax related services but also customs related services to citizens and businesses.

swers. The first taxpayer services pilot project was launched in year 1999 in cooperation with the banking sector. During 2006 and 2007, reorganisation of the electronic service channel took place so that it now provides a modern and ergonomic working environment for both the client and the tax or customs official. The service distinguishes between the roles and desktops of users (private client, corporate client, official) and offers an optimum menu structure which can be easily supplemented with new applications in the future. The portal can be accessed with passwords, with ID card or with mobile-ID. The alternative for accessing the portal is through Internet banks that are official partners. The following illustration provides a print screen image of the portal.

Illustration 3. Internet portal providing taxpayer services in Estonia

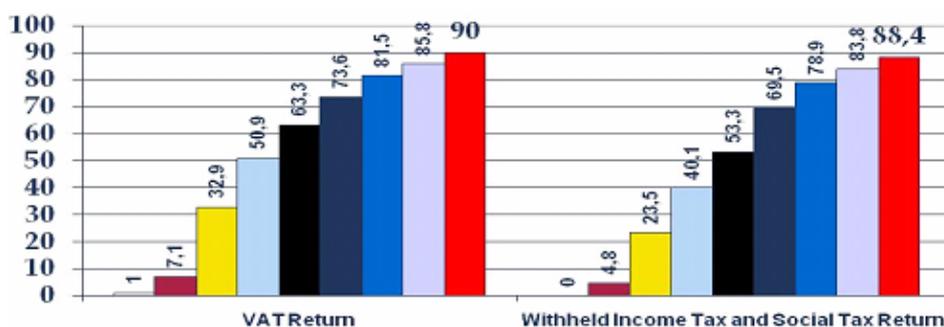


Source: Estonian Tax and Customs Board

As shown in the above illustration, the portal structure is ease to use with intuitive environment and menus that provide clear and most frequently used links. Contact information of the taxpayer is always displayed so that it can be updated if necessary (change of address, phone numbers, etc.). The Internet page provides an opportunity to access different services from tax returns to tax debt information, fund transfers or information on payment. In case of having doubts, the call centre number is displayed, so that the taxpayer can contact call centre agents and obtain needed clarifications or answers.

It should be emphasised that services related to income tax, value added tax, social contributions comprise access to information, e-filing and e-payment. In other words, according to the European Commission methodology for measuring the level of services (see table 1 and 2), Estonian taxpayer services reached the maximum stage possible.

Becoming a user of e-tax and e-customs is a simple process. A potential client need to conclude an Internet bank agreement in a branch of a bank or Tax and Customs Board's authentication agreement in a branch of Tax and Customs Board's. For natural persons, it is possible to conclude the agreement through online banking and for legal persons in local tax and customs offices. Using taxpayer services in Estonia is quite popular. According to the 2008 user statistics survey, relative to year 2000, the trend of electronically filed tax returns is positive.

Graph 1. Electronically filed tax returns in the period 1999–2007 (%)

Source: Estonian Tax and Customs Board

The Graph 1 shows the percentage of electronically filed tax returns of value added tax, withheld income tax and social contributions for the period from 1999 till 2007. Since 1999 when Estonia started with the provision of taxpayer services until 2008, the rate jumped for VAT returns and withheld income tax, from 1% - 0% to 90% - 88,4%, respectively. E-tax/e-customs is the most frequently used service channel of the Estonian Tax and Customs Board – 95% of the clients have used it and the service was rated 4,54 on a 5-point scale following a client satisfaction survey in 2008.

Online taxpayer services in Serbia

Online taxpayer services in Serbia are available on Tax Administration website⁹. From the point of view of the basic services that can be provided (see table 1 and 2), Tax Administration website provides several links with respect to income tax, social contributions, corporation tax, value added tax. With regards to income tax, the law, secondary legislation and tax returns can be downloaded. Additionally, manuals are available with an aim to clarify doubts related to income tax legislation. The documents are available in PDF format and can be printed without restrictions. Tax returns are also available in PDF and cannot be edited in the fields which relate to tax assessment information. Consequently, a taxpayer wishing to fill in the form will either have to print it and then fill it in by hand or typing machine or use a special software that will allow typing over the form. There is no possibility to send the filled in tax return to tax administration by email or by using the portal. It is necessary to send it by mail or hand it in the Tax Administration branch. As a result, the stage at which the service is provided is at the level two. Similarly, laws, secondary legislation and forms are available for social contributions and corporation tax and are the level two as well.

Value added tax is presented on a separate part of the Tax Administration webpage and comprises the law, the secondary legislation, taxpayer registry database access, information on tax rates applied to different products, questions and answers database, Ministry of Finance opinions as well as the manuals explaining the value added tax assessment and payment process. The VAT form is available in PDF format and cannot be edited in the fields related to assessment data. Compared to services related to income tax, social contributions and corporation tax, more services are available for fulfilment of VAT obligations. However, the stage of the services provided reaches the level two out of the four.

By applying the European Commission methodology for measuring taxpayer services stages, the situation in Serbia is summarised in the table 3. Notably, all services assume one way communication with no immediate interaction with taxpayers.

⁹ Internet, <http://www.poreskauprava.sr.gov.yu>

Table 3. Stages of taxpayer services in Serbia

Taxpayer services for citizens and businesses		Stage				
		0	1	2	3	4
1	Income taxes: declaration, notification of assessment (4)			x		
2	Social contribution for employees (4)			x		
3	Corporation tax: declaration, notification (4)			x		
4	VAT: declaration, notification (4)			x		

In comparison to taxpayer services in Estonia, there are possibilities not only to move to the next stage of providing existing services, but also to introduce new ones which can be beneficial both for taxpayers and Tax Administration.

Conclusion

Studies have shown that e-government improves efficiency and the level of existing services. Nevertheless, an efficient e-government may help achieve specific policy outcomes and contribute to economic policy objectives. In the field of public finance, e-government is reflected in taxpayer services that one country's tax administration may provide to citizens and corporations. Taking into account the European Commission methodology and following the analysis of the situation in Estonia, which is unique for its quantity and high level of quality of taxpayer services, the primary recommendation for Serbian Tax Administration is to improve the existing services to reach the stage 3. This would imply the establishment of two way communication between Tax Administration and taxpayers, so that for instance, a tax return can be downloaded, filled in electronically and sent online for obtaining a tax decision. Undoubtedly, moving to the stage three would bring numerous benefits to taxpayers and Tax Administration.

The second recommendation is to introduce the service of a single taxpayer account. Such a service would allow taxpayers to know their tax liabilities and monitor accounting for taxation purposes in order to pay the tax dues on time. Natural persons would be able to receive the information concerning salaries paid, income tax deductions and payments, unemployment premiums, or other public revenues which relate to right to pension or public health services.

Last but not the least, the provision of the services should be followed by Ministry of Finance campaign to create awareness of existing and new services. The emergence and improvement of the services does not necessarily mean that the services will be consumed. Therefore, it is important to inform and promote consumption of taxpayer services by targeting natural persons and companies.

References

- Aksnes, Fredrik (2007), *Improving Taxpayer Services*, Centre for Tax Policy and Administration of OECD, Paris
- Djukić, Mališa (2008), *Value added tax and e-commerce*, doctoral thesis, Belgrade
- Estonian Tax and Customs Board (2008), *e-Tax/e-Customs services provided via the Internet*, Maksu-Ja Tolliamet, Tallinn
- European Commission (2001), *eGovernment indicators for benchmarking eEurope*, Brussels, pp 2-4
- Forum on tax administration taxpayer services sub-group (2006), *Strategies for Improving the Take-up Rates of Electronic Services*, OECD, Paris
- Graafland-Essers, Irma, Etedgui, Emile (2003), *Statistical Indicators Benchmarking the Information Society, Benchmarking e-Government in Europe and the US*, Rand, Santa Monica
- Kommer, Viktor (2007), *Tax Reforms in India*, International Tax Conference New Delhi, International Bureau of Fiscal Documentation, Amsterdam
- Lau, Edwin (2003), *Challenges for E-Government Development*, OECD, Mexico

OECD (2003), *The E-government Imperative*, OECD, Paris, pp 11-14

Peragon, Luis (2007), *European perspectives on tax information and assistance services*, European Commission project document, Belgrade, pp 7-10

Internet:

Estonian Tax and Customs Board, Internet, <http://www.emta.ee/>

Ministry of Finance of Serbia, Tax Administration, Internet, <http://www.poreskauprava.sr.gov.yu/>

Factors Determining Modes of Entry of MVNO on Southeast Europe Mobile Communications Market

Anto Domazet¹, Nadžida Sarić²

ABSTRACT – MVNOs (Mobile Virtual Network Operators) are companies that function as mobile operators but do not have their own frequency spectrum allocation or the necessary network infrastructure. Those companies make business arrangements with one or more licensed Mobile Network Operators (MNOs) by leasing from them the access to mobile network and capacities. Such business concept enables the MVNOs to participate in the mobile communications market, thus extending the value chain and providing innovative mobile communication services specifically adapted to target segments.

The aim of this paper is to identify and evaluate the factors that determine the choosing of the strategies for entering the MVNO into the Southeastern Europe markets. Although SEE has various specificities and differences on national plans, in this paper it will be observed as a regional market with high convergence level, which is a result of approximately similar level of economic development, market saturation and regulatory framework which reside in the European regulations.

Factors which determine MVNO modes of entry into the mobile communications market in SEE have been researched. The most acceptable modes of entry for thin MVNO seem to be through the franchising arrangement with companies that develop franchising package for local markets. For full MVNO the most acceptable modes of entry is to invest in joint ventures company, and then into findings of a one's own company.

KEY WORDS: MVNO, modes of entry, mobile communications market

Introduction

MVNOs (Mobile Virtual Network Operators) are companies that function as mobile operators but do not have their own frequency spectrum allocation or the necessary network infrastructure. Those companies make business arrangements with one or more licensed Mobile Network Operators (MNOs) by leasing from them the access to mobile network and capacities. Such business concept enables the MVNOs to participate in the mobile communications market, thus extending the value chain and providing innovative mobile communication services specifically adapted to target segments.

MVNO have a significant market share (which varies from 5% to 25% in markets of various countries), they influence the consumer behavior in mobile services, within the meaning of changing operators, and develop new competitiveness strategies. Considering that MVNO focus on differentiated services offering with lower prices, they increase price competitiveness and Average Revenue per User (ARPU) in mobile communications industry, which is an indicator that has a decrease tendency for years. As well as telecommunications industry in general, a powerful trend of operation internationalization is present in the MVNO industry, which is driven, in business aspect, by strategies of international marketing. The mobile communications market in South Eastern Europe (SEE) with MVNOs as actors of that process is also the target of internationalization, even though its development is on lower development level by comparison with situations in more developed markets.

¹ Anto Domazet, School of Economics and Business Sarajevo

² Nadžida Sarić, Regulatory agency for communication of BiH

Theoretical framework

The literature that treats the modes of entry into international markets is highly exuberant and observes the ascending importance of internationalization, in respect to mutual correlation of that process and the modes of entry into international markets. In this paper the emphasis is given to theoretical framework that treats the questions of factors and modes of entry into foreign market.

The largest number of authors gives the complex classification of factors that determine the modes of entry into foreign market. Tallman and Shenker specify following nine factors: 1) corporate objectives and resources, 2) level of involvement: the more involvement, the more likely a choice of shared or wholly owned and controlled mode of entry, 3) level of risk and control: the more risk, the more likely a marketing oriented or contractual mode will be favoured, 4) nature of market, competition, product, consumer and market coverage, 5) speed of entry: if higher, the more likely a contractual mode of entry will be favoured, 6) investment and market costs: if higher, marketing and contractual modes will be favoured, 7) administrative requirements, 8) flexibility (favouring agents, distributors and retailers), 9) payback (Tallman, Shenkar, 1994, p. 100).

The other approach to classifying factors is fairly similar, but it contains some differences. The following factors are taken into consideration: 1) speed of entry, 2) easiness of exit, 3) rapidly changing technology, 4) resource demands, 5) profit potentials, 6) competitive intensity of market, 6) integration into global economy, 7) strategically important country, 8) unimportant market, 9) cultural distance, 10) congruence with host developmental goals (Gillespie, K., Jeannot, J-P, Hennessey, H. D., p. 295). System framework for determining of entering into international markets is of special interest. It consists of four modules with applicable number of factors within each module. The first module refers to marketing strategies with factors: 1) market centralization – decentralization, 2) global- domestic approach, 3) stage of product life cycle, 4) transaction specificity of products, 5) superior skills – resources. The second module is about organization: 1) firm size, 2) cumulative international experience, 3) presence of established affiliates, 4) managerial aspirations – expectations, 5) ability to evaluate performance. The third module is related to industry in which company operates: 1) concentration – fragmentation, 2) demand uncertainty, 3) volatility of competition, 4) importance of non-selling activities, 5) length of selling cycle, 6) need for global coordination and 7) exit barriers. The fourth module relates to target country: 1) sociocultural distance, 2) political risk, 3) geographic proximity, 4) availability of technology, 5) availability of human resources, 6) transfer restrictions, 7) opportunity for synergy (Bradley, F., 1999., p. 268).

Classification of factors of entry mode, given by Hollensen, consists of four groups of factors: 1) internal factors, 2) external factors, 3) desired mode characteristics and 4) transaction-specific behaviour (Hollensen, S., 2000. p. 208-215). This classification will be analysed in details in point four of this paper.

Theoretical views of different authors regarding strategies, that is modes of entry into international market are fairly homogenous. Most of them are ranging from indirect export to own's investments in foreign countries with interphases of direct export, production transfer without capital investment and joint ventures.

One of those approaches classify modes of entry on the basis of level of involvement and risk and control as: 1) marketing oriented (direct and indirect export), 2) contractual (licensing, franchising, alliances), 3) shared owned and controlled (joint ventures, partial mergers and acquisitions) and 4) wholly owned and fully controlled (Lee, K., Carter, S., 2005, str. 173.).

For the purposes of this paper a framework for classifying of factors given by Hollensen will be applied. On the other hand, in research three possible modes of entry MVNO into international market will be evaluated, namely: franchising as contractual mode, shared owned and controlled in form of joint ventures with local partners and wholly owned and fully controlled. It involves, thus, two strategic options, namely intermediate mode (franchising) and hierarchical mode based on investments with two options: joint ventures and own company.

Above mentioned modes of entry are based on different levels of company performance which are related to operations control in foreign market, the risk they undertake and the flexibility of business implied by the particular modes of entry into foreign market. Intensity of control and risk is the highest in fully owned mode, but intensity of flexibility in contractual mode of entry.

Those three modes will be bases for evaluation and selection of most appropriate mode of entry for any of two considered types of MVNO companies.

Methodology of research

The aim of this paper is to identify and evaluate the factors that determine the choosing of the strategies for entering the MVNO into the South-eastern Europe markets. Although SEE has various specificities and differences on national plans, in this paper it will be observed as a regional market with high convergence level, which is a result of approximately similar level of economic development, market saturation and regulatory framework which reside in the European regulations

The research of the factors that determine the strategies selection for modes of entry MVNO into mobile communications market in SEE region is based on classification developed by Hollensen (Hollensen, 2000, p. 208-215). Those factors are evaluated for three alternative strategies of entering into international markets. The evaluation in matrix figure is based on expert analysis, back grounded by the results of wider research on the subject of MVNO in SEE market (Sarić, 2008.). Methodologically, the research process flows in following sequences:

1. Two types of MVNO are defined, first, full MVNO which has its own network infrastructure and is independent of dominant mobile network operators (MNO) with possibilities of providing of wide assorted services in mobile telecommunications, and second, thin MVNO, which uses network of licensed dominant operators, with possibility of providing narrower range of mobile communications services
2. Three possible modes of entry into region market for which the factors evaluation is administrated are defined, namely: 1) licensing as contractual mode, 2) shared owned and controlled in form of joint ventures with local partners and 3) wholly owned and fully controlled.
3. Factors that influence the choosing of strategies of entering MVNO into region market are defined by Hollensen approach.
4. Evaluation is administered with grades from 1 to 7, whereat 1 indicate the lowest intensity of support of a certain factor to a certain strategy of entering into foreign market, and 7 indicated the highest intensity. Term of Southeast Europe (SEE) in this paper refers to the countries of Western Balkans.

Based on thus defined phases of research the final results will enable the conclusions about individual factor influence on modes of entry and selection of adequate strategies of entering into region market for two basic MVNO types.

Main characteristics of MVNO entry modes

Franchising

In franchising, a parent company (the franchiser) grants another, independent entity (the franchisee) the right to do business in a specific manner. This right can take the form of selling the franchiser's service, using its name, business procedures and marketing techniques (Czinkota, Ronkainen, 2004, p. 240). In case of MVNO the major form of franchising is service firm (dominant MNO or internationally oriented MVNO) – retailer (MVNO) system.

Applying to the mobile communications market, MNOs sell franchising system to those MVNO which are more virtual without any capacity to built up technical infrastructure or create differentiated services. Usually, MNOs which develop franchising system have clear distinction between wholesale and

retailing business. Building strong position in wholesale business as a core business, they prepare attractive retailing business offering them to MVNOs from abroad to work on host market, or to international MVNOs to expand internationally.

This mode of entry was very successful for Telfort and his partner KPN creating network of 19 MVNOs (Lennighan, 2006, p.10). Some MVNOs use franchising on the area of distribution, launching their MVNOs with sub-brand covering specialized market segments. There are good examples in Austria, where One Austria set up its MVNO Yesss Telekommunikations, and in Denmark, where TDC Mobil set up Telmore and Germany where E-plus set up its Simyo.

Share-owned mode of entry

The major forms of share-owned mode of entry are joint ventures companies. It is a collaboration of two or more companies for more than transitory period. Joint ventures are valuable when the pooling of resources results in a better outcome for each partner than if each attempted to carry out its activities individually. Major problems in joint ventures are related to the creation and maintenance of relationship between partners (conflicts of interest, problems with disclosure of sensitive information, disagreements how profits are to be shared and how to perform, investments strategies).

Applied to MVNOs, joint ventures are very often appropriate form of entry to international markets. As a good example it is possible to mention Easy Mobile (TDC and Easy Group), Virgin Mobile (T-Mobile UK and Virgin Group; Virgin Mobile and Optus u Australiji), Lunarworks and Europolitan in Sweden. Motives for joint ventures are different: a) reduction of investments and investments risks in building UMTS network (Telia i Tele2), b) fulfilment obligations to the national regulation agencies (Europolitan i Sense), c) expansion of revenue in GSM network (Europolitan i HemEL), d) cooperation in better use of strong brand and marketing capacities (Europolitan as a subsidiary of Vodafona) [Blom, Ernstsson, 2001].

Fully owned mode of entry

Full ownership may be desirable if companies set up their subsidiaries in the context of centralized product system and have intention to apply highly standardized international marketing. This form is a good way to avoid all possible conflicts arising from partnership in joint ventures. Fully owned mode of entry in MVNO case may be performed in two forms: as a Greenfield investment and as an acquisition by privatization of existing MVNO companies. The last case is just theoretical possibility because of underdeveloped structure of MVNOs in SEE countries. There is little probability that fully owned mode of entry would have massive presence in MVNO penetration strategies on SEE mobile communication markets.

Grouping and analysis of factors determining modes of MVNO entry to SEE market

There are four groups of factors determining entry modes of the companies classified by types of MVNO: 1) internal factors, 2) external factors, 3) desired mode characteristics and 4) transactions-specific behaviour.

Internal factors refer to: 1) firm size, 2) international experience, 3) complexity of services and 4) advantages of product differentiation.

MVNO, generally speaking, are small and medium companies. Thin MVNOs have lower capacity of hierarchical modes of entry. They do not have their own infrastructure and rent a complete technical package from MNO. Thin MVNOs are fully dependent of licensed operators (host operator) regarding access to network, completing calls, sending messages, service information and roaming. The quality

of their services can be same or most advances than services done by host MNO. Regarding size thin MVNOs prefer intermediate, but full MVNOs will prefer hierarchical mode of entry.

MVNO potentially oriented to SEE market have a different level of international experience. Among them there are global companies (Tele2, Sweden; Telmore, Denmark, for instance), regional companies (Debitel Slovenia, for instance) and national companies (IZI Mobil, Slovenia; Yesss, Austria, for instance). Companies with higher international experience prefer hierarchical modes of entry, mainly in form of full ownership, and those with lower level prefer intermediate mode.

Thin MVNO companies offer basic services (voice and electronic messages) and they do not need full control over their operations abroad. Full MVNOs have far more complex services like video on demand, m-learning, m-banking, internet, location based services and so on. The complexity of the services will increase sharply with implementation of UMTS (Universal Mobile Telecommunications System), or 3G technology which will enlarge the range of the mobile services (Southerland, p. 7). This is why they need higher level of control over their foreign operations.

Advantages of product differentiation are present at those companies which have strong company or service brand. To perform appropriate way of brand management, there is need to apply hierarchical mode of entry, and vice versa. There is good example of IZI Mobil in choosing share owned mode of entry in mobile market of Bosnia and Herzegovina. It is trying to develop strategic partnership with some of MNO operating in that market, having in mind fact that IZI Mobil has not yet recognized in regional mobile communications market.

External factors consist of: 1) socio-cultural differences between country of origin and country of entry, 2) country risk / demand uncertainty, 3) market size and growth, 4) direct and indirect barriers and 5) intensity of competition.

Due to estimation that main MVNO companies would come from European countries and that convergence of SEE mobile communications market with European regulation and style of life will continue, there is possible to conclude that socio-cultural differences will not create barriers for fully owned companies, although share owned mode seems more realistic.

There is low risk of demand instability in regional mobile communications market, because of initiative stage of market development. But, there is high level of political risk because of lack of regulation for MVNOs activities. Additionally there is risk of low independency of regulatory bodies in some countries (Croatia, Serbia and Montenegro). This is why potential companies would prefer contractual or share owned modes of entry.

There is inverse relation between market size and rates of growth in national mobile communications markets. In qualitative sense mobile communications market in many countries in SEE are latent markets (Domazet, 2002, p. 159). Because of low stage of market development, there is expectation that market will grow at rates above world average of 19% annually. This factor suggests more active strategies in form of share owned and fully owned modes of entry.

The most important barrier on SEE mobile market is lack of regulatory framework for MVNO and existence of strong elements of structures of imperfect completion (monopoly and duopoly). Many dominant operators are not ready for business cooperation with new entrants, excluding Croatia. Because of this fact, it seems more likely that MVNO will prefer share-owned or contractual forms of entry in order to be more flexible in finding exit solutions.

In all SEE countries there are three licensed operators which do not create necessary level of market competition. In the next stage of market liberalization more operators would appear. Such market situation seems very attractive for new entrants, and stimulates share and fully owned modes of entry.

Desired mode characteristics are referring to: a) risk averse, b) control and c) flexibility.

Two main types of MVNOs express different risk averse. Thin MVNOs entail low level of financial and management resource commitment. Full MVNOs have highest risk averse because they want to build up much stronger basis of their business activities in mobile telecommunications sector, accepting higher financial and management resource commitment.

Table 1. Evaluation of factors determining the modes of MVNOs entry to SEE mobile communication market

Factors	Thin MVNO				Ful MVNO			
	Franchising	Share owned	Fully owned	Average	Franchising	Share owned	Fully owned	Average
A. Internal factors	6	4,5	3	4,5	1	5,5	6,5	4,3
1. Size of company	7	4	1	4,0	1	5	5	3,7
2. International experince	7	5	3	5,0	1	5	7	4,3
3. Complexity of product (service)	5	4	3	4,0	1	6	7	4,7
4. Advantages of product differentiation	5	5	5	5,0	1	6	7	4,7
B. External factors	5	4,4	2,6	4,3	2	7	5,2	4,7
1. Socio-cultural differences between country of origine and country of entry	7	3	1	3,7	1	7	4	4,0
2. Country risk / demand uncertainty	6	3	1	3,3	2	7	4	4,3
3. Market size and growth	7	4	2	4,3	1	7	7	5,0
4. Direct and indirect barriers	4	7	6	5,7	3	7	4	4,7
5. Intensity of competition	6	5	3	4,7	3	7	7	5,7
C. Desired mode characteristics	5,7	4,3	3	3,3	4,3	5,7	5	5,0
1. Risk averse	7	4	1	4,0	5	7	4	5,3
2. Control	3	5	7	5,0	1	5	7	4,3
3. Flexibility	7	4	1	4,0	7	5	4	5,3
D. Transaction-specific behaviour	3	3	3	3,0	1	4,5	6,5	4,0
1. Tacit nature of know-how	3	3	3	3,0	1	5	7	4,3
2. Free-riding potential	3	3	3	3,0	1	4	6	3,7
Total	5,5	4,1	2,9	4,2	2,1	5,9	5,7	4,6

Ful MVNOs have much stronger control of their business operations than thin MVNOs. Although full MVNOs do not have full control of their operation and must accept partnership with MNO in many areas of the business, thin MVNOs do not have any important role in managing mobile network, in controlling services and other conditions of business(roaming and interconnections, especially).

Flexibility refers to the capacity of MVNOs to adapt to the changing conditions of business in short time. Hierarchical modes which include fully and share owned MVNOs have a lower flexibility than franchising entry mode.

Transaction-specific factors consist of tacit nature of know-how and free-riding potential of MVNOs. Firm-specific know-how is the characteristic of ful MVNOs and this is why they may prefer hierarchical mode of entry trying to prevent it. Free-riding potential is much higher in full MVNOs in forms of strong brand potential and fixed cost spreading among new markets. Those facts prefer hierarchical mode of entry, including both considered forms.

Results of factors evaluation

Results of quantification and evaluation of factors determining MVNOs mode of entry, presented in table 1, show that preferable form of entry mode to SEE mobile communications market for thin MVNOs is contractual mode in form of franchising and for ful MVNOs is hierarchical mode in form of share owned partnership, e.g. joint ventures forms.

For thin MVNOs the most influential factors preferring franchising mode of entry are internal and external factors and desirable mode of entry. Transaction-specific factors have a neutral influence,

only. The average value of franchising alternative is 1,34 time higher than average value for share-owned alternative and 1,90 time higher than value for fully-owned alternative of hierarchical mode.

For full MVNOs the most influential factors preferring share-owned mode of entry are external (average value of 7 points) and factors of desired mode characteristics (average value of 5.7 points). From the other side, factors preferring fully-owned mode of entry are internal factors (average value of 6.5 points) and transaction-specific behaviour (average value of 6.5 points). The results of factors quantification are very close, so one can say that alternatives of share owned mode and fully owned mode are practically equally preferred. The average value of share-owned alternative is 5.9, which is just 1,035 times higher than fully owned alternative.

Conclusion

Economic growth, liberalization in sector of mobile communication and convergence in regulation based on European legal framework in SEE countries has stimulated internationalization opening new possibilities of doing mobile communication business in SEE countries.

MVNOs are companies that function as mobile operators but do not have their own frequency spectrum allocation or the necessary network infrastructure. Those companies make business arrangements with one or more licensed Mobile Network Operators (MNOs) by leasing from them the access to mobile network and capacities. Such business concept enables the MVNOs to participate in the mobile communications market, thus extending the value chain and providing innovative mobile communication services specifically adapted to target segments.

In MVNO internationalization, based on different concepts of international marketing, mode of entry becomes issue of strategic importance. Factors determining mode of entry, generally speaking, are sector-specific. In case of MVNOs preferable form of entry mode to SEE mobile communications market for thin MVNOs is contractual mode in form of franchising and for full MVNOs it is hierarchical mode in form of share owned partnership, e.g. joint ventures forms.

References

- Blom, M., Ernstsson, M. (2001): *The Mobile Telecom Industry - an Industry in Change*, a Master Thesis at Stockholm School of Economics, Institution of International Business, Stockholm, p. 38-39
- Bradley, F., (1999). : *International Marketing Strategy*, Fifth edition, Prentice Hall, Essex
- Czinkota, M., R., Ronkainen I., A. (2004): *International Marketing*, Seventh Edition, South Western, Thomson, Mason
- Domazet, A. (2002): *Međunarodni marketing*, Ekonomski fakultet Univerziteta u Sarajevu, Sarajevo
- Gillespie, K., Jeannet, J-P, Hennessey, H. D., (2004): *Global Marketing – An Interactive Approach*, Houghton Mifflin Company, Boston – New York
- Hollensen, S. (1998): *Global Marketing A market-responsive approach*, Prentice Hall Europe, Hertfordshire
- Lee, K., Carter, S., (2005): *Global Marketing Management*, Oxford University Press, Oxford
- Lennighan, M. (2006): *Mobile Virtual Network Operators Going to Extremes*, Total Telecom Magazine, April 2006, p. 30
- Sarić, N. (2008): *Development of Mobile Virtual Network Operators on South East Europe Mobile Communication Market*, doctoral thesis, School of Economics and Business Universtity Sarajevo, Sarajevo
- Sutherland, E. (2008): *Telecommunications in South-East Europe: operators, reforms and outcomes*, CTTE 2008 - 7th Conference on Telecom, internet & media Techno-Economics 17-18 June 2008, Paris, France
- Tallman, B.S., Shenkar, O. (1994): *A Managerial Decision Model of International Cooperative Venture Formation*, *Journal of International Business Studies*, 25(1), 1994: 91-113.

Human Resource Management – Developing Force of Tourist Industry*

Marija Džopalić¹, Jovan Zubović, Ivana Domazet²

ABSTRACT – Tourist industry success depends on several factors, one of which and among the most important is human resources. It is necessary that managers on all levels create such an environment using different methods and instruments so as to develop employees' capacity, improve motivation and identify key factors for success in development and repositioning in the world tourist map. The methods and the instruments to be used are defined in contemporary HRM. It is necessary to have influence all factors in relation with human behavior in a company, especially organizational, social and cultural. Quality of tourist service and positioning on local, national and regional market may be improved if HRM is founded as central strategic and operational development concept. All stakeholders, private and public sector, tourist and local community may benefit from permanent improvement of employees in all sectors that are directly or indirectly involved with tourist industry.

KEY WORDS: HRM, tourist industry, quality, tourist service, tourist agencies

Tourist industry and human resources

As a result of dynamic development in economy, increase in standard of living, improved cultural and educational levels, mobility, urbanization and demographic movements, tourist industry is continuously increasing its share in total value of the world's GDP, employment and transfer of goods and services. Tourism is expanding worldwide and its further development is strategically very important for every country and its integration into global economic activities.

Importance of human resources in tourism originates from the very core of tourist service. Human nature drives us toward meeting new people and visiting new regions. Such activities where people broaden their horizons are critical for development of tourist service. HRM in tourism is key factor for success and development of the economy, bearing in mind what impact tourism has on other economic activities. Tourist industry directly relies on people, their ideas, working behavior and communication with potential customers (tourists). Image creation of one tourist site depends on behavior of large number of people. For that reason, human resource management is valuable and inevitable knowledge which if properly organized generates success in this sector.

Understanding the strategic role of HR

In today's business, organizations constantly need to evaluate their internal and external environment for possible challenges and opportunities in order to remain competitive and to have sustainable growth. Political, economic, social, and psychological changes within our societies have significant impact on organizations. Given any significant change or event, how ready are organizations to react in order to remain competitive?

* This paper is a part of researching project no.159004, financed by the Ministry of Science and Technological Development of Republic of Serbia, named: "The Integration of Serbian Economy into the EU - Planning and Financing of Regional and Rural Development and Enterprise Development Policy".

¹ Marija Džopalić, Belgrade Banking Academy, Belgrade

² Jovan Zubović, Ivana Domazet, Institute of Economic Sciences, Belgrade

Now-a-days many factors drive changes in organizations, including the use of technology, globalization, changes in workforce demographics, elimination of bureaucracies in organizational structures, and the need to find a balance between work and family issues. Understanding the potential of an organization's resources and optimizing the output of such resources, given the changes, provides an impetus for HR to become the key source of creating the competitive advantage for the organization.

To create value and deliver results, HR professionals must begin not by focusing on the work activities or work of HR but by defining the deliverables of that work. HR's roles in building a competitive organization include management of strategic human resources, management of transformation and change, management of firm infrastructure, and management of employee contributions (Ulrich, 1997). Although these roles are valid and have proven to be value-added in recent years, now there is a critical need to move beyond the strategic business partner role to becoming a player in the business (Ulrich & Beatty, 2001). Players, according to Ulrich and Beatty, contribute to the profitability of the organization, deliver results, and do things to make a difference. The roles of players are to (1) coach, (2) design, (3) construct, (4) change the organization, (5) create followers, and (6) play by the rules. Another perspective on the role of HRM suggests that in leading-edge companies, HR professionals play four key roles: (1) strategic business partners, (2) innovators, (3) collaborators, and (4) facilitators (Schuler & Jackson, 2000). As strategic business partners, HR professionals should understand the nature of the business from strategic, operational, financial, and other aspects necessary to be part of an effective team managing an organization. Functioning as innovators, HR professionals are challenged to search continuously for strategies that will create value for the organization and not merely function in a reactionary mode. Furthermore, HR professionals will also serve as collaborators with senior leaders and all employees to implement business strategies forming the strategic link throughout the organization. Finally, as facilitators, HR professionals function as the change agent providing rationale, support, and readiness for planned changes designed to support the business strategies.

The fundamental role of HRM is essentially to maximize profitability, quality of work life, and profits through effective management of people (Cascio, 2003). Given this premise, it can be easily inferred that HR's role is to help create value to the organization.

HR–firm performance linkage

Examination of the impact of HRM policies and practices has been an important topic in the fields of both human resource management and strategic management (Becker and Huselid, 1998). Building from research in both these areas, the view of HRM has progressed from HR as a service and maintenance functional area to a direct contributor to firm performance. We do not want to provide a comprehensive review from both strategic and HR management, but rather to provide an integrative overview of the literature examining the relationship between HRM and firm performance. A review of the existing literature examining this relationship recently revealed three distinct perspectives.

The first perspective takes a systems approach, and examines the impact of an overall set of HR practices on firm performance. This perspective advanced the literature from examining the effect of a single HR practice on performance, to examining a set of practices that work together synergistically. For example, Huselid (1995) examined a system of “high performance work practices” and found support for a positive relationship between such a system and corporate financial performance.

The second line of research examining HRM and firm performance begins to address this shortcoming by considering the role of HRM in implementing strategic initiatives. This perspective explains the positive findings between HRM and firm performance by emphasizing the role HR plays in implementing strategies. To effectively implement a particular strategy, HR practices must “fit” with the strategic goals of the firm.

In this view, a firm's HR practices should develop employees' skills, knowledge, and motivation in such a way to facilitate employee behaviors that complement a firm's strategy. For example, employees may take actions to reduce costs, increase product differentiation, or provide exceptional service in line with specific strategic goals. The role of HRM in this view is one of a “partner” with the overall

firm or business unit (Boxall, 2003), and empirical support for this perspective has been shown in the literature (Huselid, 1995).

The third perspective recently developing and gaining rapid acceptance in the literature examining HRM and firm performance is grounded firmly in the resource-based view of the firm. In this view, HRM is seen as a key factor in a firm's ability to develop and leverage valuable and rare organizational resources and capabilities that are difficult for competitors to duplicate (Barney, 1991; Lado and Wilson, 1994). From a resource-based perspective, a firm's human capital is frequently assumed to contribute to a firm's competitive advantage due to its socially complex, firm-specific nature (Hatch & Dyer, 2004). To the extent that the HRM function constitutes an investment in firm-specific human capital through selection, socialization, staffing, development, training, and skill-based pay, the HR function may be a potent source of competitive advantage for a firm (Lado & Wilson, 1994).

In sum, the theoretical underpinnings of the literature examining the relationship between HRM and firm performance have developed from (1) examining specific sets of HR practices, to (2) examining a match between HR practices and strategy, to (3) examining the role of HRM in building and maintaining organizational resources and capabilities that contribute directly to a firm's competitive advantage. Consistent support has been found for the HRM–firm performance link in the literature, and with the continued development of theory, a richer understanding of how this relationship occurs can both advance the literature and facilitate improvement in practice.

Tourist industry characteristics

Many policy-makers have attempted to define the nature of the tourism industry— yet there is still no one commonly accepted definition. Hence, there are inherent problems seeking to define what is a large and diverse sector, which means many of the activities may overlap, and could be described as encompassing tourism. For example, Lucas (2004) in her recent work on employment relations in the hospitality and tourism industries chose to talk in broad terms about the Hotel, Catering and Tourism Sector (HCTS).

This characterization of the HCTS recognizes that, in reality, many jobs in hospitality and tourism, 'share common attributes and are associated with both hospitality and tourism activities' (p. 4). Clearly, then, we should recognize the potential for a lack of precision in describing the tourism and hospitality industries.

In an attempt to avoid too much imprecision and, at the same time, capture the diversity of the sector we use the framework offered by People 1st, which is the Sector Skills Council (SSC) for the hospitality, leisure, travel and tourism sector, to exemplify the broad range of activities that may be seen in the HCTS. SSCs are employer led and amongst other things aim to be the voice of industry on skills matters and encourage best practice approaches to employment. Therefore, People 1st suggest that the sector as a whole is made up of 14 sub-sectors (People 1st, 2006):

- hotels;
- restaurants;
- pubs, bars and night-clubs;
- contract food service providers;
- membership clubs;
- events;
- gambling;
- travel services;
- tourist services;
- visitor attractions;
- youth hostels;
- holiday parks;
- self-catering accommodation;
- hospitality services.

Tourist industry satisfies higher level of human needs, which do not have existential character, like cultural and cognitive needs, needs for sport and health. For that reason the elasticity of demand for tourist service is high, it is sensitive to quality and requires high level of individualization.

Several authors define tourism to be a service which is characterized by diversity and complexity. Unković (1998) defines it as “heterogeneous business activity made of different economic and non-economic activities combined in a product which satisfies need of local and foreign tourists”. Bakić (2003) notes that “tourism is not a separate business activity, it rather is a complex system made of different subsystems with high elasticity and specificity in productivity of work as its key component”. Bakić further says that sector of tourism delivers both products and a service. It is specified by “conversion function” which has a potential to convert non economic goods (location, climate, antropogenous and social factors like folklore, historical background, culture etc.) into economic good and together with other products and services (transportation, accommodation, food, etc.) place it on the market. According to his previous work (Bakić, 1998) this function defines tourism product as “single (partial) element or as functional mix of several such elements (integrated) offered by producer (supply side), where its final shape is made by tourists (demand side) in the process of selection and mix of different elements. Tourist product is viewed as “amalgam” where both producers and consumers take part at the same time, consisting of physical characteristics, concepts and sellers’ behavior and other elements which offer “expected gain”.

Management is an activity which became a necessity in all organizational systems. It is necessary to plan, organize, lead and direct employees activities in order to effectively achieve goals and objectives. Stavrić, Mardokić and Gašović (2004) note that “it is important for scarce resources (human capital, elements of production, capital) to be used rationally so as to maximize effectiveness and efficiency in achieving goals and objectives”.

Providers and consumers in tourist industry

Tourism as a service is created as a result of human need for travel, holidays, acquaintance, knowledge and communication. The service is provided by employees in tourist agencies along with activities of employees in hospitality management, transportation, trade, communal activities and entrepreneurship. People have had need for travel for long time. However, development of tourism as an organized activity and business sector has begun after the need has grown and ceased to be a privilege of rich.

Tourist agencies combine tourist offer, needs and demands of customers and in that way create their product. They integrate different elements of needed products and services, adapt them and bring them closer to customer – tourist. Tourist agencies today offer wide range of services. Development of information technology increases possibilities of combining and creating differentiated tourist offer.

Activities of tourist agencies according to Štetić and Šalov (2000) are defined in the following functions:

- informational-advisory
- promotional
- intermediating and
- organizational.

Along with a growth of income and wider population standard of living, the need for travel and interest for meeting other people and regions has grown. The value system has shifted towards orientation on leisure time. Rapid development of means of communication and transportation enabled faster contacts and movement, leaving people with more free time. Developed air transport became core for development of modern tourism. Possibility of comfortable and fast transport from one to another destination is driving force for development of tourism in international context. Increased standard of living created completely new generations of population with a new life style and new system of values. Tourism became a part of human life. Holliday is something people wait for the whole year long and special attention is drawn to vacation as a tool for discharging from gruelling life and working

pace. People today do not have time and will to create holiday itinerary, so they expect from tourist agencies to fulfil their needs and desires, which may vary depending on price and concepts of life.

Key success factors in tourist industry

Success in tourism depends on numerous human factors and their interaction. In practice, employees generate capital for a company they work over their competencies, attitudes and intellectual agility. Competencies as a component of human capital according to Milićević (2002) are knowledge, skills, talents and know-how that the employees and managers have. Uniqueness of tourist product and role of employees in creation and delivery of that product requires modification of traditional 4P marketing mix into a new formula 4P which includes people skills and processes initialized by a customer. The elements of modified 4P are excellent people skills, superior product, impressive presentation and customer driven processes.

The concept of “Human Resources” refers to total of human potential in an organization including knowledge, skills, abilities, creativity, motivation and energy needed to reach organizational goals. Pržulj (2007) emphasizes that “Human resources are a compound of intellectual, physical, psychic and social energies which may develop in achieving organizational goals”.

People skills, their style and their competences are the key elements which should enable consumers to feel satisfied. Skills like communication, presentation, influence, positive approach, energy and self control are required if one wants to succeed in tourism. If customers feel respected, understood and treated with frankness, we may say that good foundation for high quality product is on place. In tourism we usually say that customers do not buy a product, they buy the attitude which is shown to them.

If we talk about the product in tourism we talk about the travel package as an unique product. The package is a combination of services which include preparation, organization, sale and realization of travel. Travel package is related to a certain tourist site which might be attractive for its natural and atropogenous features. It has decisive role in tourist’s selection process. Preparation of travel package is an entrepreneurial activity performed by tourist agency. Its quality relies on abilities, education and information the employees of an agency have. If we want a travel package to be good and unique product we must take care about tourist needs.

For a product to be attractive, proper presentation and promotion are critical. Presentation is total of communication between seller and consumer of tourist package. Customers derive experience and their attitudes according to presentation they had where they observe the location of an agency, looks and behavior of employees, the quality of travel prospects and communication behavior. Selection of good advertising in tourism is most important instrument of promotion. Proper public relations enable tourist agency to have suitable positioning, acceptability and recognition on the market.

Managing human resources in tourist industry

Priorities of the HRM are changing and adapting to company strategy. Dessler (2007) notes that most important responsibility of Managers of HR is to create such HR policy and practice where personnel behavior become competent and reliable in achieving company strategic objectives and goals. Many organizations create human resource developing strategies that include leadership, loyalty, employment and appreciation as motivating instruments. At the same time they develop processes strategies which define standards and trace performance and development. Employees in this sector of industry are key company success factor. Frontline personnel have special value for organization, since they are the first customers contact. The customer perceives the whole organization and creates an image through these employees.

Managers with their leadership skills influence employees’ satisfaction and performance. They define the direction and methods how to achieve goals, gather personnel and motivate them to give their best and keep control on the whole process. Human resources are not the same as the other company re-

sources since people have their own specific interests, goals, character and perception. Employees are individuals with their own ego and they are willing to use their knowledge, skills and energy for organizational goals only if they achieve their personal goals and needs. Contemporary human resource management offers a framework for satisfying employees' goals and needs and harmonizes them with organizational goals. New approach to human resources was created as a result of growing competition an organization is facing on the global and open markets, making human potential become differentiation tool. Human resources became intellectual capital of an organization, and managers of HR have a task to convert that capital into company added value. This is a new strategic concept aimed at future, which observes human as capacity and potential resource, core strength and competitive advantage an organization has and which by proper management and skills may create economic value for the organization. This is a dynamic process where managers permanently identify HR potential and develop it by simultaneously complying needs employees and organization may have. Qualitative selection methods, investments in education and development, appreciation of performance, rewarding system based on results, involvement of employees in solving organizational problems, and overall harmonization of interior work environment give positive results in every organization. If we want HRM to improve company success, it is necessary to emphasize competences, motivation, loyalty, competitiveness and flexibility of employees.

Tourist agency highly relies on its employees. For that reason the recruiting and selection of candidates who would best suit to tourist business is very important. Recruitment is only a first step of a process, which will remain unfinished if we do not take care on continuous training and education of personnel and especially on motivation (rewarding, performance validation, promotions, etc.)

Tourism is under influence of rapid technology change which requires adjusting methods of work and knowledge, as well as of change in taste and demand of customers on the tourist market with a wide offer of unique products. Modern resource approach to employees emphasizes a need for organization to permanently improve personnel potentials. In tourism this has a specific value, because it is a business activity which is subject to rapid change, squeamish consumer taste and high dependability on information and modern communication technology. Improvement of employees is in direct relationship with organization flexibility, and flexibility is required for an agency to survive on the market. Improvements help us motivate employees, to identify their potentials and direct them towards company goals.

The global study also gives an indication of future education and training priorities for tourism. Spivack (1997) reports a number of what she calls "skills development issues" derived from anticipated changes within the tourism sector, and which the panel consensus process prioritized as central to education and training needs in the future. These were, in rank order:

1. Managers will need to develop more skills in human resource management, particularly in knowing how to build an enthusiastic workforce.
2. With continued internationalization of business, all levels of management will need more training, especially in interpersonal and multicultural skills.
3. Environmental awareness and conservation techniques will become an essential part of tourism education at all levels.
4. The expansion of franchises among transnational firms will accelerate the need for international-level quality of service and skill standards.
5. Public health issues, such as AIDS, that relate to the delivery of tourist products and services will become an essential part of tourism education at all levels.
6. Supervisors will need to learn more high level management skills such as forecasting and strategic planning.

Activities in tourism are of a seasonal character so they are subject to permanent change. For that reason the employees have to be flexible and mobile. This is possible to achieve by rotation or planning of work in such a way so as to identify potentials and gain new knowledge and skills. In that context we have to take care on design of work which might extend and expand current activities according to needs and evaluation of managers.

From the aspect of HRM it is important to analyze communication skills of the employees, as on of the key criteria in acquiring a job, training, valuing and rewarding. Communication facilitates better understanding of the job roles, understanding and trust between peers and creation of better human relationship, all of which influence job satisfaction and job motivation of an employee. Communication practice in a tourist agency directly impacts how employees deal with customers and business partners, hence success of the agency on the market. At the same time internal communication in the agency (between peers, and employees-managers) is prerequisite for successful business process, which should be based on collection, linking and placement of information. Adequate communication channels and timely availability of relevant information create peer relationships, reduce conflicts and shape positive climate and culture of the tourist organization.

Organization culture is one of the most important variables of the organization behavior. It deals with understanding of an organization as a group which has strong social influence on individuals. Behavior standard is important element of the culture. Values and standards together represent constitutive elements of a specific organization culture. Organization culture creates employees behavior and it is a result of HRM policies and strategies.

Among organization factors which influence customer-employee relationship, very important role belong to working environment, job design, managers behavior, and the concept of HRM in general (development, evaluation, rewarding). All of the above influence job satisfaction. If satisfied with personal and professional life and especially with treatment in company employees will have positive attitude towards customers. Dynamic environment of tourist agency requires of the agency and its employees to have high level of flexibility, openness and willingness to change. Such culture where change is welcome brings innovation and life long learning as primary values.

References

- Bakić Ognjen (1988) *Strategijsko planiranje turističkog proizvoda*, Narodna knjiga, Beograd
- Bakić Ognjen (2003) *Marketing u turizmu*, CID, Ekonomski fakultet, Beograd
- Barney J (1991) *Firm resources and sustained competitive advantage*, Journal of Management 17 (1991), pp. 99–120.
- Becker B.E, Huselid M.A (1998) High performance work systems and firm performance: A synthesis of research and managerial implications. In: G.R. Ferris, Editor, *Research in personnel and human resources management* Vol. 16, JAI Press, Stamford, CT (1998), pp. 53–101.
- Boxall P (2003) *HR strategy and competitive advantage in the service sector*, Human Resource Management 13 (2003), pp. 5–20.
- Cascio, W.F. (2003) *Managing Human Resources: Productivity, Quality of Work Life, and Profits*, 6th ed., McGraw-Hill, Boston, MA
- Group of Authors (2005) *Strategija turizma Republike Srbije – Prvi fazni izveštaj*, Ekonomski fakultet Univerziteta u Beogradu i Horwat Consulting, Zagreb,
- Hatch N.W, Dyer J.H (2004) *Human capital and learning as a source of sustainable competitive advantage*, Strategic Management Journal 25 (2004), pp. 1155–1178
- Huselid M (1995) *The impact of human resource management practices on turnover, productivity, and corporate financial performance*, Academy of Management Journal 38 (1995), pp. 635–672
- Jackson, S.E., Schuler, R.E. (2000) *Managing human resources: A partnership perspective* (7th ed.) Cincinnati: South-Western College Publishing.
- Lado A.A, Wilson M.C (1994) *Human resource systems and sustained competitive advantage: A competency-based perspective*, Academy of Management Review 19 (1994), pp. 699–727.
- Lucas, R. (2004) *Employment Relations in the Hospitality and Tourism Industries*, Routledge.
- Milićević Vesna, 2002., Internet ekonomija, Fakultet organizacionih nauka, Beograd
- People 1st (2006) *Skills Needs Assessment*, People 1st.
- Pržulj Živka (2007) Menadžment ljudskih resursa, Fakultet za trgovinu i bankarstvo „Janićije i Danica Karić“, Beograd

- Spivack, S. (1997), "A consensus model approach for assessing gaps between education system output and human resource demands in the tourism and hospitality sector to aid in the attainment of quality service goals", unpublished DPhil thesis, University of Buckingham.
- Stavrić B, Mardokić B, Gašović M (2004) *Menadžment*, Beogradska poslovna škola, Beograd
- Štetić S, Šalov P (2000) *Poslovanje turističkih agencija*, Savezni centar za unapređenje hotelijerstva – ugostiteljstva, Beograd
- Šunje A, Pašić M, *Menadžment ljudskih resursa (HRM)*, dostupno na <http://ads.gov.ba/obuke/doc/Ocjenjivanje%20radne%20uspjesnosti.pdf>
- Ulrich D (1997) *Human Resource Champions*, Harvard Business School Press
- Ulrich D, Beatty D (2001) *From Partners to Players, Extending the HR Playing Field* Human Resource Management 40, no 4, pp.293-307
- Unković Slobodan (1998) *Ekonomika turizma*, Savremena Administracija, Beograd

The E-Logistics System

Dragan Ilić¹

ABSTRACT – *Logistics systems are a collection of data, hardware, software, and rules that work together to support an activity. (Dawe, 1995) The e-Logistics is the first to create a complete Transport Management System using only Internet Protocol (IP) based technology. It does not have to be converted to operate on a multi-site basis: it is multi-site based. It differs from other optimization tools, which are focused on consignments from a single site and assume assets can be moved to execute an optimized plan. It provides real-time visibility of the entire transport network and optimizes most efficiently the deployment of those assets to achieve the work to be done to standard. It supports the way transport operations actually work, and completes the entire transport management cycle of forecast, plan, delivery, post delivery and reporting; Plan vs. Actual. Whilst other systems may do parts of this better no other system provides management of the entire process and enables colleagues and business partners to work together collaboratively, streamlining work-flow and reducing administration. (eLOGISTICS.com, 2003) The e-Logistics system can be described by Process, Information System and Value.*

KEY WORDS: *e-logistics, supply chain management (SCM), logistics system, logistics network*

Introduction

A supply chain is a network of suppliers, manufacturing plants, warehouses, and distribution channels organized to acquire raw materials, convert these raw materials to finished products, and distribute these products to customers. The efficient design and operation of supply chains is one of the important components of planning activities in a manufacturing firm. The strategic level supply chain planning involves deciding the configuration of the network, i.e., the number, location, capacity, and technology of the facilities. The tactical level planning of supply chain operations involves deciding the aggregate quantities and material flows for purchasing, processing, and distribution of products. The strategic configuration of the supply chain is a key factor influencing efficient tactical operations, and therefore has a long lasting impact on the firm. Furthermore, the fact that the supply chain configuration involves the commitment of substantial capital resources over long periods of time makes the supply chain network design problem an extremely important one. (Tjendera, et al., 2005)

Ayers (2001) shows that there is much cost saving in logistic processes and one of the potential moves is to consider logistics as part of the Supply Chain. The next definition can be easily learned: logistics is that part of the supply chain process that plans, implements, and controls the efficient, effective flow and storage of goods, services, and related information from the point of origin to the point of consumption in order to meet customers' requirements.

Logistics means the integration of two or more activities for the purpose of planning, implementing and controlling the efficient flow of materials and products from the point of origin to the point of consumption. Logistics involves the integration of information, transportation, inventory, warehouse, material handling, and packaging. Depending upon its origins, logistics is often seen as begin synonymous with distribution activities, either the physical distribution of product, SCM, pipeline 'management, or supply and transport. Whichever description is used, the basic definition of logistics is the same; namely, getting the right goods to the correct place at the time and in the condition required by the customers. Generally speaking, the most common form of logistics has traditionally been based on

¹ Dragan Ilić, University EDUCONS, Sremska Kamenica

moving large shipments of items in bulks to select strategic customers in a few geographic locations. Shipments have also traditionally been tracked by container, pallet, or other unit of bulk measurement, not by individual item or parcel. (Bayles, 2001)

The Internet and logistics

In the 90s, an open-system of computer network, known as the Internet, made available global communications with a much lower operating cost. World Wide Web (WWW) cyber space has offered companies an opportunity to establish electronic commerce (e-commerce) with customers directly or with other business firms that may later form partnership in the SCM (Bayles, 2001). The incredible growth of the Internet is changing the way corporations conduct business. The advances in the Internet offer a wide range of opportunities for companies to find new ways of contacting their business in order to cope with increased competition more efficiently and effectively. As a result, e-Logistics practices are increasingly becoming the subject of studies evaluating the impact of Internet on economic growth and business performance. (Bayles, 2001)

According to Ross (2003), the distance between suppliers, manufacturers, distributors, customers, and consumers continues to shrink because the e-Commerce is having an enormous impact on the logistics function in most companies. The e-Commerce is causing organizations to redefine their market assumptions, value propositions, and value delivery systems. It's also forcing firms to take on new value chain roles and responsibilities.

Coyle (2003) considered the influence of Internet when he derived his classic internal value chain showing primary activities which a business must do to exist and the secondary activities required to control and develop the business and which are common across the primary activities. An organization today must consider the effect of Internet enabled commerce on their distribution channels and the value chain.

The most common use of e-commerce today is to research vendor and product information. This is a primary reason that some vendors have only a Web site on the Internet to merely advertise their products. However, other companies have advanced online procurement system that permit a buyer to electronically check available stock, negotiate price, issue an order, check on the status of the order, issue an invoice, and receive payment. The ultimate e-commerce procurement system is still in the development stage and will evolve over time. (Coyle, 2003)

E-SCM is fast becoming a "must have" in the global logistics industry. It goes beyond the application of Internet technologies (the common interpretation today), to the use of electronically-processed information to facilitate the planning and execution of supply chains. This allows companies to monitor, plan and execute their supply chain more effectively. (Lim, 2002)

Many Internet and traditionally-based e-commerce companies, whether focused on business-to-business (B2B) or business-to-consumer (B2C) markets, have come to realize that easy access to information and communication and the delivery of their products or services are important drivers in developing market competitiveness (Sarkis, Meade and Tallun, 2004).

Logistics is a subset of SCM, and accordingly, e-Logistics is a subset of e-SCM (Gimenez and Lourenco, 2004). E-Logistics is one subset of a larger external logistics market. E-Logistics can be defined as the transfer of goods and services using Internet communication technologies such as electronic data interchange (EDI), e-mail and World Wide Web (WWW). (Gunasekaran, 2003)

Also as a part of e-business, e-Logistics, is applying the concepts of logistics electronically to those aspects of business conducted via the Internet (Bayles, 2001). It is difficult to define e-Logistics comprehensively because the potential impact of e-business on logistics and SCM is not yet fully understood. One possible definition is that e-Logistics simply means processes necessary to transfer the goods sold over the Internet to the customers (Auramo, 2001). Kim and Lee (2002) argue that the definition of e-Logistics is the virtual logistics business activity and architecture among the companies

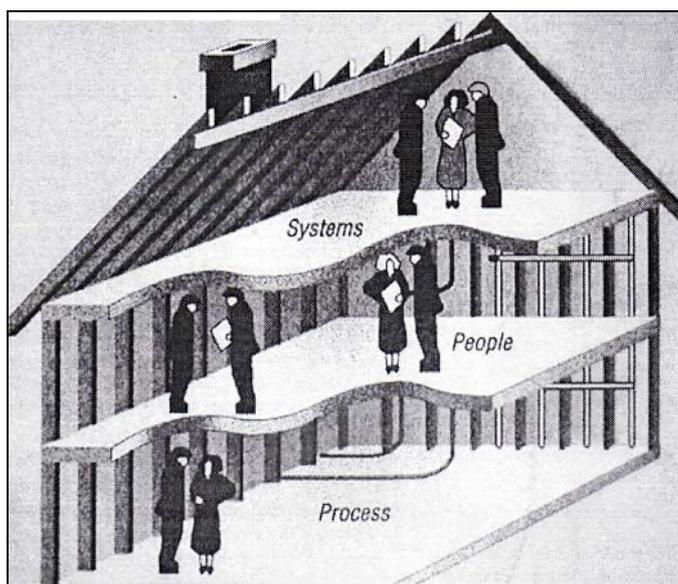
based on the Internet technology. Also the e-Logistics framework which is expansion of conventional logistics framework enables business integration among the separated information system.

The importance of e-Logistics system

E-Logistics has become a "hot" topic for a number of different reasons. These include the trend towards multi-site operations with several independent parts involved in the production and delivery process, new and increasingly cut-throat marketing channels and the electronic marketplace. Traditional supply chains and trading partner relationships are exploding into intricate and dynamic virtual networks of trading partners and service providers. The emphasis in these relationships is to derive significant value through increased revenues and decreased costs. Achieving this in any organization directly depends on the performance of all the others in the network and their willingness and ability to coordinate (Swaminathan, Smith and Sadeh, 1998). The question facing organizations today is not if they should join these new electronic networks, but how.

According to Dawe (1995), if we think of a logistics organization as a house, see Figure 1, each activity can be recognized as rooms. There are three elements in the rooms: processes, people and systems. The processes are the walls, ceilings, and floors that define the relationships between activities, the people are the inhabitants that work with the processes; and the systems are the plumbing and wiring connecting and supporting the rooms.

Figure 1. The Logistics house



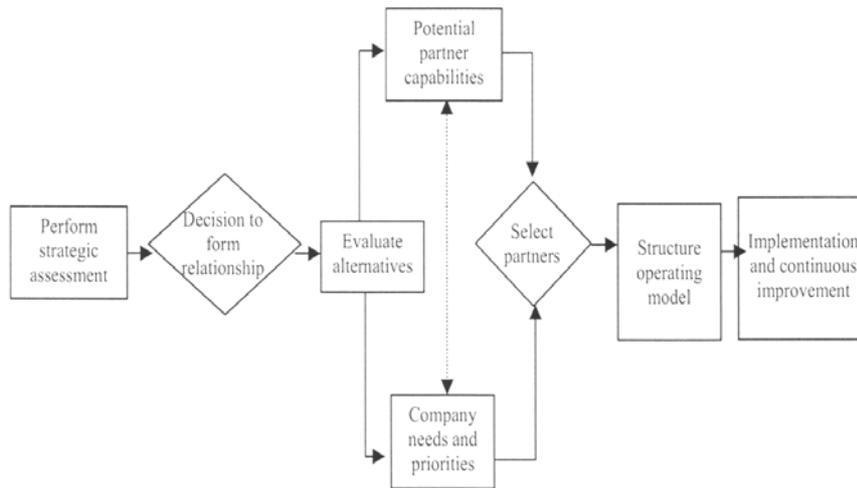
Source: (Dawe, 1995, p.102)

The process determines whether the right things are being done. The system determines whether those things are being done right. (Dawe, 1995) However, the logistics of e-commerce is not easy. Making systems integration a high priority are crucial steps in making it work. (Seideman, 2000) Information has always been central to the efficient management of logistics but now, enabled by technology, it is providing the driving force for competitive logistics strategy (Christopher, 1992). Many companies are now designing supply chains which cannot operate without sophisticated Information Technology. The role of the logistician, however, remains as optimizing the supply chain by understanding the possibilities of IT and using it to its full potential. Logistics is as much about the management and movement of information as it is about the management and movement of physical goods (Hammant, 1995).

The process of logistics

According to Coyle (2003), for purposes of illustrating the process of logistics, see Figure 2, the authors assume that the model can be applied to a manufacturing firm which has a relationship with a supplier of logistics services.

Figure 2. Process Model for Forming Logistics Relationships



Source: (Coyle, 2003, pp.421)

Step 1: Perform Strategic Assessment

When the manufacturer becomes fully aware of its logistics and supply chain needs and the overall strategies, the first stage will be adapted to guide its operations. The result of this step will lead some types of information available.

- Overall business goals and objectives which include those from a corporate, divisional, and logistics perspective;
- Needs of assessment to include requirements of customers, suppliers, and key logistics providers;
- Identification and analysis of strategic environmental factors and industry trends;
- Profile of current logistics network and the firm's positioning in respective supply chains;
- Benchmark values for logistics costs and key performance measurements;
- Identification of "gaps" between current and desired measures of logistics performance.

This step will give the significance of most decisions in logistics and supply chain relationship, and the potential complexity of the overall process, any time taken at the very beginning of gaining an understanding of one's needs is well spent.

Step 2: Decision to Form Relationship

This step may take on a slightly different decision context depending on the type of relationship being considered by the manufacturing firm under consideration. The first question is whether or not the provider's services will be needed when the decision relates to using an external provider of logistics services. A suggestion to making this decision is to make a careful assessment of the areas in which the manufacturing firm appears to have core competency. As indicated in Figure 3, for a firm to have core competency in any given area, it must have expertise, strategic fit and ability to invest. If any one or more of these absent may suggest that the services of an external provider are appropriate.

Figure 3. What Does It Take to Have an Area of Core Competency



Source: (Coyle, 2003, pp.422)

Step 3: Evaluate Alternatives

According to Coyle (2003), it is important to conduct a thorough assessment of the manufacturing company's needs and priorities in comparison with capabilities of each potential partner in order to utilize the partnership formation process. This task should be supported by the availability of critical measurements and the results of personal interviews and discussions with the most likely potential partners.

Step 4: Select Partners

This step is the critical concern to the customer. The selection of a logistics partner must be made following very close consideration of the credentials of the most likely candidates. It is also very important to interact with and get to know the final candidates on a professionally intimate basis. (Coyle, 2003)

Step 5: Structure Operation Model

The structure of the relationship refers to the activities, processes, and priorities that will be used to build and sustain the relationship (Coyle, 2003). As suggested by Lambert and et al. (1996), components make the relationship operational and help managers create the benefits of partners, a suggest list of components of operating model include:

- Planning
- Joint operating controls
- Communication
- Risk/Reward sharing
- Trust and commitment
- Contract style
- Scope of the relationship
- Financial investment

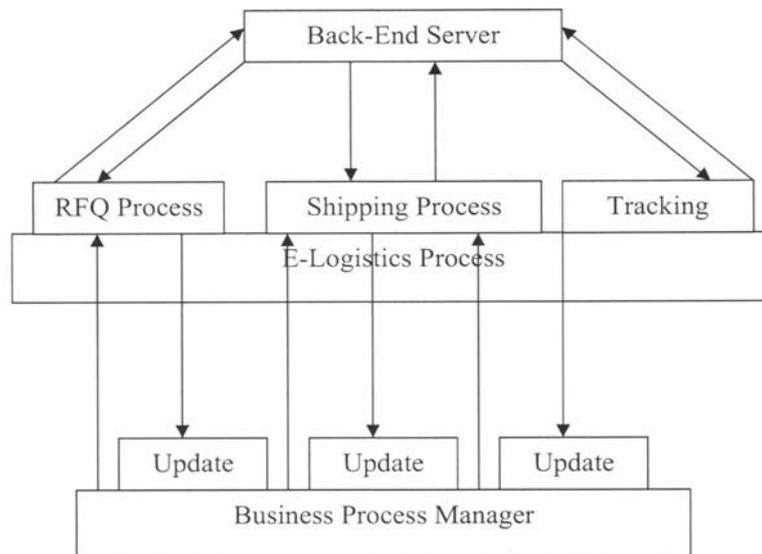
Step 6: Implementation and continuous Improvement

The most challenging step in the relationship process has just begun after the decision to form a relationship has been made and the structural elements of the relationship identified. The overall implementation process may be relatively short or it may be extended over a longer period of time. In a situation where the degree of change is more modest, the time needed for successful implementation may be abbreviated. (Coyle, 2003)

The process of e-Logistics

According to Zhang (2001), typical e-Logistics processes include Request for Quotes (RFQ), Shipping, and Tracking. As shown in Figure 4:

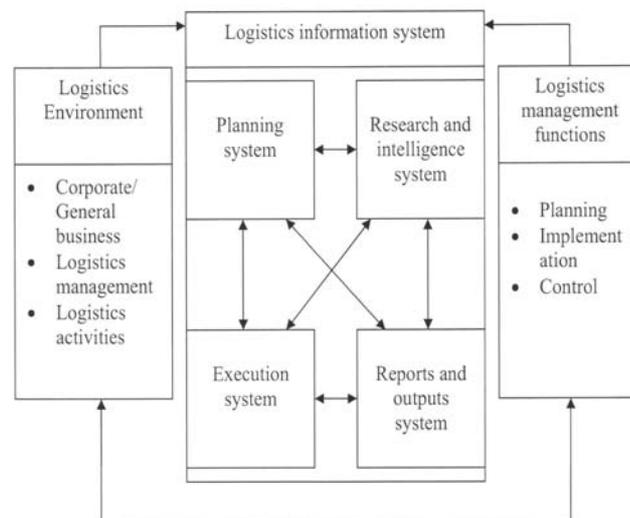
Figure 4. High-Level View of E-Logistics Processes Integration Framework (ELPIF)



Source: (Zhang, 2001)

The RFQ process is done by the business process manager in order to get the basic services such as getting the quotes in an e-Logistics process. The purchase order (PO) is updated, whenever the response is obtained. Shipping process is also invoked by the business process manager and upon completion updates the PO. Once goods are shipped, the tracking number is given to the customer and that tracking number is mapped to the PO number in an e-Logistics system. Customers can track their shipment with the help of that number. The interaction diagram of e-Logistics and business process manager is shown in Figure 2.4. (Zhang, 2001)

Figure 5. Logistics information system



Source: (Coyle, 2003, pp.466)

As illustrated by Ross (2003), the e-Logistics system can be broken down into 19 strategic and tactical objectives which can be organized within a frame work of three critical processes: planning and collaboration, transaction, and execution. In addition, the model can determine how information is exchanged by containing a technical infrastructure component, and it also contains an infomediary component which will detail the depth of knowledge and information required to support the capabilities, both internally and externally, to drive the logistics model.

Final remarks

Logistics performance may be conceptually viewed as a subset of the larger notion of firm or organizational performance. Essentially, logistics performance is composed of three key components: the first, logistics productivity, that is used to create the meaningful productivity standards to measure the ability of track and managing logistics costs; the second, logistics service performance, is concerned with tracking metrics associated with the ability of logistics functions to meet customer service goals; the final component, logistics performance measurement systems, focus on what and how performance is to be tracked (Ross, 2003). Managers today increasingly face the challenge of improving logistical performance within their organizations. When a firm confronts this challenge and undertakes the risk of improvement, its managers must grasp leadership of the change process. The logistics excellence provides managers and others the motivation for and means of becoming thoroughly committed agents of logistical change. Logistics Excellence is about change management, the focus is on how to go about changing an organization's commitment and culture to support revitalization of its logistics process.

References

- Ayers J. B. (2001), *Handbook of Supply Chain Management*, the St. Lucie Press/APICS Series on Resource Management.
- Bayles D. L. (2001), *E-commerce logistics and fulfillment: delivering the goods*, Prentice-Hall International (UK).
- Coyle J., Edward J. Bardi and C. John Langley Jr. (2003), *The Management of Business Logistics: A Supply Chain Perspective*, 7th edition, South-Western, Thomson Learning.
- Dawe, R. L. (1995), *Systems put your house in order*, Transportation & Distribution, Oct. 1995, pp102-106.
- eLogistics.com (2003): *A New Standard for Transport Management System*, [online] Available: <http://www.elogistics.com/aboutus/welcome.htm> [2005-09-11]
- Lanbert Douglas, M, Emmelhainz Margaret A., and Gardner T. (1996), *Developing and Implementing Supply Chain Partnerships*, The International Journal of Logistics Management 7, pp1-17.
- Ross D. F. (2003), *Introduction to e-Supply Chain Management: Engaging Technology to Build Market-Winning Business Partnerships*, ST. LUCIE PRESS, A CRC Press Company.
- Santoso, Tjendera, Ahmed, Shabbir, Goetschalckx, Marc and Shapiro, Alexander (2004) *A stochastic programming approach for supply chain network design under uncertainty*, European Journal of Operational Research, Nov2005, Vol. 167 Issue 1, pp. 96, 20p; DOI: 10.1016/j.ejor.2004.01.046.
- Swaminathan, J. M., Smith, S. F. and Sadeh, N. M. (1998), *Modeling Supply Chain Dynamics: a multiagent approach*. Decision Sciences 29(3), pp 607-632.
- Zhang Liang-Jie (2001), ELPIF: An E-Logistics Process Integration Framework, IBM T.J. Watson Research Center.

Challenges of Strategic Marketing in XXI Century

Karolina Ilieska¹

ABSTRACT – The term “Marketing short-sightedness” is introduced in the middle of the twentieth century because of excessive focusing of the manufacturers upon the product. But today, the orientation of the firms only to the needs of the customer and the profit itself as a result of the customers’ satisfaction can lead not only to short-sightedness but also to a complete marketing blindness. The following are the consequences of the marketing blindness: Satisfying the customer with a certain information which is needed more and more, one can impose a profound influence of the needs of other kind of information; It causes social disintegration oriented to satisfy the customers with money; It disturbs the demographic dynamics the biosphere and geosphere. Nature should be on the top of the pyramid, then comes the society and the market after it. Marketing blindness puts the market on the top of the pyramid, then comes the society and nature after it. Marketing should enable sustainable development of the activities, the process and the functions in order to avoid the blindness. On the contrary: Cigarettes and alcohol will poison the satisfied customer; Banks will activate their mortgages “Live now and think of your debt later”; Globalization will look for cheap labour force (0.13\$ per hour instead of 5\$ per hour); Nature will turn into resource and rubbish dump (which one is worse it is not known).

KEY WORDS: marketing blindness, sustainability, development, strategy

The theory of marketing short-sightedness

The term “Marketing Short-sightedness” is introduced in the middle of the XX century by Theodor Levit. It means that the customer focuses excessively on the product, its price decrease and quality and sale increase, but at the same time the needs and desires of the customers are neglected.

Philip Kotler developed this theory in details. Considering the fact that nothing is eternal except the change, the modern marketing science is looking for answers of some new questions that need to change the theory of marketing short-sightedness. The answer of these questions is becoming a challenge in front of the strategic marketing in XXI century which will function as enabling maintainable development. The change of the theory will take place in the direction of saving its basis but emphasizing its “essential” marketing activities. In the theory of marketing, the focus is on the profit as a result of satisfying customers’ needs to their maximum. “Put the profit on its place. Customers’ satisfaction is the final goal and if someone reaches it, the profit will be consequence” (John Adam) This will lead not only to “short-sightedness” but also to “marketing blindness”.

Marketing blindness

Marketing as a science performs its principles via realising the concept of achieving profit to its maximum with satisfying customers’ needs to their maximum. But, orientation and development of the customers’ needs by themselves can cause anthrop negative reactions.

The structural anthropogenic change can be the first negative reaction as a contradiction on the need for development of the person. For instance, the excessive satisfaction of customers’ needs for specific type of information can cause disorder in the needs of other type of information. As a result, this can

¹ Karolina Ilieska, Faculty of Economics, Prilep

cause disorders in the development of the person and some negative implications for the society and wider.

The principles of marketing are regarded: it created some new needs and desires and satisfies them at the same time, but it doesn't solve the problem with the harmonic development of the person. Therefore, we can say that the company's marketing is blind by its structure for needs of the person's harmonious development. The translocation of social strata and the creation of social deformation is the second negative reaction which as a consequence shows increased social disorder in the society.

Marketing creates needs for the customers to be capable of paying, but it does not satisfy the needs of the poor strata. Therefore, it is said that marketing in the firms is blind by its structure talking socially.

There's a view that market relationships create more rightful society because there is no profit if desires and needs are not satisfied. But, the market is neither free non-righteous and perfect, so the society has a chance to correct its social consequences that emerged as a result of its function.

The third negative reaction is causing structural changes in biogeosphere. Namely, the market will realize its functions, the society will correct the social deformations, but the growth of the mankind, the needs and scientific and technological progress will face the restriction of the resources.

Considering the idea for larger and more qualitative products which will satisfy more needs, marketing understands the planet Earth only as a resource, but this understanding causes structural changes in the biogeosphere and it can lead to long-term fatal consequences. In its way, marketing becomes "biogeoblind". This means that marketing "has a good point of view" considering the needs and wishes of customers, but it becomes "blind" for the person, the society and the nature.

Strategic management

The opinion that "the invisible hand of the market" will solve all the problems, considering the fact that the rational free choice will satisfy their needs in the best way is a delusion which sets the market at the top of the pyramid. But, this consideration destroys the nature that is located at the bottom of the pyramid, then the society which is in the middle level. The solution should be looked for in the strategic managing.

The strategy is a plan that contains the basic goals that the firm intends to reach in the period ahead. The goals, defined according to the marketing concept are set in accord with the strategy of increase of the: needs, production and profit. The market success of the firms is measured with the annual production, profit and market participation. Later, the measure for success is increased with additional measures such as the one for private ownership, payments, titles and posts, in other words the acceptance of the model: "Thing Big".

However the qualitative side of the success has been neglected and it should give answers to the questions: how do we produce?, how do we create needs?, what is the influence of our choice on the planet Earth? The strategic managing of the firm is focused on the factors and conditions for the growth. The basic problems are:

- how to capture new customers and keep the old ones?,
- how to sell more of a certain market segment?,
- how to optimise the relationships with suppliers?,
- how to get a step in front of competitors?,
- how to manage human resources?,
- how to optimise relationships with the institutions?

So, the strategic managing in the firm cares for growth and the development of the firm. In the conditions like these, marketing has a goal to discover markets just like Columbus discovered and conquered new lands.

Marketing elaborates markets, studies the competitors and suggests new measures against them, and it elaborates the whole market politics. Today, marketing is being defined (Cotler) as:

“Human activity oriented toward satisfying the needs and desires by means of change”;

“Marketing is a social and managing process helping separate people or groups of people to satisfy their needs by the way of change”.

Marketing today is often understood as business philosophy which brings the production of only those products that can be sold at the market. As a result of such understanding, success is achieved in cases like profit increases, production increases and needs increase. But, the abundance of goods and services has led to qualitative changes. The new level of quality and needs has given to customers a feeling of freedom and independence. The philosophy of needs has become the basic ideology of XXI century: “the more needs you have the greater person you are”.

“Appetite comes with the meal”, according to an old saying, but “diseases come with needs” is a new reality. If we analyse the relation nature-need, we will come to a conclusion that how of the world ecosystems are disturbed by obtaining homes, firms roads for people. Advertisement influences growth of needs. In the year 2002, \$ 500 millions were spent for advertising which is 9 times more than spending in 1950.

High level of needs results in increased production of any “waste”. We are witnesses of the increased pollution of water, air and soil. Therefore, this may lead to conclusion that the increased needs do not create benefit and do not bring “luck”.

Competition is becoming more and more fierce. The clear understanding is that the product of the competitor is not the problem, but the problem is the competitor who produced it and offered at the market.

For that reason we have “wars” where competitors use all allowed and some of non-allowed tools. The fight is oriented not only towards the problem how to develop new ideas for this new times but also how to drive out the competitor from his positions. Globalisations leads to the demand of cheaper labour out of the national borders and in addition to this the payment is \$0.13 per hour, instead of \$5 per hour.

Members of the Organisation for Economic Regeneration and Development recycle 16% of the communal waste, and every citizen creates 560 kg waste annually. It’s obvious that strategic management and marketing do not care for nature and demographic system. That strategic management and marketing cannot lead the mankind through XXI century.

Challenges for strategic marketing in XXI century

Market economy which has created marketing appearance as a business philosophy, has led to the appearance of “marketing blindness”. Therefore, a need of new philosophy and a need of new culture of realisation and behaviour appeared. In fact, it is all about a systematic approach and understanding of the world as “one system” we should care about. The principle: “Think globally but act locally” should be substituted with “Think globally act globally and locally”.

It’s time we understand that there is no physics of hard object without global “atomic physics”, and local changes without changes in the firm can not exist. All of the changes are taking place systematically and simultaneously, because all the subjects act in an turbulent environment.

The following are the problems strategic marketing is facing:

- Change of the content of strategic marketing, the strategy of development that is maintainable development should be applied instead of the strategy of growth

- Co-ordination of the sustainable development of all systems of the Super-system: natural, demographic, economic and scientific and technological system.

- Co-ordination of development of national system.

Problems that national strategic marketing is facing are:

- Sustainable development of demographic system

- Sustainable development of economy and nature by means of science and technology and creation

of a new culture

Tasks of strategic marketing in the firm:

- Optimisation of production: producing only the products beneficial for the development
- Optimisation of resources at the entrance: decreasing the costs per unit product, using recycling resources, less waste
- Change of understanding about the relationship towards the employees in the firm, they should be understood as human capital
- Respecting the rules and correct relationship with the competition

Strategic marketing in XXI century should change its content and functions. This is achievable if:

- It changes the culture for needs and the offer for goods and services and if it forms a new culture which will respect the terms “usefulness” and “enough”.
- New culture is a revolution in satisfying the needs.
- The needs for more product are not a choice but a necessity.
- Everyone has right and responsibility to choose “what” and “how much/many”.
- The responsibility of the firms is to offer ecological products with suitable quality, price, way of distribution.
- Offers products with “fair” price which will cover the costs of the products, the costs of ecological standards and will enable optimal equilibrium towards the purchase power of the customers via the balance between the profit and the usefulness.
- Distribute at proper place and at proper time for the customer and it puts a focus on the distribution of ecologic products
- It continues the communication with the customer via complete, true, punctual and unambiguous information.

Conclusion

Strategic marketing should care for the satisfaction of the customers and the profit in conditions of maintainable development. The maintainable development should be designed in the business politics and the strategic plans of the firm. Strategic marketing should evaluate from “theory of chaos-market economy” via “theory of games-competitive behaviour” to “systematic approach- multidisciplinary strategic marketing”.

References

- Damjanov, A. (2003): “Evolution of the contemporary marketing”, Svistov, Bulgaria
- Durankev ,B. (2002): “Key to the marketing”, Sofia, Bulgaria
- Ilieska, K.(2002): “Marketing information system”, Bitola, R. Macedonia
- Kotler, Ph.(2000): “Marketing Management”, New Jersey, SAD
- Kostova, S. (2005): “Marketing Philosophy”, Sofia, Bulgaria

Human Resources Management

Dejan Ječmenica¹

ABSTRACT – *Human resources management in enterprises is the most important and basic enterprise development element. As such, it becomes critical regulation for differentiating the enterprise from others in the market contest. Employees and their development are becoming enterprises' driving force that contributes to creating the enormous competition advantage.*

The sphere of human resources management in enterprises is becoming very important segment of every enterprise's business activities. So far, this sphere was not the subject of enterprise strategy, but by starting the transition and transfer to market economic conditions, it is becoming more considered and much more accepted. For these reasons, there is a need for improvement and development of this sphere.

Turbulence changes within this sphere impose the need for development of employees towards higher level of accepting and improving existing knowledge, capabilities, and skills – all of this with the goal to have better working results and create competitive advantage.

KEY WORDS: *HR, employees, competence, training, working effectiveness, employment*

Introduction

Some companies think of their employees as the most valuable assets, others think that it is the essence of the relationship between management and the employees when it comes to planning the career of each individual, but the reality of human resources management is somewhat different. In order for us to better understand and explain, the whole review of human resources management process should be done through prism of its activity field. In continuation, overall process with detailed descriptions will be presented.

Human resources management process

Human resources management process consists of several activities that every human resources manager should follow:

1. Human resources planning
2. Recruitment
3. Selection
4. Introduction to working environment
5. Training and instruction
6. Results evaluation
7. Promotions, transfers...

These activities will be described in details later because each of them presents critical part of the strategic chain of a company.

Human resources planning

It represents planning of future personnel requirements of the organization and considers activities of the organization and environment factors. Organizations that do not practice this can often find them-

¹ Dejan Ječmenica, Faculty of organizational science, Belgrade

selves in situation of not having enough quality personnel, nor efficient completion of the goals. In a last few years, planning of employees is becoming increasingly challenging because there is a huge competitiveness at the employment office, and the manpower is in short supply.

Planning of employees has four crucial parts within planning procedure:

Planning for future requirements, that is, planning qualifications and number of employees that will be needed in the future.

Planning for the future balance; comparing number of employees needed with the number of people who are currently under employment.

Planning of recruitment or temporary dismissals, depending on whether company accomplishes its goals or not.

Planning improvement of employees, which represents the starting presumption of the continuous work when there is constant inflow of qualified and trained workers.

Regarding that human resources managers have a task to provide more productive organization, they have to pay attention to two main factors: requirements of the organization when it comes to employees and future economic trend. Employees demand can present additional employment in case that the company has a strategy for future development, or dismissals in case of lower business activities. If the economy is under development, we will see as a consequence a higher manpower demand. Higher demand will then bring higher price of qualified manpower.

In this way we come to another sphere of human resources management, that is, to the phase of recruitment of new employees according to hierarchical scale.

Recruitment

Process of recruitment has a goal to provide corresponding number of candidates, enough for the managers to select qualified employees for the specific job. According to this plan and organizational requirements, job descriptions are being made for the potential employees. Candidates must have clear picture of the activities and responsibilities of the position they are applying for.

For that reason, human resources manager performs the analysis of existing job positions, and elaborates the description of each of them (job description). Within this description, there are all requirements, responsibilities, and the position within company. According to these materials, the level of required education is being defined, as well as experience and skills of the future applicant.

Recruitment process is being done within organization, thing that has many advantages, but also deficiencies. Knowing working habits of employees and organizational operations, motivation and loyalty urged by promotions, as well as lower expenses as a consequence of good selection of managers within organization, are undoubtedly advantages, but can have negative aspects of this kind of recruitment. We are including just people within the company, reducing possibility of getting new ideas, and also we are often in the situation to see many workers getting promoted for their length of service, and not for their merits.

When company needs people with specific qualifications, recruitment process is being done outside the organization. Number of people that will apply for a position within a company depends on its external reputation, location, and attractiveness of the offer. Companies seek for new employees at educational centers or headhunting agencies.

The first solution is not convenient when it comes to scholarships, and also there is huge fluctuation of newly employed people within first 2 or 3 years. Second option is used when there are no enough professionals. Also, companies spend a lot of money for advertisings in the most representative newspapers and publication.

Off course, by recruitment process we have just started the process of seeking for new, adequate candidates. The next level is the selection.

Selection

Theoretically, selection process requires mutual decision making. On one side, we have the candidate for the job that makes the decision to apply at specific company, but on the other side there are HR managers that are engaged in selection of required personnel. Reality is somewhat different, because very often we have the situation on the market with many candidates that are applying for every job position.

Managers then perform evaluations of candidates, such as job forms, Curriculum vitae, interview, capability test, and references check up. Selection process differs from company to company.

During selection of workers on lower level, there are no detailed interviews or tests, especially since it was proved that most of the tests were discriminating applicants.

Analytical interview is important for most of job position, especially when it comes to higher positions. At the end of this phase, HR managers decide whether they will offer a job to the specific candidate or not. On the other side, this is the moment when applicants decide whether they will accept the job or reject it.

When it comes to hiring managers, although it looks like unreasonable move, very often those who do not have much experience are hired, because the results they achieve at the very beginning of their career will influence the organizational management and the progress of the candidate. Most appreciated are communication capabilities, initiative and leadership.

Managers with experience have already built their own leadership style that cannot be applied at every organization. That is the reason why human resources managers are very careful when it comes to evaluating these candidates. Off course, sometimes it is necessary to hire someone with lot of experience in organization when there is no person with corresponding profile, and the company has no enough time to train the employees.

After many interviews, tests, and recommendations control, the next phase is orientation within the company.

Introduction to working environment

Presents so called socialization and provides chosen candidates with possibility to fit into the new working organization in the best manner. Socialization means giving general information on routine jobs, presenting the organizational history (goals, products, and services) and presenting general rules of organization and the conveniences for the employees.

It is natural for newly employed to feel insecure at work in the beginning, but later when they get deeper insight into business activities of the organization, that situation can become challenging for company's management. The challenge reflects possible disagreements when it comes to employees' expectations and the ones of the organization, which can lead to discontent of both sides and mass fluctuation of workers.

Company expects newly employed people to be devoted and loyal to the company and its values. Off course, socializations represents the very beginning of employment, and the companies appreciate the most those people who are capable and willing to improve themselves.

Training and instruction

Training and improving programs serve for increasing the capabilities and productivity of workers. It is necessary to know the difference between training program and the instruction program. Instructions improve existing efficiency at the job, while training program serves for improving at the existing job and preparation for the next level jobs.

Instruction programs use motivation for learning new skills that will be needed later. When there is instruction program for people already employed at the company, this can be challenging because

some of them won't apply new skills and knowledge, and will continue to work in a habitual manner. There are four procedures that managers use for determining the scope of the instruction program for every individual employee:

Determine the efficiency – HR manager is also engaged in justifying the most comprehensive way to follow the quality of work, that is, efficiency.

Analysis of the request for job position – this analysis is being done for every job position, and it considers all knowledge and skills required for specific position. Later, every employee is being reconsidered and if he has no all required skills and knowledge, he is a candidate for instruction program.

Organizational analysis – all amounts to analysis of the work, efficiency, and successful realizing the goals. After that, results are being compared with the standard. Determined differences are being removed by additional training.

Monitoring of the workers – presents acknowledging and presenting of all the challenges that are to meet the company, not only by managers. There are also proposals for their solving.

After he has gathered all the necessary information on the organizational needs, HR manager starts carrying out the instruction program. Within the program, there are two common methods – rotation (when the employee has an opportunity to acquire wide diapason of skills for specific time period, being trained by highly qualified cooperator. These instructions include various simulation exercises, business games, and concentration on the problematic situations.

Training programs represent improvement programs and the preparation for higher responsibilities later after promotion. Priority is given to education methods at the job.

Tutoring – training by high qualified worked, it is the base for continuity in work. Although, most of managers does not know how to transfer their knowledge or is afraid of that because he feels endangered. That can provoke rivalry.

Rotation – manager acquires new knowledge by working at different places, and in this way he gets to know more and more aspects of his own company.

Subjecting to the training – it is close work with the qualified colleague, and the manager-student has a rank of assistant. This is model-learning because all the students are in constant contact with the qualified cooperator.

Planning of working activities – helps HR manager in broadening and enveloping capabilities of his employees.

Qualified workers help company increase productivity and improve performances. In order to determine the real performance results, human resources manager performs the evaluation.

Results evaluation

Represents comparing the results of the individual with the expected activities for that specific job position. Poor results usually need corrections, and high results deserve awards. It is very difficult to obtain objective evaluation when it comes to these situations. We can cite some of the evaluation methods:

Model program for evaluation – this model is based on alerting the workers what are they expected to do. Each of them, at the end of the year, receives a form to fill in related to evaluation of their efficiency in the next year. Those employees who do not realize their own expectations have improvement plan.

Informal evaluation – includes constant receiving of return information on realized efficiency of the worker. It is being done on daily level or periodically, and represents the most important activity of managers.

Official systematic evaluation – represents six months or year level evaluation of the efficiency and has four basic purposes: workers are being informed on the rank of their efficiency; workers that deserved salary increase are being singled out, as well as those that need training or promotion. Evaluations are being done by superior managers, manager groups, colleagues, but workers are evaluating managers as well.

Depending on the results after the evaluation, worker can get salary increase, promotion, transfer, and degradation or dismissal notice.

Promotions, transfers...

Represent the individual's value in the eyes of the organization, that is, his concrete contribution. This kind of decision can have crucial value for the manager.

Promotions – Generally represent the main factor of the motivation for further improvement. It is important for the directors to be objective and to give promotions according to merits, without favoring. In this way, managers can be challenged by some kind of discrimination or creating the sense of insulting and resistance to the work by workers who were not promoted. The goal of the manager is to give all of them a chance to prove themselves.

Transfers – There are many reasons why managers approve transfers. The most often are skills improvement, acquiring new experience, providing higher independence and the quality improvement. Also, some workers get transfer to inferior job position as a manner of degradation or last chance to stay in the company.

Discipline, degradation and dismissal – Discipline measures are being carried out when employee does not reach expected efficiency or violated organization's policy. Off course, there are several phases within discipline measures: warning, written reprimand, increased monitoring, suspension, punitive transfer, degradation and dismissal. If it is not possible to carry out degradation or transfer, it is better to decide for dismissal, without leaving the employee at the position.

Managers must set certain rules and breaking the employment policy, because there are an increasing number of companies fighting against charges for "illicit breaking of employment".

Conclusion

Changes in the environment have huge influence on the companies. They are forced to react in a specific manner in order to accomplish their strategic goals, and most of these reactions influence directly or indirectly the employees and the human resources management policy. In this way, human resources management is endangered and represents a real challenge.

Every company has its own specific organizational culture, and managers solve their external adaptation and internal integration challenges in accordance with the existing behavior patterns and in this way exceed the environment pressures. In order to operate in a stable manner, we should transform our company into more flexible organization, with people capable of prompt reactions and adequate adaptation.

Appointed facts create permanent bond between human resource management process and strategy, that is, overall direction the company is moving to. In order for the organization to fulfill all both internal and external expectations, human resource management should have crucial importance.

References

- Adizes, I, (2000), *Managing corporate lifecycles*, Belgrade
Mašić, B, (2001), *Strategic management*, Belgrade
Drucker, P, (1995), *Management in the future*, Belgrade
Stoner, J, E, Freeman, D, Gilbert, (1997), *Management*, Belgrade
Gratton, L, V, Hope Hailey, P, Stiles, C, Truss, (1999), *Strategic Human Resource management*, New York
Pržulj, Ž, (2002), *Human resource management*, Belgrade

New Ways of Increasing Nation Wealth in the Creative Age

Biserka Komnenić, Hristina Mikić¹

ABSTRACT – *In the last fifteen years developed nations of the world have seen a significant movement in terms of the important economic activities that comprise their GDP (knowledge-based fields such as financial and insurance products, software development, biotechnology, creative industries, education and training.). As economies continue to become more knowledge intensive, intellectual capital will become the competitive edge of people, corporations and nations. Stemming from this awareness of the value of know-how is a drive to establish new metrics that can be used to record and report the value attributable to knowledge within an organization and nation at whole. Creative capital theory (R. Florida) states that the key determinant of global competitiveness and wealth no longer turns simply on trade in goods and service or flows of investment and capital, but rather in flows of creative people (creative class). The aim of this paper is to study the relation between intellectual capital (IC) as well as creative capital and development of sustainable competitiveness of an nation.*

KEY WORDS: *intangibles, intellectual capital, creative capital, managing*

Introduction

Globalization, enhanced with revolution in IT, has provided much of the inputs for many countries to move towards knowledge based economy. In 1997, analysts recognized the U.S. economy went through a decade of strong growth. This could not have been explained by traditional methods of evaluation of economic growth. It has been concluded that the basis of this tremendous expansion of post-industrial society was in implementing IT. In the last fifteen years developed nations of the world have seen a significant movement in terms of the important economic activities that comprise their GDP. Today, these economies are far less reliant upon traditional primary (resource based) commodities or even secondary (low value added) commodities such as manufactured goods. In the „new economies“, the emphasis in terms of high economic value-added, is on service activities and intangible-based outputs or contents. During nineties, the trend of value creation is moving from material to nonmaterial. At the same time, international economic follows were influenced by increasing "transition of the production-oriented economy to a consumption-oriented one, as well as the grater importance of cultural and symbolic goods and invisibles, material and immaterial cultural products and creative services in economic development".² This situation signifies the transformation, from an industrial economy to a creative economy that generates wealth by harnessing intellectual labor, intangible goods and human creative capabilities. In that sense, the terms "experience economy", "value-added economy", "creative economy" and "symbolic economy" are sometimes used to describe transformation by underlining the market culturalization now occurring rapidly and to a wider extent in our economy.

On the global level, different estimations shows for example, that creative industries account for more than 7 per cent of the world's gross domestic production³ and their annual average growth is 10 per cent. These industries represent a leading sector in the OECD economies, showing annual growth rates of 5 to 20 per cent.⁴

¹ Biserka Komnenić, Hristina Mikić, High school of Business Studies, Novi Sad

² Du Gray (1997), p. 175.

³ World Bank (2003), p.4.

⁴ UNICTAD (2004), p. 3.

Therefore, the 21 century brings with it a brand new challenge for nations. It is becoming more and more essential to visualize intellectual capital as well as its different components such as creative capital on economy level. It is because the old market drivers may have been manufacturing, land and capital, but the driver of the new era is intellectual capital efficiency as well as ability of a country to mobilize and manage creative talents for innovation, industry transformation and long-term prosperity. Consequently, the recognition, identification, measurement, benchmarking, development and harvesting of nation's and its firms' intellectual capital as well as developing creative industries as an economic subject have been moved to the mainstream of policy agenda in many economies.

Intellectual and creative capital from macroeconomic perspective

From macroeconomic perspective, IC is considered as a major tool of enhancing the economic development (EC). IC is seen as a production factor and as an asset (like physical capital) that organization has to mix, in order to have success: in consequence, IC is a tremendous tool of wealth production and economic development. Since the early days' great economists: Smith, Malthus, Ricardo, Marx, and Keynes, considered the working skills as a condition for bigger growth. The neoclassical early studies (made by Harrod, Domar and Solow), continued in that line of thought, although they did not analyze in detail the question of labor heterogeneity. In the early 1960s, Schultz stated that E&T, knowledge and skills, were important to determine growth.⁵ Machlup was the first who invented the term „intellectual capital“ and used it to emphasize the importance of general knowledge as essential to growth and development⁶. Alfred Marshall says that knowledge is our most powerful engine of production; it enables us to subdue nature and satisfy our wants.⁷ The concept of intellectual capital was further analyzed by Kendrick confirmed that finding and the idea that „non tangible capital“ is important for the existence of economic development.⁸ Management guru Peater Drucker in his description of post-capitalist society also further expanded the concept of IC. Drucker highlights the importance and arrival of a society that is dominant by knowledge resources and competitive landscape of intellectual capital allocation.⁹ The term intellectual capital became well known in 1991, thanks to Tomas Stewart groundbreaking cover story in *Fortune Magazine*, which provided the main impulse for a new world of intellectual capitalists.¹⁰ Boisot and Malhotra defined the concept of national knowledge assets as the intangible assets of a country that have significant impact on a country's potential growth and progress.¹¹ Malhotra further defines knowledge assets or intellectual capital as the hidden assets of a country that underpin and fuel a country's growth. As knowledge becomes a key production factor it is important to understand the value of knowledge capital. Many countries understand how value creation and GDP growth is spurred by service and knowledge-based output in addition to manufacturing output.¹² However assessment of national economic performance is still tied to traditional factors of production (land, capital, labor) rather than a thorough understanding of the value of knowledge assets, which are assets governed by the law of increasing returns.¹³ If assets can be described as physical claims to future benefits (potentially generating value or cash flows), intangibles assets represent the “non-physical” claim of future benefits and values.¹⁴ These assets can lead to the production of goods and services that display a high-knowledge content and value (for example, high-technology products; consulting services, etc.). The value of knowledge assets is not elicited by current accounting practices

⁵ Schultz (1961), pp. 1-17.

⁶ Machlup, (1962).

⁷ World Bank (1998), pp.20.

⁸ Kendrick, (1993).

⁹ Drucker, (1993).

¹⁰ Stewart, (1991), pp. 44-60.

¹¹ Boisot, (1998); and Malhotra, (2001)

¹² For more extensive discussion, see Guthrie and Petty, (2000).

¹³ Arthur, (1996).

¹⁴ Value Based Management.net, (2006).

and intangible assets continue to represent the “hidden” value of a firm or a country.¹⁵ Malhotra explains that leaders of national economies are trying to find reliable ways for measuring knowledge assets to understand how they relate to future performance. So, the dawn of the new millennium brings with it a brand new challenge for nations and firms.¹⁶

In the last years, there are also increasing research interests for creative capital as a specific form of intellectual capital and lot of researches focused on different aspects and phenomenon of new economy. In those researches the term capital very often is use to describe a broad range of production factors which are intangible, but not strictly determine in economic sense (creativity, intellect, skills, democracy, social networking etc). There are different syntaxes which closely describe different form of intangible capital: *intellectual capital* point out that the source of capital is intellect; *cultural capital* point put that the source of capital is cultural values; *social capital* point out that sources of capital are actual and potential social relations and norms etc. General idea behind of those syntaxes is similar: all of those different forms of capitals mean combination of intangibles human resources which can be use for creating worth, in other words for increasing assets.

Florida point out that from an economic point of view, creativity or high level of human creativity potential is a form of capital – creative capital. He defines creative capital as a human ability to create new ideas, new technologies, new business models, new cultural and artistic forms etc.¹⁷ Florida’s definition can be described as production-oriented definition of creative capital (creative class approach), in compare to the pragmatic definition that emphasize activities in which creative capital is engaged (creative industry approach). Florida differentiates creative capital from intellectual capital by using occupationally based concept of creative capital and he introduces concept of creative class.¹⁸ The Creative class is the new class structure in economy that its members engage in work whose function is to create meaningful new forms.¹⁹ From his point of view, new economic decade is characterized by global competition for talents and key dimension of economic leadership as well as competitiveness will depend on national’s ability to mobilize, attract and retain human creative talent – creative capital. It is obvious that mobilization and attracting creative class is impossible without effective organizational and institutional structure in which human creative talent can be engaged. Having in mind mentioned approaches, we consider that creative capital can be defined as an intangible or tangible assets created by creative use of individual knowledge, talent and skills and it is closely linked with concept of creative industries in which it is mostly (but not only) created.

Today managing intangible assets on the level of organizations, cities, regions and nations has definitely been recognized as a key factor of enhancing competitiveness and economic development and policy makers, important international organizations, governments and economic bodies have addressed the issue. Some of them have seat a clear goals for their future economic development strategy and took practical steps by examining the methods to transform institutional knowledge into intellectual capital of nation. At the macro-economic level most of the efforts have started from analytical assessments of a country’s knowledge endowments as well as analytical measures for assessment the full range of creativity resources. For example, Malhotra represents efforts from the Nordic European countries to identify knowledge assets and the value of intellectual capital.²⁰ On the other side, there are different research approaches to identify creative capital. For example, Florida have developed key indicator of creative competitiveness of nations by using Creativity Index, while most countries use pragmatic measures for estimating creative capital in narrow sense such as creative industries mapping studies.

¹⁵ Edvinsson and Malone, (1997); Stewart, (1997).

¹⁶ See Malhotra, (2001).

¹⁷ Florida, (2005), pp. 32.

¹⁸ Creative class has two major sub-components: a Super creative core (computer and mathematical occupations, architecture and engineering occupations, physical and social science occupations, education, training and library occupations, arts, design, entertainment and media occupations) and Creative professionals (management occupations, business and financial occupations, legal occupations, healthcare practitioners and technical occupations, high end sales and sales management). Florida, (2002), pp. 328.

¹⁹ Florida, (2002), pp. 68.

²⁰ Malhotra, (2001)

Intellectual capital of nation

Assessment of IC of nation requires the articulation of a system of variables that helps to uncover and manage the invisible wealth of a country. The intellectual capital of nations includes the hidden values of individuals, enterprises, institutions, communities and regions that are current and potential sources for wealth creation.²¹ Until now just several concepts and methods used to capture statistics and describe the construct of national IC was developed and published. Principal among the new reporting models of intellectual capital of nations are National Intellectual Capital Index (NICI) developed by N. Bontis and The Value Creation Efficiency Analysis (VAIC) developed by A. Pulic.

N. Bontis has modified Skandia Navigator on purpose for valuating national IC, and developed national IC measurement methodology and index.²² There are five main components of National Intellectual Capital: (1) *financial wealth*-for evaluation of financial wealth, Bontis used comparison of GDP per capita between Arab countries and OECD member countries. Bontis normalizes this figure for the difference in purchasing power parity, so his metric (FC01) represent the GDP per capita with purchase power parity. In addition to GDP measures, Bontis used trade policy as an important factor in determining financial capital. Barriers to trade influence overall economic wellbeing. Another chief indicator (FC05) of financial capital is the market capitalization of nation's stock market; (2) *human capital*- Bontis defined human capital as knowledge, education and competencies of individuals in realizing national tasks and goals. The human capital of nations begins with the intellectual wealth of its citizens. This wealth includes knowledge about facts, laws and principles, as well as the less definable knowledge of specialized, teamwork and communication skills;²³ (3) *process capital*-process capital is defined as the non-human storehouse of knowledge in a nation, which is embedded in the technological, information and communications systems as represented by its hardware, software, databases, laboratories and organizational structure, which sustain and externalize the output of human capital; (4) *market capital*-Bontis defined Market capital as the intellectual capital embedded in national interrelationships. Market capital represents a country's capabilities and successes in providing an attractive, competitive solution to the needs of its international clients, as compared with other countries. Market capital is social intelligence created by elements such as laws, market institutions and social networks. It is similar to social capital, but a lot more, because it includes systemic qualities with embedded discovery attributes that enhance social capital creation. (5) *renewal capital*-Bontis defined Renewal capital as a nation's future intellectual wealth. This includes its capabilities and actual investments in renewal and development for sustaining competitive advantage. He states that examination of the forces shaping renewal capital demonstrates the link between continued investment in renewal capital and sustained economic growth.

Ante Pulic developed a "Value Creation Efficiency Analysis," a measurement system that links performance of key physical, financial, and intellectual capital resources to financial data.²⁴ His work recognizes the value of intellectual capital by bridging the gap between the new economic drivers and the traditional accounting standards and provides a new way to look at the national economy's performance. Formally, VAIC is a composite sum of three separate indicators:²⁵(1) Capital employed efficiency (CEE) – indicator of VA efficiency of capital employed;²⁶(2) Human capital efficiency (HCE) – indicator of VA efficiency of human capital;²⁷(3) Structural capital efficiency (SCE) – indicator of VA efficiency of structural capital.²⁸

²¹ Bontis, (2004), pp. 14.

²² Originally, »Navigator« has been created on purpose for enterprises to measure and manage their intangible assets as key factors of their future successful performance. Methodology was developed by Leif Edvinsson, who was first corporative director of Intellectual capital division in global insurance company - Scandia, where this method was first implemented.

²³ OECD (1998).

²⁴ Pulic, (2004a, b).

²⁵ The following equation formalizes the relationship algebraically: VAIC (Value Added intellectual coefficient for firm) = CEE + HCE + SCE.

²⁶ CEE = VA (value added)/CE (book value of the net assets for firm).

²⁷ Human capital coefficient for firm (HCE) = VA (value added)/HC (total investment salary and wages for firm).

²⁸ Structural capital VA for firm SCE = SC (value added – human capital) /VA (value added).

The benefit of this measuring method is his focus on value creation, not control and takes intellectual capital, particularly human capital, into account. It considered human capital to be key resource and driving force of value creation in the new economy, and thus its ability to create value has to be measured and monitored.²⁹

According to Professor Pulic, measuring the efficiency of IC on national level is very important subject. It may be even more important, as laws and political decisions, which are issued at macro level strongly, influence the entire economy and individual company's business success. By monitoring IC-efficiency at national level, a new perspective on economy's performance can be obtained. Pulic believes that like revenue and profit, which are no longer adequate indicators of business success at macro level, GDP cannot be considered a valid indicator of national economy performance any more. He thinks that the problem with GDP is the fact that if country has a GDP of X billion euro, similar to revenue, you have no information, whether this is good or bad, with regard to the utilized resources. Second problem is that the macro level is measured with one measure and the micro level with another, although both belong to the same economic organism. Therefore, according to principals of new economy Pulic suggests a substitute for GDP, an ICE of country. The results from VAIC analyses on national level can indicate governments to what extent economy has made progress or stagnated in comparison to the previous year and how individual national economies are performing in comparison to others. General trends show how the "value creation ability" has been developing, in certain sector of economy, which are stagnating and which the growing ones. Therefore, VAIC can help national and local governments, company management and consultants in determining weak points and reasons for value destruction, in systematic improvement of value creation efficiency and establishing balance on higher and higher levels.

Considering that Serbia tends to become a member of EU, it is necessary to try to accomplish EU existing standards, and there is a lot of work which has to be done. In November, 2006, at conference titled „Valuing and measuring Intellectual capital in Serbia“ in organization of Ministry of economy of Republic of Serbia and Regional chamber of economy Novi Sad, Professor Pulic made presentation of Intellectual Capital efficiency (ICE) in Serbia region of Vojvodina. His calculation shows that IC efficiency of region of Vojvodina is 1.54 which is below European average which was 2,21 in 2001.

Creative industries mapping studies and Creativity Index as a tools for measuring creative capital

As we mentioned, there are two research approaches for measuring creative capital. The first of them have a pragmatic sense – creative industries mapping studies. The first study of this kind was carried out in Great Britain where, at the same time, the basic research methodology was developed, but the idea for analyzing economic potential and impact of creative resources came from The International Intellectual Property Alliance (IIPA) in 1990 with research of economic potentials of copyright industries in the USA. It is important to underline that this pragmatic tool for measuring creative capital is aimed to measure creative capital in narrow sense than Florida's creative capital definition. Creative industries mapping documents as a toll for evaluation and measuring creative capital tray to identify and estimate capitalization of artistic creativity potentials through creative industries concepts.³⁰ From a methodological point of view, starting point in most of mapping studies is not to define or measure creativity, but to examine how creativity is exploited and transformed to tradable products or services,

²⁹ IC report: Intellectual capital efficiency in Croatian economy (2002), pp. 5.

³⁰ Creative industries are a conglomeration of very heterogeneous economic branches where creativity is the essential input for creating product and services. The first definition of creative industries appeared in Britain in 1998 and it was adopted by many countries: "creative industries are those industries which derive from individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property" See Creative Industries Mapping Document (1998), p.4 Under this concept, the creative industries include usually 13 sectors: advertising, architecture, the art and antiques market, crafts, design, designer fashion, film and video, interactive leisure software, music, the performing arts, publishing, software, television and radio and methodological differences depending on official classification of industrial activities.

and how process of production, commercialization, distribution and consumption can be properly evaluated within the same sector of economic activities. In that sense, the creative industries are an industrial system that transforms intangible assets based on artistic creativity into processes of production and distribution of goods and services of symbolic values and social meanings. Measuring creative capital through creative industries concept is a powerful means for analyzing driving forces of certain areas within creative industries and their contribution to short-run economic growth in national frameworks, but they cannot be accepted as consistent indicators for gaining a global and comparable picture on competitiveness of creative capital.³¹

The second research approach for measuring creative capital is the Creativity Index. It is developed by Florida in 2002, and measures the creative competitiveness of nation according to his 3Ts theory of growth: technology, talent and tolerance.³² Creativity index is composite measures as sum of the Talent index, the Technology index and the Tolerance index, and its value is normalized on a scale from 0 to 1.³³ This index serves as a measure of country's base of creative talent which affects long-run prosperity as well as relative position of country to mobilize, attract and generating creative capital.

By using Florida approach, we adapted indicators for measuring competitiveness of creative capital to the West Balkan context. These indicators differ in several important aspects from the indexes originally use in Florida analysis. Because data is limited, we use proxy measures to capture the creative capacity in West Balkan.³⁴

Table 1. West Balkan Creativity Index, 2005

Country	Talent Index	Talent			Technology			Tolerance			Creativity Index
		Creative class	Human Capital	Scientific talent	Technology Index	R&D Index	Innovation Index	Tolerance index	Value index	Self expression index	
Serbia	0,569	12,07	11,03	184	0,626	0,4	23,18	0,33	0,33	0,33	0,508
Montenegro	0,756	12,62	25,3	102	0,025	0,2	0	0,37	0,41	0,33	0,383
Bosnia and Herzegovina	0,232	11,4	4,03	12,58	0,008	0,15	0,39	0,355	0,38	0,33	0,199
Macedonia	0,332	8,59	15,17	170	0,172	0,26	5,4	0,325	0,34	0,31	0,276
Croatia	0,574	10	11,89	347	0,578	1,14	3,61	0,43	0,4	0,46	0,527

Sources: WIPO, Statistical Office of Croatia; Statistical Office of Serbia; Statistical Office of Macedonia; statistical Office of Bosnia and Herzegovina; Statistical Office of Montenegro; different resources and reports.

³¹ For more extensive discussion, see Jovičić S, Mikić H. (2006)

³² 3Ts of Economic growth is based on three critical factors: talent, technology and tolerance. Florida emphasizes that the economic leaders of the future will be the nations and regions within nations than can best mobilize the creative capacities of their people and attract creative talent from around the world. It argues that technology and creative people are key drivers for economic development, but tolerance critically affects the ability of nations to mobilize their own creative capacities and compete for creative talent. Florida, (2004), pp. 12.

³³ The Talent index measures level of creative capital and it include three components: creative class measure, human capital measure and scientific talent measure. The Technology index measures level of technology capitalization and represents continuous accumulation and explanation of human knowledge. It includes two components: R&D measure and innovation measure. The Tolerance index measure openness and diversity of place and it represent ability of country to generate, attracting and holding critical factor of development – talent and technology.

³⁴ For example, in our paper creative class is represented by combination of super creative class and creative professional based on national statistic data, not from International Labor Organization data. Than, we use data from World Intellectual Property Organization for calculating Innovation Index, as well as original Value survey data for calculating Value index and Expression index. For more details concerning Florida methodological issue see Florida (2005), pp. 270-280; Florida (2004), pp. 42-44.

At the first look, it seems that the creative epicenters of West Balkan potentially are Croatia and Serbia. They are top on the West Balkan Technology index and score responsibly well on the West Balkan Talent index. But if we look at Tolerance index the situation is different. In the group of analyzed West Balkan countries Serbia counts very low tolerance index. That means Serbia has acceptable potential to generate talents and technology, but very low ability to attracting them from other places in West Balkan region and holding them. In other words, Serbia has a low ability to mobilize their own creative capacities and compete for creative talents in the region which can be seen as a main weakness for future prosperity. In the future, long-run prosperity of Serbia will depend on its openness for new ideas, new organizational structures and new projects as well as diversity of values and expressions. At the end, it is important to notice, that future improvement of competitiveness of Serbian creative capital attraction can be improved by developing strategy to attract and retain talents, especially in the field of creative industries, new technology and science.

Conclusion

IC in its various forms is a very important tool of economic development. Importance of IC is growing with the emergence of new technologies, forming new industrial groups and the economic development itself. IC has become fundamental resource in today's knowledge based economy. Therefore IC investment for one country represents investments in country's sustained competitiveness and consequently they determine its future wealth and economic development. Huge investments in IC are fundamental for economic development to happen, other important factors, such as established democracy, a high degree of economic and political stability, democratic and open society and international integration are necessary for improving relation between IC and economic development. Although, Serbia like most developing countries lacks the IC, and the infrastructural and organizational tools, which are needed to accomplish a sustainable economic development process, it should make strong effort to restructure industrial age organization structures, processes, and mindsets to utilize the wealth-creating potential of its people.

References

- Boisot, M.H. (1998), *Knowledge Assets*, Oxford University Press, New York, NY.
- Bontis, N. (2004), National Intellectual Capital Index – A United Nations initiative for the Arab region, *Journal of Intellectual Capital*, Vol. 5 No. 1, pp. 13-39.
- Creative Industries Mapping Document* (1998), The Department of Culture, Media and Sports (DCMS), London http://www.culture.gov.uk/global/publications/archive_1998
- Drucker, P.F. (1993), *Post – Capitalist Society*, HarperCollins, New York.
- Du Gray P. (1997) *Production of Culture /Culture of production*, Sage, London.
- Edvinsson, L., Malone, S. (1997), *Intellectual Capital*, Harper business, New York, pp.44.
- Florida R. (2002) *The rise of the creative class*, Basic Books, New York.
- Florida R. (2005) *The flight of the creative class*, Basic Books, New York.
- Guthrie, J. and Petty, R. (2000), Intellectual capital: Australian annual reporting practices, *Journal of Intellectual Capital*, Vol. 1 No. 3, pp. 241-51.
- IC report, *Efficiency of intellectual capital in Croatia economy*, (2002), GIPA, Zagreb.
- Jelčić, K. (2004), *Handbook for managing intellectual capital*, HGK. Zagreb.
- Jovičić S, Mikić H. (2006) *Creative industries in Serbia-basic facts and recommendation*, British Council, Belgrade.
- Kendrick, J. (1993), The total capital economic growth, *Atlantic Electronic Journal*, Vol.22 No.1
- Machlup, F. (1962), *The Production and Distribution of Knowledge in the US*, PUP, Princeton, NJ.
- Malhotra, Y. (2001), *Knowledge Management and Business Model Innovation*, IPGroup, London
- Pulic, A. (2004a), Intellectual Capital-Does it Destroy or Create Value?, *The Journal of Business Performance Management: Measuring intangible assets - the state of the art*, Vol. 8 No. 1

- Pulic, A. (2004b), Value Creation Efficiency at National and Regional Level: Case study Croatia and EU, *Intellectual Capital for Communities - Nations, Regions, Cities and other Communities*, Elsevier Butterworth Heinemann, Boston, USA.
- Schultz, T. (1961), Investment in human capital", *The American Economic Review*, Vol.1 No.2, pp.1-17.
- Stewart, T. (1991), Brainpower: how intellectual capital is becoming America's most valuable asset, *Fortune*, 3 June, pp. 44-60.
- Value Based Management.net (2006), Intangible assets, www.valuebasedmanagement.net/faq_what_are_intangible_assets.html
- World Bank (1998), *Knowledge for Development*, World Development Report, World Bank, Washington.
- World Bank (2003), *Urban development needs creativity: How creative industries affect urban areas*, <http://www1.worldbank.org/devoutreach/nov03/article.asp?id=221>.
- UNCTAD (2004), *Creative Industries and Development*, United Nations Conference on Trade and Development, Eleventh session, Sao Paolo, 13-18 June 2004. http://www.unctad.org/en/docs//tdxibpd13_en.pdf

Human Capital Management in Fair Events Organization

Vasilj Koprivica¹

ABSTRACT – Organization is focused on formation of teams in cases when a complex goal is in their path. Achieving of complex goals raises the need for various fields of knowledge. Knowledge requirements are dictating the necessity for team formation. Organization of fair events is a complex task; it is dependent on numerous external factors.

Organizational reaction on those factors must be quick and flexible. In organizational sense, it is the need to use all available knowledge and motivation which can happen only through team work. The aim of this research is to prove that fair organizations are compatible with fair events applying teamwork because only then, a synergy of organizational efforts and efforts of other participants is achieved.

KEY WORDS: team, teamwork, fair exhibition, exhibitors, visitors, organizers

Introduction

Subject of this paper is a research of how is teamwork compatible with fair industry and organization of fair events and whether effects of team work are achieving higher satisfaction to all participating parties in the process of preparation and performance of a fair event. Aim of this research is to prove that prove that fair organizations are compatible to organizing fair exhibitions relying significantly on teamwork because in that way the synergy of efforts of organizers and other participants is achieved. Furthermore, the aim is to determine whether teamwork is producing higher service level and raises level of satisfaction in all participating parties. Practical goal of this research is to deliver optimal managerial recommendations and measures in order to raise team effort and as such, improve functioning of fair events and client satisfaction.

Target groups of this empirical research are exhibitors, visitors and organizers of fair exhibitions. Both questionnaire and interview are used as tools for gathering necessary information. Approximately, 200 subjects of various statuses directly participated in this inquiry.

In accordance with determined goals, following hypotheses were established:

- H0 There is a need for teamwork in fair organizations.
- H1 Fair exhibitors' assessment shows that they can achieve a goal of exhibition with more efficiency if a team is in charge of preparation and organization of fair exhibition
- H2 Fair exhibition visitors' assessment shows that they are more satisfied with the content of the exhibition organized by a project team.
- H3 Satisfaction of organizational workers is higher if they are working as a team in organizing the event.
- H4 Satisfaction of all consumers of the fair product is higher when it is organized by a project team

Sample

The audit was made on 60 visitors, 30 of those visited events organized in classical way and 30 visited events organized by a team.

¹ Vasilj Koprivica, A.D. "Novosadski sajam" Novi Sad

Opinion poll was conducted among 40 organizers who organize fair events by team work. As a separate sample, we had 40 employees, 20 of those are organizing events in classical functional manner and 20 of those are participating in organizing events as team members. All subjects in question are Novi Sad Fair employees. All examinees, both visitors and exhibitors, were involved in events of similar profile, size and time length, in order to minimize external influences.

Research results

Results of this research shall be displayed in accordance with aims and hypotheses set at the beginning. Firstly, we shall analyze standpoints of employees participating in team efforts.

Employee questionnaire results

The fact that 67,5% examinees think that there is a need for additional team members gives a clear warning to management to enhance the team in question. Since 57.5% of examinees consider that there is a large proportion of team members who supersede their personal interest to team work we can state that team cohesion is at low level and awareness of join efforts is insufficient. The fact that 62.5% of examinees claim that each team member is aware of his responsibilities is showing that good and clear distribution of duties is established. The claim of 62.5% examinees that team work must be improved is highly indicative and is putting pressure both on management to invest further in education and improvements in team work and on team members to strive harder towards the common goal.

Following results of the research will be presented through following research indicators.

- Team communication
- Observation of team performance
- Team cohesion
- Corporate image

Claim of 62.5% examinees that team members are aware of the aim of their joined effort speaks highly of their high level of knowledge in work methodology and team work characteristics. Lengthy discussion regarding occurring problems claimed to be present by 55% of examinees speaks about poor time management and has a negative influence on team efficiency. This result shows substandard communication levels in team for securing satisfaction with exhibitors and visitors, bearing in mind the percentage of answers in “no” and “don’t know” range.

Way of team formation and roles these teams have in organizing fair exhibitions and realization of fair services are influencing these results. Strong and variable influence of the environment is weakening the training level of team members, which is evident in team communication. We must not omit the fact that most positive score is given by the vast majority of examinees. That leaves room for further improvements in team communication.

When asked whether they think team work should be improved, 62.5% examinees gave a positive answer, which indicates high level of awareness that team is functioning below its capabilities.

The absence of team cohesion is a fact which can be claimed according to the results of this research. Instantly noticeable is a fact that 57.5% examinees are claiming to have team members who are superseding their personal interest to general team interest and goals. In addition to this, 50% of examinees claim that not all team members are equally involved in team activities which indicate the absence of cohesion and disrespect of common goals.

Visitor questionnaire results

The biggest difference in given marks between examinees occurred when marking staff kindness and purchase opportunities at fair exhibitions. Higher scores were given by working team members. High grade average of 4.03 was given to hygiene, hall lightening and noise, in one word, ambient.

Exhibitors questionnaire results

Exhibitors marking fair exhibitions gave high scores to kindness of organizers (4.06), additional content (4.16) while fulfilled expectations were graded (4.03) only at exhibitions organized by relying on team work. Same characteristics organized in the classical functional way got a full grade lower scores.

Fair exhibition appraisal results based on answers given on five common questions addressed to visitors, exhibitors and employees (A) are shown in the following charts.

Chart 1. Please grade organization of fair area

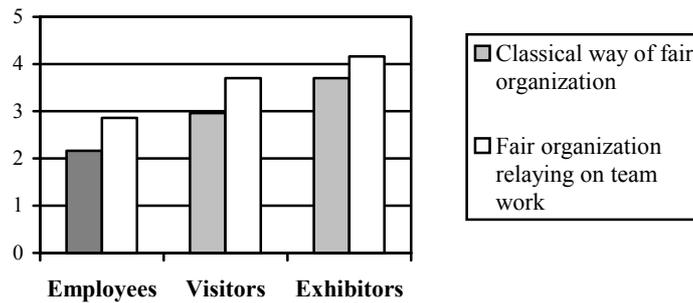


Chart 2. To which extent did the fair exhibition fulfill your expectations?

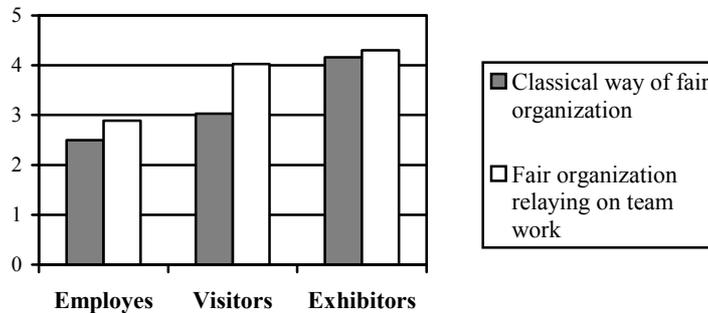


Chart 3. Please grade catering services at fair exhibition

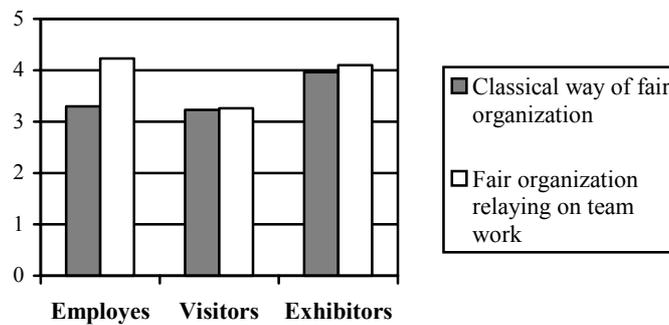
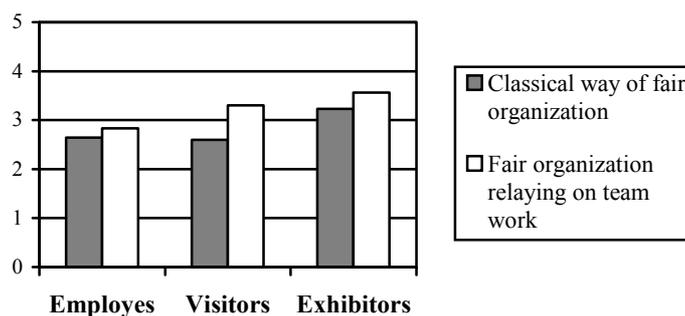
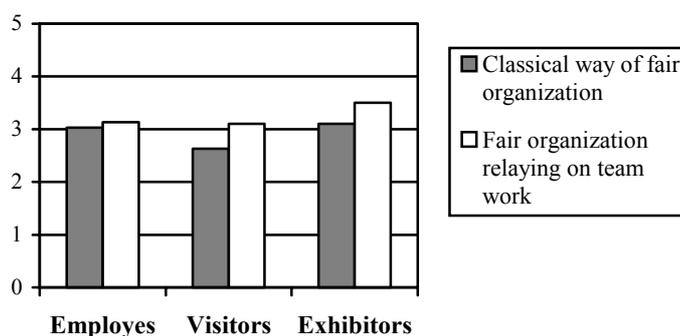


Chart 4. Please grade media announcements for fair exhibition**Chart 5. To which extent are you satisfied with business attendance to fair exhibition?**

What is visible at a glance is that all three categories of examinees (visitors, exhibitors and employees) are giving higher scores to events organized relying on teamwork on all five questions. The best scores are given by employees indicating their self-confidence and the lack of criticism. The lowest set of scores were given by visitors indicating that their expectations were higher; they were the target of media campaign which obviously gave them promises which proved to be too large. Exhibitors are close to employees in scoring because they share the sense of being hosts at the events in question.

Key part of the research allows deduction of following conclusions:

Hypothesis (H0) stating that there is a need for team work in fair organizations is undoubtedly confirmed by exhibitors, visitors and managers, organizers. Results mentioned before state that all participants of fair exhibition possess awareness that team work in an organization delivers better results.

Hypothesis (H1) stating that fair exhibitors are aware of the fact that their exhibition aims can be reached more efficiently if they have an assigned team to conduct preparation and organization of an event was confirmed by the results of this research.

Hypothesis (H2) is confirmed by research results. Visitors of fair exhibitions organized by project teams have awarded higher scores to fair ambient, media coverage, purchase opportunities, additional content and business attendance than it was the case with exhibitions organized in classical functional way.

Hypothesis (H3) was confirmed by results of this research. Fair exhibitions managers have expressed unambiguous praise to working in teams.

Research is providing basis for suggesting measures in order to enhance team performance in realization of fair exhibitions.

It is necessary to improve training and team preparation, bearing in mind swift changes in the environment,

Team communication must be improved

The number of team members is insufficient and management is obliged to have that in mind

Huge reserves in improving team work do exist
Team cohesion improvement is a managerial obligation
It is necessary to invest in affirmation of teamwork both externally and internally.

References

- [1] Cotler, F., 2005, "Lateralni marketing", Adžes, Novi Sad
- [2] Cox, S., 2005, "Growing your event in a rapidly changing business environment", Exhibit Surveys, Inc
- [3] Fridman, F. J, 2003, "White Paper and Trends Show industry, Time&Place Strategies", Inc, New York
- [4] Grubić-Nešić, 2005, L. "Razvoj ljudskih resursa", AB print, Novi Sad
- [5] Ljubojević, Č., 2002, "Menadžment usluga", Stilos, Novi Sad

Consulting Services as a Factor of Economy Knowledge Development

Branko Mihailović, Zoran Simonović, Vesna Paraušić²

ABSTRACT – Consulting service presents recommendation of adequate measures, and support implementing the recommendation which is a result of research, identification and analysis of problems in certain organization. A consultant is an expert who provides consulting services. His education and experience, in combination with realistic and complete informing of concrete situation, make it possible for him to offer support to enterprises in a proper way. Companies in Serbia are in stage of adopting the conception of market economy, except some parts of economy where government property will further exist. The development of market and market relations influenced the development of consultancy as a professional service with its specific methodological, conceptual, ethical and other performances. Various consulting organizations and consultants are quite different regarding education, experience, competency, work style, conditions of intervention, service quality and professional standards. Education through consulting is not automatic. Consulting with clients' active participation gives the best results.

KEY WORDS: consulting, competition, clients, performances, manager's abilities and skills

Introduction

Consulting is a result of manager need for integrated and complex business information. To obtain the transfer of consultant knowledge and manager skills development, a certain conditions must be fulfilled. First of all, business integrity and consultant competence are the most important. Business integrity, i.e. consultant ethics contributes image and reputation and is important competitiveness factor on consultant services market.

The cooperation between consultants and managers, based on principle of ethics, contributes to development of manager skills. In spite of all, that implies that consultants and managers have no hidden intentions or interests, in other words, their common aim should be overcoming of business problems.

That demands business competence, which includes: competence of consultant company and consultant as a person, detailed knowledge of client's business branch, detailed knowledge of client's country and culture, presence of creativity and innovations. Managers should have wish for acquiring new skills and motive for new accomplishments. Comparing with work results of managers in successful companies, consultants can motivate manager-clients towards continued learning and improvement. Consultant's work is based on creating new solutions. That can be achieved in cooperation with managers, as active partners of their consultants.

The indicators of knowledge economy

The knowledge economy forum, organized by World Bank, which had a theme concerning the best practices for innovations and competitiveness improvement in post communist countries, was held in Prague, on March 2006. In the World Bank report, named "Public Financial Support for Commercial

¹ The paper represents a part of research on project 149007 „Multifunctional Agriculture and Rural Development in Function of Republic of Serbia's Accession in EU“, financed by MSRS.

² Branko Mihailović, Zoran Simonović, Vesna Paraušić, Institute of Agricultural Economics, Belgrade

Innovation" (January 2006), various financial instruments, that could stimulate business innovations, are being analysed, and series of references for reforms that should precede, are being given, in order that these instruments could be well used. The aim of the report was to offer possibilities for production and economy growth to the countries of Europe and Middle Asia, especially to the post communist countries in transition, and to those that are not members of EU, by creating suitable surrounding for application of economy knowledge through innovations and learning. Robert Solow (1956) started the researches many years ago, which helped economists in knowledge that constant growth economy owes to technological changes, rather than to factor of accumulation, meaning traditional factors. Subsequently, the mainstays for running economy by knowledge are the following:

1. Economic stimulation and institutional regime (economic surrounding that provides free circulation of knowledge, investment support in information and communication technology (ICT), surrounding that encourages entrepreneurship, policy of customs and non-customs barriers, the rule of law, application of rules that protect intellectual property, fight against corruption);
2. Education and training;
3. Information infrastructure (dynamic structure starting from radio to internet is necessary to facilitate and improve the communication and exchange of information);
4. Innovation systems (network of research centers, universities, private companies).

Therefore, if the countries invest extra funds in research and progress, without providing, at the same time, economic facilities and stimulations, without improving information infrastructure and educational system, without including private sector and without developing innovation system - the money would be spent for nothing.

Also, the national innovation system is made of following necessary conditions, but not sufficient ones: human capital; science and ICT; protection of intellectual property; adequate business surrounding. These conditions are basic infrastructure or "pipeline" of innovative entrepreneurial projects, which, in synergy with the access to the money funds, can create innovations.

By warning the countries from Middle Europe to Middle Asia that they are falling behind developed world in field of investment in progress and researches, World Bank, at the same time, invites them to make steps in improvement of conditions for increased investments in commercial innovations, as an instrument for economy growth and poverty decrease. Turning the researches and development into market success is key factor for achieving viable and long-term economy growth. This will happen only if there's motivation provided for research workers and companies to work together, as well as wide-spread access to computers and Internet, all in order to raise the total level of economy competitiveness and to open the quality work-places.

When talking about the range of computer and the Internet use in R. of Serbia, the research that was took under the Republic office for statistics in December 2006 (the report named "The use of ICT in Republic of Serbia, 2006), has showed next: 26,5% households owns a computer, 18,5% companies owns internet connection, 97,3% companies uses computer in its business, 90,2% companies has internet connection, 52,9% companies owns Web Site, and 48,6% companies uses electronic services of public office (the research was took under methodology of EUROSTAT, on territory of Serbia, the referent period for questions was the year 2005th, the size of sample was 1.200 households, 600 companies, phone poll).

Otherwise, the average participation of research and progress expenses in GDP in analysed countries ECA (among 30 countries only 4 of them belong to developed EU countries) is only 0,9%, that is far below the EU target level of 3%, which these countries should realize by 2010. Besides, two thirds of research and progress expenses in these, mostly post communist, countries is covered by public resources. Quite opposite, in countries with large participation of research and progress expenses in GDP, such as Japan, USA, Sweden, Finland, Ireland, Germany- the participation of private (industrial) researches is from 65% to 70% , while government sets aside only 20-30% funds for these researches.

Previous experience in researches and education systems of post communist countries can help these countries to change their economy towards knowledge , innovations and new technologies. But, in spite of great number of research workers and successful education inherited from communist period,

it would be difficult for countries that were part of East block to turn these potential advantages into commercially successful innovations unless universities and research institutions cooperate closely with private sector, what implies restructuring research system towards adjustment to economy needs.

By using package "Knowledge Economy Indicators-KEI" - economy facilities, education, innovation system and information infrastructure, the Report of World Bank is ranking the countries of Europe and Central Asia by their abilities to efficiently invest in innovations.³ Every country got mark on a scale between one to ten for each indicator and total KEI mark, which determines country's placing.

Knowledge Economy Indicators of World Bank Institute are designed to help countries to decide which reforms to take before they invest more financial resources in order to stimulate innovations. Generally speaking, despite significant differences all over region, most countries should change their education system, improve their information and infrastructure basis and increase motivation for economy, before they assign further means from public budget.

Table 1. Comparison between countries of ECA in accordance with KEI and four pillars of National innovation system

Countries of region*	KEI	Rank KEI	EIR	Rank EIR	I	Rank I	E	Rank O	II	Rank II
Slovenia EU	7.88	3	7.01	5	7.91	3	8.58	2	8.00	4
Hungary EU	7.01	8	6.42	10	7.00	9	7.65	10	6.98	11
Check republic EU	7.00	9	6.01	13	6.92	10	7.10	15	7.96	5
Poland EU	6.86	12	6.36	11	6.15	14	8.32	4	6.60	14
Slovakia EU	6.70	13	5.96	14	6.70	12	6.65	18	7.47	7
Croatia	6.22	14	4.31	18	7.12	7	6.55	19	6.91	12
Bulgaria EU	6.19	15	6.05	12	5.94	17	6.73	17	6.03	15
Romania EU	5.27	17	4.37	17	5.20	21	5.60	25	5.93	16
Serbia	4.55	22	2.15	25	5.17	22	5.93	23	4.94	20
B and H	3.02	28	2.62	24	1.02	30	4.00	30	4.45	21
Albania	2.99	29	2.66	23	1.65	28	4.81	28	2.82	27

* Category ECA (Europe and Central Asia) includes the following 30 countries: Albania, Armenia, Byelorussia, B&H, Bulgaria, Croatia, Czech Republic, Estonia, Finland, Georgia, Greece, Hungary, Israel, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldavia, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Tajikistan, Turkey, Ukraine, Uzbekistan;

KEI – Indicators of knowledge economy; EIR - Economic stimulation and institutional regime; I – Innovations; E – Education; II – Information Infrastructure

Source: Public Financial Support for Commercial Innovation (Europe and Central Asia Knowledge Economy Study Part I); <http://www.worldbank.org/eca/kestudy>), January 2006, World Bank.

Among 25 countries of ECA categorized as post communist countries, when talking about KEI, the highest rated three are Estonia with 8,26 points, Slovenia with 7,88 points and Lithuania with 7,17 points. Serbia takes seventeenth place with 4,55 points, and last three places take Bosnia and Herzegovina, Albania and Tajikistan. In comparison with Finland, for e.g., we can see that Finland- one of the most innovative economies in the world, has 9,02 points as general KEI mark, 9,73 points for innovations and 9,21 points for education. At the same time, the post communist countries got "mixed" marks for separate indicators. Serbia's worst mark- 2,15 was for indicator of economy stimulations and facilities (rank- 25.) with Georgia, Tajikistan, Kazakhstan, Byelorussia and Uzbekistan following after. The highest mark (5,93) Serbia got for education, but even with that mark, Serbia still takes 23. position among 30 analyzed countries and comparing with countries in region (*table 1*) more disadvantageous education system have only Romania, Bosnia and Herzegovina and Albania. For instance, Croatia has the highest score for innovations (7,12), and that country takes fourth place among 25 countries of

³ Public Financial Support for Commercial Innovation, 2006, pp. 49 i 57.

ECA, followed by 6 countries-members of EU. However, Croatians got only 4,34 point for their economy facilities and stimulations regime, which indicates that that domain demands progress and applies to Serbia as well.

General conclusion of this World Bank report is that countries of East Europe and Middle Asia should stop expend their, already limited, resources on archaic innovation systems and start stimulate private companies to engage in the process, just like countries in West do. That doesn't mean that the countries should stop financing researches completely, but when they set aside funds for such activities, the accent should be on private companies researches. More important fact for the countries is that they should take necessary structural reforms so that investments in innovations could bring profit. In other words, the public funds are poor anyway, so they should be used in projects which can refund them in the most efficient way. If the country has lack of institutional context and information and innovation infrastructure, or lack of proper economy policy and stimulus set, or unsatisfying coordination of research institutions with private sector, or inadequate education system and the like, funds used for research, progress and innovation support could be misspent.

Analysis of consulting services sector development in Serbia

Consulting may be defined as a kind of professional support to managers analyzing and solving practical problems. It enables transfer of successful management system from one firm to another or from one organization to another⁴. The main reason consulting exists are changes. Consulting service presents recommendation of adequate measures, and support implementing the recommendation which is a result of research, identification and analysis of problems in certain organization. A consultant is an expert who provides consulting services. His education and experience, in combination with realistic and complete informing of concrete situation, make it possible for him to offer support to enterprises in a proper way.

Companies in Serbia are in stage of adopting the conception of market economy, except some parts of economy where government property will further exist. The development of market and market relations influenced the development of consultancy as a professional service with its specific methodological, conceptual, ethical and other performances. According to information provided by Economic Council of Serbia, the number of consulting companies in Serbia and particularly in Belgrade, lined up according to form of organization, is given in Table 2. The number of consulting companies which are registered as small enterprises is given separately.

According to information provided by Economic Council of Serbia, 973 consulting companies are operating at domestic market of consulting services. The data prove that most consulting companies are organized as companies with limited liability or one member stock companies. 6% of total amount of consulting companies in Serbia are consulting companies registered as partnership companies, while 1,9% are stock companies. The other forms of organization take relatively small part. In the same time, a great number of consulting companies are located in Belgrade (79, 5%), while the others are located in different regions of Serbia.

here is a significant number of companies belonging to the category of small enterprises - 27,3%. These companies respond to clients' needs that big consulting companies either are not specialized in, or don't have economic interest in providing smaller consulting services. This points out that consulting companies in Serbia apply situational approach defining their business offer. Their business activity is adapted to clients' needs. Competition is a significant factor with influence over consulting companies offer and actions. Companies struggle over clients and markets with other firms of the same or different specialty. No doubt that consultancy is trying to adapt to clients' needs and concrete situation in an organization till maximum. Since it is hard to define problems solely as financial, it is very important for clients being able to ask and obtain financial and other consulting services, coordinated and supplemented with advices connected to different approaches to the problem being solved. Most of

⁴ Zivanovic, N. 'Strukturiranje poželjne konsalting pomoci preduzecima u krizi', Poslovna politika, June 1994, p. 37

clients prefer buying services selected, coordinated and formed into a complete package by only one consulting company. This is so called 'one shop or one window service'. In Table 2, one may notice that consulting companies in Serbia are mostly in private property. There is a minor percentage of those organized as public property (0,5%). Considering this, we may say that profitability of projects is one of the most important goals of consultants' business activity. In the same time, many firms in Serbia require previous reorganization as a condition for successful privatization.

Table 2. Consulting companies in Serbia and Belgrade by form of organization⁵

Form of organization	Serbia				Belgrade			
	Map		Total		Map		Total	
	n	%	n	%	n	%	n	%
Stock company	10	3,7	19	1,9	6	2,9	13	1,7
Public property	4	1,5	5	0,5	1	0,5	4	0,5
Company with limited liability	135	50,8	553	56,8	112	54,9	451	58,3
One member stock company	97	36,5	325	33,5	75	36,8	274	35,4
Limited-liability company	2	0,8	6	0,6	1	0,5	3	0,4
Partnership company	15	5,6	59	6,1	8	3,9	27	3,4
Other forms	3	1,1	6	0,6	1	0,5	2	0,3
Total	266	100	973	100	204	100	774	100

The way out of the company crisis requires consulting services which are very expensive, while the main cause of company reorganization is financial crisis, which means that companies have no means of their own to buy a consulting service. A problem of this kind is solved by loaning from development banks, then from donations and subventions. Foreign consultants who work on reorganization of companies in Serbia are being paid from donations or loans of The European Agency for Reconstruction, The Department for International Development (DFID), United States Agency for International Development (USAID) and World Bank. Consulting is not identified in statistical classification of social services; therefore we examine its development indirectly, through financial services (financial mediation since 2002, when methodology of monitoring services in Serbia was changed) and technical and business services recorded till 2001.

Table 3. Realized investments – financial and other services⁶ (000 RSD)

	1999	2000	2001	2002	2003	2004
Serbia	566.631	1.274.357	1.921.602	3.684.555	5.088.468	5.817.205
Belgrade	309.982	494.542	984.885	2.151.740	3.102.603	3.778.210
%	54,71	38,81	51,25	58,40	60,97	64,95

In the period between 1999 and 2004, financial and other services in Belgrade were leading regarding realized investments in comparison with other regions in Serbia. The amount of realized investments in the field of financial and other services (region of Belgrade) ranges from 38.30% to 64.95% of total amount of realized investments in the same field in Republic of Serbia. These information about realized investments coincide with the concentration of consulting organizations, which are mostly located in Belgrade.

⁵ www.pks.co.yu

⁶ Investments of Republic Serbia, 1997 – 2004, RZS, Belgrade, 1998 – 2005

Consulting as a way of learning and a model of manager skills development

Participation of manager in consultant work is basic principle of modern consulting. Manager and consultant integration leads towards higher probability of problem solution and better knowledge transfer. So consultants should stimulate managers to creative thinking which is basis of manager skills development. Creative thinking is based on creating ideas and their evaluation. All the ideas are important, particularly the "crazy" ones are supported, since we are dealing with quantity not the quality in this first phase of thinking. In this way we get large number of ideas, because old ideas stimulate the new ones. There are following techniques of creative thinking:

Brainstorming. Brainstorming method enables researcher to hear large number of ideas for a short time. In BS session 6-12 peoples from leading circles take part. Every idea is written down, stimulated and valued for easier solution making for particular problem. Up to 200 ideas can be heard, period of BS is between 1 to 2 hours.

Sinectics. This technique is similar to brainstorming. We have 9 members in session. The procedure is next: the orderer brings up for discussion problems in company, and the members are expected to help him solve them, by bringing out their opinions and suggestions. After that, the orderer considers suggestions and presents what he likes and what he doesn't likes. The members are resolving a problem then and the process continues until good solutions are found.

No matter which technique is used, according to the same source, consultant must observe the following rules:

To delay a judgment - do not criticize any idea too early;

Give imagination complete freedom - by free expressing of imaginative ideas better results will be obtained;

Quantity - more "crazy" ideas, more better results;

Cross-ideas - a rule that enables consultant to combine and improve ideas with participants in resolving problems.

The consultant and manager cooperation is useful to both sides. In other words, consultants collect information about organization and its business, enriching their own business experience and strengthening their own business competence this way. On the other side, the manager skills and capabilities are being developed, what, all together, leads to resolving business problems. It is necessary to practice control right after innovations. After controls have less intensity and less effect since the process is settling in new conditions and in new level. Consultant has obligation to point out the characteristic spots where big deviations can be found. The basic assumption is that client has constructive attitude to solve a problem and has no hidden interests or intentions. The consulting tendency has evolved from problem itself to problem resolving process and cooperation with client.

After mutual problem diagnosis, a meeting, where a consultant would give client a return information about client's problem, is necessary. Adequate solutions are reached through consultant and manager discussion. Usually, these solutions are not final, but they are beginning of a new diagnosis stage and new meeting. Consultant should bring manager new perspective of problem analyzing, which manager couldn't see and understand objectively, because of his wholly engagement in it. On the other side, consultant should observe a problem from distance, what leads to diagnosis objectivity.

In process consulting, consultant objectivity overcomes manager subjectivity, who will, after several cycles of diagnosis and meetings, become objective himself.

Conclusion

The condition in the field of consulting services points that it is necessary to perform the decentralization of consulting. As a support to this process, the decentralization of the advisory bodies of some ministries and Economic Council of Serbia is also required. This would found the environment for

more adequate responses to needs of enterprises, and the possibility of a partnership approach to solving business problems, as the partnership is among the basic principles of modern consulting.

Various consulting organizations and consultants are quite different regarding education, experience, competency, work style, conditions of intervention, service quality and professional standards. Education through consulting is not automatic. Consulting with clients' active participation gives the best results. Consultants should be more active when marketing of their services is considered; they should invest more effort and means in marketing. Marketing brings the knowledge of the leaders in consulting market. One of the indicators of the consulting market development in the previous period are investments realized in this field. World consulting organizations had their share in the consulting services development in Serbia. Through the mechanism of competition in their field, they led to improvement of some consulting dimensions.

References

- Investments of Republic Serbia, 1997 – 2004, RZS, Belgrade, 1998 – 2005.
Public Financial Support for Commercial Innovation (Europe and Central Asia Knowledge Economy Study Part I); Januar 2006, World Bank, <http://www.worldbank.org/eca/kestudy>
Živanovic, N. 'Strukturiranje poželjne konsalting pomoći preduzećima u krizi', *Poslovna politika*, June 1994.
www.pks.co.yu

Human Capital Management

Dragan Mihajlović, Biljana Ilić¹

ABSTRACT – *Research and development management, as well as human capital management as part of overall management, is a natural, logical consequence of the necessity of development for the sake of survival under the conditions of constant changes and actions of market rules. This especially relates to a new information – techno – economic paradigm of business running, under the conditions of hyper production of new (high) technologies and their implementation into all the spheres of human actions at present. Also, it relates to the era of rapid (turbo) changes of “self organizing” chaos of a post-business society in a ‘knowledge society’ that we live in, in the era of application of knowledge above knowledge – which implies the revolution of management in process. Only change is constant. A stable organization is the one that is successful in internal integration, as well as in external integration with dynamic market.*

KEY WORDS: *management, research and development, human capital, change, dynamic market*

Staffing

This management function has been given a significant importance lately. Since man is the only living factor in an organisation, there is no universal pattern when working or socialising with people that would guarantee business success. The task and the objective of Human Resource Management (HRM) within an organisation involves the following: filling vacancies in the organisational structure, paying attention to education, career advancement and training of employees.

Broadly speaking, the system of managing people involves human resource research, staff recruitment and filling vacancies, progress or development of employees, their salaries and bonuses, promotions and health care, positive climate among employees, between employees and employers as well as with unions, etc. If not followed by *continual advancement, education and training* besides keeping qualified employees, staff recruitment alone does not guarantee business success. Since we are living in an era when employees learn and enlarge their knowledge in shorter and shorter periods of time, success and survival of an enterprise depends on the permanent development and advancement of every employee.

Only the companies capable of *taking over, encouraging and keeping* their employees will be able to accomplish the planned objectives and to survive in the market. At the same time, enterprises have to 'make teams' and 'renew' qualified staff in order to achieve the goals. The main objective of human resource management in every company is to make sure that *right people occupy the right positions*, and that the right people are given a possibility to educate and to develop, all with the aim of creating a “learning organisation”.

Merely doing one's own job is not enough in the modern business world. When a person starts working, that does not mean he or she has achieved the peak; on the contrary, that ought to be the beginning of enlarging one's actual knowledge from the actual field of interest and work. Through permanent education and learning the company's goals become the goals of all the people employed in the company.

¹ Dragan Mihajlović, Biljana Ilić, Faculty for Management, Zaječar

The learning organisation

The learning organisation has become one of the most interesting, but also one of the most misunderstood methods of organisational changes during the 1990s. However, the roots of this theory are much older. The traces of evolution of the learning organisation idea date back to Don Michael – and to his book 'On Learning to Plan – Planning to Learn' – which was published in 1973². The book aroused great interest and made way for the future solutions regarding learning in an organisation.

Senge defines a learning organisation as one where its members continually expand their capacity to create a new way of thinking and where they continually learn how to function as a team; Garvin says that it is an organisation skilled at creating new knowledge regarding the ways in which work gets done, etc.

The strategy of the learning organisation is directed at recognising and accepting the attitude that the only source of sustainable strategic advantage is learning, while continual experimenting is the way of institutionalising the process of learning.³

In 1994, in the research conducted in fourteen companies with reorganised activities of organisational learning (3M, Hawlet Packard, Corning, Shell), McGinty Weston identified three elements of learning defined as 'those which create meaning and set perspectives' in an effort to develop a learning organisation:⁴

- Vision, Value, Integrity
- Dialogue
- System Thinking

The research also identifies three key practices of integrating learning into everyday activities: "mental modelling", "action learning" and "leverage learning".

The essence of the learning organisation is seen in the absence of a medium through which people change. People have no attitudes, mental models, values – they are attitudes, mental models, values. There is no medium by use of which we can interact with the world around us because the world around us is entwined with what we are; our environment is also part of us, as we are part of the environment. "The eye cannot see the other eye!" The learning organisation is a challenge, not only to individuals and organisations but also to the whole society.

Finally, in order to grasp and make use of organisational learning, it is necessary to answer three basic questions:

- The question of meaning – the existence of a practical definition easy to use
- The question of management – the existence of clear guidelines for practical implementation in operating councils
- The question of measurement – in order to monitor and advance the process we need adequate tools to rank the level of learning

The organisation capable of finding adequate answers to the above given doubts will be capable of turning learning into a meaningful corporate goal.

The disciplines of the learning organisation

Engineers say that the new idea is created after it has been tested and proven in the laboratory. An idea becomes an innovation once it can be applied in practice. It is said that when the idea is very important, it is the 'basic information' and it creates new or transforms the already existing branch of industry. Having this in mind, we can say that at the moment the learning organization is only an invention waiting to become a basic innovation. In other words, in order for the learning organization to be ap-

² Peter M. Senge, *The Fifth Discipline*, Currenev Doubledav, 1990, p. 6

³ Biljana Bogičević, *Menadžment ljudskih resursa*, Faculty of Economics, Belgrade, 2003, p. 25

⁴ Biljana Bogičević, *Menadžment ljudskih resursa*, Faculty of Economics, Belgrade, 2003, p. 26

plied in practice, it has to have technological components called the disciplines of the learning organization:⁵

- System thinking
- Personal mastery
- Mental models
- Building shared vision
- Team learning

The development of the learning organization

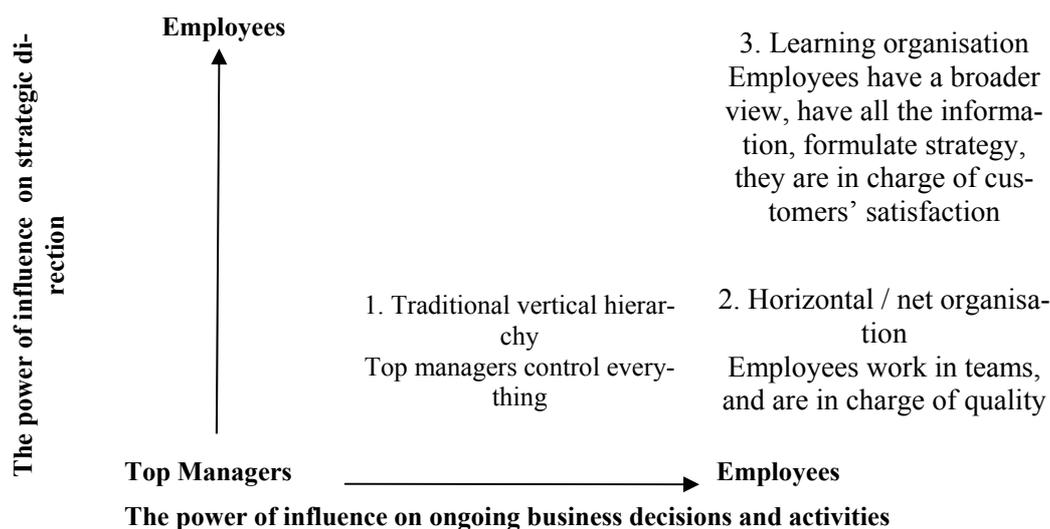
It can be said that the learning organization is developed through particular phases (Picture 1, *Evolution of the learning organization*).

Phase one describes the traditional hierarchy in which top managers have centralised control over activities within the company but they also control strategies, including relations with consumers and the environment. In the second phase of development, top managers delegate more duties to their subordinates and make them more responsible and independent in making decisions or taking actions. Phase three marks the employees' taking part in deciding on strategic questions. The employees dealing with customers and other elements in the environment choose the company's strategy and tactics which are to ensure success in the particular environment.

Employees are no longer factors of efficient production who are delegated routine tasks. The strategy is now the outcome of accumulated activities of teams of employees. These employees work within a general vision, and different parts of the organisation adapt and change not depending on each other but they contribute, at the same time, to the company's mission.

In a way, the existence of the learning organisation increases the knowledge of the company. Employees participate in all the activities that involve thinking, including strategy, and there are almost no divisions between different departments from top to bottom.

Picture 1. Evolution of the Learning Organisation



⁵ Prof PhD Mića Jovanović, Prof PhD Momčilo Živković, Prof PhD Tatjana Cvetkovski, *Organizaciono ponašanje*, Megatrend University of Applied Sciences, Belgrade, 2003, p. 402

Everybody communicate and work together, creating enormous intelligence and flexibility so as to deal with the fast-moving environment. Designing the learning organisation means introducing specific changes into the sphere of leadership, horizontal structure, responsibility delegation, communication / information transfer, strategy and organisational culture.

Conclusion

With the arrival of foreign companies, privatisation and stronger competitors in the market, the function of human resource management is becoming more and more significant since human activities are actually human capital.

If we do not acknowledge the fact that successful company running, that is, successful management of all potentials, including human capital as the most important element of any company, we will lose the battle with our competitors. The success of a company is seen through the success of its employees.

If we do not motivate and pay attention to the complexity of human capital, we will not achieve the planned corporate goals. The most important component in making a profit and successful business is creating a learning organisation. During the creation of the learning organisation there is no final destination, there is no particular place we are to get – it is a life-long process.

References

- Biljana Bogičević, Menadžment ljudskih resursa, Faculty of Economics, Belgrade, 2003
Mića Jovanović, Momčilo Živković, Tatjana Cvetkovski, Organizaciono ponašanje, Megatrend University, 2003
Peter M. Senge, The Fifth Discipline, Currenev Doubleday, 1990

Individual Versus Composite Indexes for Digital Divide Measuring¹

Dorđe Mitrović²

ABSTRACT – *The importance of information and communication technologies (ICT) for the development of information society (IS) and new economy (NE) is more than evident. But less obvious is their negative influence on the uneven economic development and rising differences between individuals, households, companies, or regions related to the access to and usage of ICT. This phenomenon is called “digital divide” and it is very important to develop corresponding system of measurement of its effect at national and international level. The aim of this paper is to review the existing concepts and systems of IS indicators and measurement of digital divide present in the economic theory. The paper attempts to analyze challenges, problems and opportunities for economic analysis and statistical monitoring emerging from the social and economic influence of digital divide. We conclude that the economic and statistical concepts and methodologies of research need to pay more attention to composite indexes over particular indexes. Only composite indicators can present adequate guides for creators of economic policy to reduce the social and economic digital gap during building and development of IE and NE in the country.*

KEY WORDS: *digital divide, statistical methodology, information society indicators*

Introduction

The development of Information Society (IS) and New economy (NE) became in the beginning of XXI century the most important priority in economic and government policy for all countries of European Union (EU). The most significant aspect of increasing of global competitive advantages for every developed country is its ability to completely use all possibilities offered by information and communication technologies (ICT) for the acceleration of economic growth and development. Therefore, this is one of the most important priorities for Serbia, which needs to make the classic process of transition and transfer to the market model economy and particularly transition towards the economy based on knowledge (i.e. Information Society) as well.

However, the usage of ICT with all the positive effects it carries has several negative consequences – the most important one is the presence of digital divide. The digital divide comprises unequal economic development in the country and between countries, as well as the growing economic and social differences between individuals, households, enterprises and regions concerning access and usage of ICT. Creating and implementing of adequate economic and policy of development of IS and NE depends on suitable system of measurement of extent and influence of digital divide on national and international level.

The aim of this paper is to review existing concepts and systems of IS indicators for measurement of digital divide presenting in the economic literature. This paper analyzes challenges, problems and possibilities for the economic analysis and statistical monitoring of the social and economic effects of digital divide. We will show that economical and statistical concepts and research methodologies must pay much more attention to composite indexes than to single indexes. We are concluding that only

¹ Acknowledgement: This paper was writing during author’s work on the project „Supporting the reform in Serbian economy – growth, employment and competitiveness”, № 149047, supported by the Ministry of Science and Environmental Protection, Republic of Serbia.

² Dorđe Mitrović, Faculty of Economics, University of Belgrade, Belgrade

composite indicators can be adequate guides to the creators of economic policies for decreasing social and economic digital gap during construction and development of IS and NE.

Definition of digital divide

In the context of traditional economics, developed (rich) countries and developing (poor) ones were mutually distinguished by opportunities to access and to dispose with raw materials, physical capital (machines, factories, ways) and human capital (educated labour force) which are essential for economic development. However, in the context of the new economy, we perceive a polarization between developed and less developed countries in sense of access to ideas, knowledge and ICT. Poor countries lack in ideas and knowledge normally used by industrially developed countries for creation of economic values. Gaps existing between countries in sense of access to raw materials and in sense of access to knowledge don't eliminate each other, but they can be complementary. The gap existing between countries, regions and individuals in sense of access to ICT in the literature is usually defined as *digital divide* or *digital gap*.

However, the digital divide is much more than a simple division between individuals or households which have and the ones that don't have computers and Internet access. Van Dijk distinguishes four areas with factors of limitation in sense of access to basic elements important for use of ICT and four types of access which are limited by them: 1) lack of the elementary digital experience because of lack of interest, hostilities towards computers and unattractiveness of new technology –mental access; 2) availability of computers and web connections –material access; 3) lack of digital knowledge and skills because of inadequate education, insufficient user friendly of ICT or inadequate social support – skills access; 4) lack of possibility to use ICT – usage access.[3]

When we consider the usage of Internet, Norris distinguishes three different levels of division: 1) global divide, which scopes the differences between developed and undeveloped countries, developing and countries in transition; 2) social divide, which points to inequalities between inhabitants inside the country, and 3) democratic divide, which points to differences between those which use and those which do not use ICT in order to join and participate in the public life.[6]

Wilson adds more elements to this classification by identifying four components of full access to ICT in society: 1) physical access – possibility for potential user to have access to physical ICT infrastructure on determined geographic area; 2) financial access – shows if users (whether individuals or whole communities) can afford the Internet connection; 3) cognitive access – considers if individuals have skills to use Internet and to find and evaluate the type of information they need; 4) content access – considers if there are enough available materials which can fulfil users' needs (especially in their native language); 5) political access – takes into account if users have approach to institutions which regulate technologies in use, i.e. if the population actively participates in the designing of projects which are in their own interest; 6) design access – access to that form of communication (interface) between man and machine which is most appropriate for the user himself (in case of blind and illiterate people, etc.); 7) institutional access or access to the institutions – it refers to the large number of different organizational forms and regulations which form and define the access to digital contents on the determined way; i.e. the number of users of ICT is drastically different if the access is possible only through households or through schools, libraries, institute, postal office...[10]

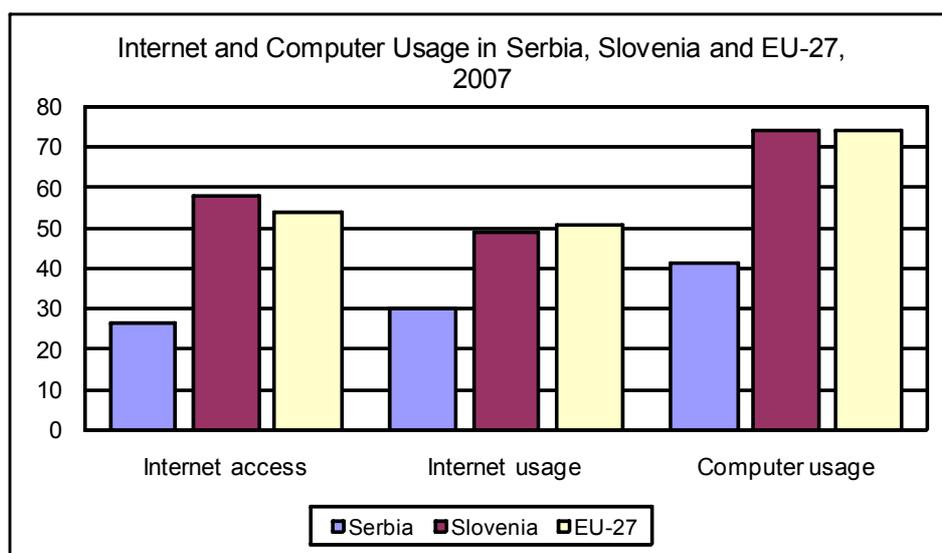
In the similar way as Van Dijk, Warschauer argues that beside the physical access to ICT, other factors such as contents, language, literacy, education level and institutional structure must be considered as well during evaluation of the level of availability and usage of ICT in the society.[4]

Mossberger, Tolbert and Stansbury argue that the problem of digital divide is not unambiguous and that under this concept in a larger sense we can consider multiple divides between individuals and households concerning the physical access (access divide); possession of knowledge and skills on usage of ICT (skills divide); possibility of ICT use for finding new jobs, use at work and constant learning (economic opportunity divide) and possibilities for ICT use in democratic processes (voting, for example) (democratic divide).[5]

From previous text we can conclude that there are many ways in which we can define and conceptualize the term of digital divide. Regardless of the theoretical framework which is used as the starting point, several methodological problems are always inevitably imposed during the empirical research. In this paper we will present a few methods which are significant for measurement of digital divide independently from domains in which it is observed. Analyses of these methods will show us that simple comparison between individuals, households or enterprises on, for example, level of the usage of Internet which often is prevailing in the literature, is not enough and sometimes can lead us to wrong conclusions.

Individual is indexes

Figure 1.



Single indicators by which we measure the level of IS development and, respectively indicators by which we express smaller or larger level of existences of digital divide, in many cases lead us to different, even contradictory conclusions. As an example we will show the comparison between Serbia and Slovenia on the basis of three ICT indicators (the percent of households which have access to the Internet, the percent of users which use Internet every day and the percent of users which use computers every day). We can notice in figure 1 that the gap concerning accessibility to Internet between Serbia and Slovenia is very big (58% in Slovenia, while in Serbia the number is 26,3%). We encounter similar situation regarding computer use (in Slovenia 74%, while in Serbia the number is 41,2%) and concerning the use of Internet (in Serbia 29,9% the user use Internet almost every day, with a different situation in Slovenia where this percent amounts to approx. 49%). When we would use the simple arithmetic average like some kind of common index of three mentioned variables, we would notice that a very large gap exists between Serbia and Slovenia in ICT usages (in Serbia 32,47%, while in Slovenia this average would be 60,33%). In following pages of this paper we will notice that results presented by single indexes of IS development are very easily manipulated, because digital divide between these two countries is not so big if we consider and observe the equality of ICT usage inside countries.

Composite is indexes

As of lately, a very large number of indexes which measure the level of IS development has been developed, and which are very appropriate for measuring and expressing the existence and size of digital divide, i.e. which are very appropriate for mutual comparison between countries. Some of them are

Digital Access Index - DAI, Digital Opportunity Index - DOI, Networked Readiness Index - NRI, Technology Achievement Index - TAI, Information Society Index – ISI etc.[1]

In this paper we will analyze only one composite index with which in principle we can observe general characteristics of all previous mentioned indexes in the domain of measuring level of existence of digital divide. Digital Divide Index – DIDIX has been developed in the framework of SIBIS project for measuring of the level of development of Information Society in countries of European Union. SIBIS indicators (Statistical Indicators Benchmarking the Information Society) present the group of indicators for measuring of IS development which have been proposed by University of Applied Sciences Solothurn Northwest Switzerland (FHSO) in the framework of the project „Statistical measuring indicators for Information Society“ (ST-26276-SIBIS). This system of indicators comprises 133 indicators in total from which 34 have been separated as most important and most appropriate for monitoring development of Information Society. Indicators were constructed during the work on this project, but several indicators are from other different sources (other projects, national statistical services, Eurostat, Eurobarometers...). The importance of indicators has been determined according to politics of development of Information Society on the level of European Union.[2]

DIDIX index has been developed in larger measure for needs of designing and managing of economic policy, and in much smaller measure for scientific purposes. But, regardless of this fact, this index is simple enough for constructing and it can help us as a good example on which we can observe all advantages of more complex composite indexes in respects to individual. DIDIX index presents the combination of four socio-demographic factors (gender, age, education and income) in respect to three ICT indicators. The initial composite indicator show us the relative level of ICT adoption and it is constructed on the basis of following elements:

1. percentage of computer users;
2. percentage of internet users;
3. percentage of computer users from home. [4]

Index constructed in this way is further analyzed through four potentially deprived groups in the framework of the Information Society:

1. women;
2. people aged 50 and over;
3. the low education group (people who finished formal school education at the age of 15 years or below) and
4. the low income group.[4]

The basic DIDIX indicator presents ratio between the compound ICT adoption indicator in a certain risk group and the value of the corresponding indicator in the total population. If the value of ICT indicator usage in a risk group is equal to that of the population average, then the corresponding basic DIDIX value should be equal 100. [8]

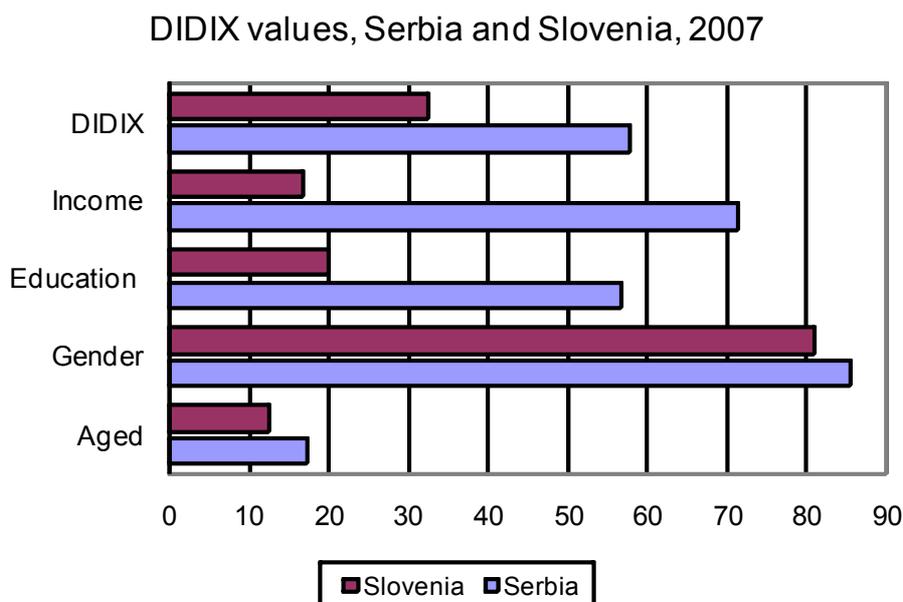
Table 1.

	A		B		C		SubIndex 0,5*A+0,3*B+0,2*C
	Computers (%)		Internet (%)		internet from home (%)		
	%	% total	%	% total	%	% total	
usage total	41,20	=100,00	29,90	=100,00	22,69	=100,00	
aged 55+	7,99	19,39	4,19	14,01	3,80	16,75	17,25
women	36,70	89,08	24,50	81,94	18,45	81,31	85,38
education < 15	24,90	60,44	15,90	53,18	11,96	52,71	56,71
unemployed	31,60	76,70	19,70	65,89	15,01	66,15	71,35
SubIndex	61,40	53,75	54,23	57,67			

Source: Author's calculations

Figure 2 and table 1 present the basic DIDIX indicator values for four risk groups, as well as total DIDIX index value which was calculated as the arithmetic mean of the basic DIDIX indicators measured in the framework of four mentioned segments. However, because of inexistence of total data for Serbia for three indicators in the framework of group of poorest inhabitants, we will analyze group of unemployed (under the simplified assumption that just unemployed persons in Serbia have lowest incomes). [7]

Figure 2.



As shown in table 1 and figure 2, for example, the basic DIDIX index value concerning the education in Serbia in 2007. is 56,71, means that individuals which have not continued education after 15 years of life acquire ICT on that level which is 57 % of the level reached by the total population. From presented data we can also notice that the value of digital divide index for the population aged 55 year and older is 17,25, which means that in this risk group the digital divide is very expressed. In other words, people aged 55 and over use ICT on the level smaller than 1/5 of total usage level of ICT in country.

When we analyze the total DIDIX index for Serbia in 2007., we can see that its value has reached 57,67, which means that earlier mentioned four risk groups of population use ICT on the level which is smaller than 2/3 of total ICT usage in the country. When this data is compared with Slovenia we can see that in Serbia digital divide is still not so expressed as in Slovenia. That is, the total DIDIX index value in Slovenia is 32,50, which means that four risk groups in this country use Internet only on the level from 1/3 of total usages. Previous analyses of single indicators, in the first place the usage of Internet, show us that situation in Serbia concerning the ICT usage is very dire. However, composite index as DIDIX has discovered that although in Serbia people use the Internet in smaller measure, availability and usage of Internet is much equitable, i.e. the corresponding value of total DIDIX index is closer to 100. This is especially expressed in risk groups like unemployed persons, people with low incomes and people with low education. Of course, value of DIDIX index is not to be taken as given size and unique parameter during the analysis of digital divide, because it is very possible that it will be lower as the computer market will develop in Serbia along with the increased use of more expensive and sophisticated software and hardware solutions (along the decreasing of piracy).

Conclusion

The research made in this paper show us that DIDIX index (and consequently any other composite index) allows an effective analysis on aggregate levels. In relation to single indexes, we can measure more aspects of relatively more complex concepts and by doing so make the comparison between countries on different levels. Literature usually distinguishes, as one of the biggest lacks of composite indexes, the oversimplified correlation between appearances and process, where the digital divide comes down to one number which can, in some cases, be distant from reality. However, composite indicators are a very good mean for presentation of reached level in IS development and present level of digital divide to people which are out of the scientific community, before all to creators of economic and other politics and strategies on the state level. In fact, in this way people who haven't enough skills in scientific methodology in a very clear and concise way get the insight in the actual state and future directions of actions during the IS development.

References

- DAUGELIENE, R., KRIŠČIUNAS, K. The Assessment Models of Knowledge-Based Economy Penetration. In *Engineering Economics*, ISSN 1392-2785, 2006, Volume 50, Number 5, pp. 36-46
- European Commission. *SIBIS – New eEurope Indicator Handbook*, 2003.
- VAN DIJK, J., HACKER, K. The Digital Divide as a Complex and Dynamic Phenomenon. In *The Information Society*. ISSN 0197-2243, Sep/Oct 2003, Vol. 19, Issue 4, pp. 315-316
- HÜSING, T., SELHOFER, H. *DIDIX: A Digital Divide Index for Measuring Inequality in IT Diffusion*. In *IT & Society*, Spring/Summer 2004, Volume. 1, Issue 7, pp. 21–38
- MOSSBERGER, K., TOLBERT, C. J., STANSBURY, M. *Virtual Inequality – Beyond the Digital Divide*, Georgetown University Press, Washington D.C., 2003, 192 p., ISBN 0-87840-999-8
- NORRIS, P. *Digital Divide: Civil Engagement, Information Poverty and the Internet in Democratic Societies*. Cambridge University Press, New York, 2001, 320 p., ISBN-10: 0521002230
- STATISTICAL OFFICE OF THE REPUBLIC OF SERBIA. *Usage of Information Communication Technologies in the Republic of Serbia*, 2007, Belgrade,
http://webrzs.stat.gov.rs/axd/en/dokumenti/ict/2007/ICT_2007_saopstenje_knjiga.pdf
- VEHOVAR, V., SICHERL, P., HÜSING, T., DOLNICAR, V. *Methodological Challenges of Digital Divide Measurements*. In *The Information Society*, ISSN 0197-2243, Nov/Dec 2006, Vol. 22 Issue 5, p. 279-290
- WARSCHAUER, M. Reconceptualizing the Digital Divide. In *First Monday*, 2002, Vol. 7, Number 7,
<http://www.firstmonday.org/issues/issue77/warschauer/>
- WILSON, E. J. *The Information Revolution and Developing Countries*, The MIT Press, Cambridge, 2006, 447 p., ISBN-10: 0262731789

Creative Industries, Creative Economy and Knowledge Economy: The Holly Trinity of a New Economic Growth Paradigm

Saša Popović¹

ABSTRACT – In recent years a new term ‘creative industries’ has emerged from the policy mix. As Richard Florida, the guru of creative industries noted, it exploits the fuzziness of boundaries between ‘creative arts’ and ‘cultural industries,’ freedom and comfort, public and private, state-owned and commercial, citizen and consumer, the political and the personal. According to him, it was partly a case of democratising culture in the context of commerce: doing away with evaluation as a rationale for subsidy in favour of market forces. And it was also a case of seeing creativity itself as an enterprise sector. Creative industries were the commercial applications of creativity within a democratising ‘re-public of taste’. It links the human attribute with large-scale organised enterprise. It sees imaginative innovation as the very heart of wealth creation and social renewal.

This paper explores basic concepts, structure and the impact of the creative industries, and more generally creative economy, on the future economic growth. Some general conclusion are also drawn on the implications of creative industries on the higher education sector and policy making procedures

The core exploration is undertaken of the shift towards creative industries where the value of creativity is linked to economic value.

KEY WORDS: creativity, creative industries, creative economy, economic growth

Introduction: on creativity and knowledge economy²

On the basis of scientific tests carried out in experimental psychology, the psychologist Z.Y. Kuo³ concluded that “with the help of the pulse, passively striking in a chicken’s head prior to its hatching out of an egg, the chicken is learning how to pick”⁴. At one moment that passive impulse in the chicken’s head, probably pulsating in the rhythm of its heartbeat, leads to an event of crucial importance, with its inducing the chicken to break the egg shell and get out into the world. It is quite normal, one might say, as if anything derived from nature has to be clear and familiar to everybody. But simply associating such an impulse to the creative incentive in humans, a dilemma appears about more questions emerging than appropriate answers could be provided.

After transmitting Kuo’s conclusion to the phenomenon of human creativity, our attention is driven more to the causal than to the effective aspects of this phenomenon. Also, we wonder if humans are born with the creative impulses passively pulsating inside their heads, up to the moment when the powerful incentive of consciousness appears and thoughts make their way, like when the chicken breaks the egg shell? Deliberately or not, the orphic egg happens to be the symbol of the universe in Greek mythology.

The power of the creative impulse is revealed by Shakespeare’s thought, saying: “Oh God, I could be bounded in a nutshell, and count myself a king of infinite space”⁵. It reflects the power of human

¹ Saša Popović, School of Economics, University of Montenegro

² This paragraph of the article was published as a separate article in *Start-Up Creative Podgorica*, British Council, Podgorica, 2005, pg. 48

³ Z. Y. Kuo (1898-1970), Chinese psychologist

⁴ Richard I. Evans: pg. 19

⁵ William Shakespeare: “Hamlet”, Act II, Scene 2

thought where the limits look like illusions of repressed consciousness, as soap bubbles blown up making notions to appear senseless inside as well as outside.

However, after a fully polyvalent appearance of a human on the social scene, in time he comprehends that the point is not just in learning how to "pick", but also "what should be picked". Some techniques of this skill are mastered in the family, but the quality of learning remains in the responsibility of the system of education at all its levels. Since the existential value of behavior is advanced through learning, knowledge acquired is the foundation of such a value. Knowledge acquired through education is an "old", refunded knowledge, possible to be described as a "cumulated experience". It is generally achieved through passive techniques applied in educational institutions, and its consumers become true prompters of scientific facts.

The experimental way of thinking leads to the conclusion about creation being a unity of knowledge and imagination. To put it simply, let us tell that new knowledge is reached through an experimental acknowledgment of imagination. For example, without imagination, being aware of his inability to fly, man would never attempt to substitute wings, never would they apply techniques to overcome their natural limits and construct an airplane. On the contrary, men succeeded not only to fly, but the echo of their longing for flight was expressed in a famous myth about Icarus and Dedalus. Without any intention to offend Darwin, let me remind that the stunted ability of poultry to fly may be just a result of their lack of imagination.

The psychologists believe that a live creation, regardless to the medium, presents a projection of author's mental life. The medium, i.e. the form of expression – a color, a word, a sound, a movement or a shape – is a point where the creator meets the outside world, bearing a trace of such a connection. Such a necessity of a medium, a form of expression, points to the fact about creativity achieving its value through interaction.

Social interaction is providing a wide space for analysis. We are primarily interested to learn how the environment – the family, the school, the firm or the society as a whole – does stimulate passive creative potentials in humans, inducing them to become active. The resulting social benefits present the economic value of creativity. The process of acquiring new products is becoming increasingly complex, and accordingly the process of economic development, with knowledge, information and creativity as its key components of providing the economic value, is called the economy of knowledge. Einstein's formula $E = m \cdot c^2$ seems appropriate to generally express the importance of the economy of knowledge; according to the notation in English, E denotes the economy of knowledge, m-money and c-creativity. Accordingly, the economy of knowledge is the multiplication of the money invested and the creativity squared.

With high reliability, the modern societies may be classified into two categories: the "know-how" and the "now how" category. The societies lacking the know-how orientations and not attempting to master them would certainly find themselves, sooner or later, in the situation of now how. Consequently, a society's destiny may be denoted by a single letter. Also, deliberately or not, this letter is c – the initial letter for creativity. The structure of such internal changes in society may arouse interest as well. According to Naisbitt⁶, most social innovations in America are taking place just in five states: California, Colorado, Connecticut, Washington and Florida. Those states may also be denoted as the "Creative States of America". The other states in the USA mainly follow the trends created in the mentioned five ones. Also, ten cities in USA are considered as those having high potential. In both cases we have in mind the qualitative management of the development potentials.

In the historical context, the development potentials differed in particular stages of the socio-economic development, and may be simply presented in pairs of factors. In agriculture, the pair consisted of land and physical labor, in the era of industry of capital and energy, while technology and knowledge present the development potentials in the age of informatics. The notion of property changed along with its subject changes - from property over land, through property over machines, to intellectual property. Quite logically, for those changes the term of competitiveness needs to be redefined. Thomas Railey is of opinion that the only competitive advantage of a company should be in its process of innovation,

⁶ John Naisbitt, pg. 59

based on combining knowledge about the market and technology with the creative talents of its employees, and its ability to create value based on information. Obviously, competitiveness is undergoing a metamorphosis in this century, from its products quality and their economic capacity, to prestige in innovation, patents and copyrights, providing profit based on creation.

Today the economy of knowledge is connected to the sectors of high technologies, telecommunications or biotechnology. However, creativity – in spite of being in the basis of the economy of knowledge - is an older category, immanent to each human activity. Let me give an example of entrepreneurship, referring to the production of Kinder eggs- the product invented by a creative team in the Italian firm Ferrero SpA. The Kinder egg, a descendent of the Easter egg, is a candy designed for children, consisting of a twofold chocolate layer containing a plastic capsule with a surprise – a folding plastic or wooden toy. The chocolate blend of Kinder eggs is not special, but the effect of surprise and always newly designed toys contributed to this unusual product's annual sale amounting to over one billion dollars on the world market.

In my opinion, the time will come when the participation of aluminum in the gross national product (GNP) of Montenegro will be replaced by products and services from creative industries.

Possibly, one day on a chicken farm in Martinići⁷, a hen lays a Fabergé egg. You never can tell!

The creators of creative industries

As a factor of development, creative industries are to be viewed in a broader context. Historically, development potentials were different in certain stages of socio-economic development and in a simplified way they can be presented as pairs of factors. Thus, in the agrarian economy we can talk of soil and physical labour, in the industrial economy of capital and energy, while in the information age we can say development potentials are technology and knowledge. Parallel with these changes, the ownership focus also changed, depending on the significance of the subject of ownership: thus, we can notice the change from the focus on ownership over land, through the focus on ownership over machines to the focus on intellectual property. Logically, these changes brought to the need to redefine the concept of competitiveness. Competitiveness nowadays, obviously, goes through a metamorphosis - it changes from the quality and economic efficiency of the product to the prestige in innovations, patents and copyrights which ensure profit on the basis of creativity. In contemporary economies it is the industry that generates the fastest growth. In Great Britain, for example, over a million and half of people are employed in creative industries and this is the share of 9.7% in the country's GDP. Just for the sake of comparison, the share of agriculture is about 1%. The share of production industries in gross domestic product is 50% lower nowadays than in the fifties in XX century.

As Hartley noted⁸, the “creative industries” idea itself is a product not of industry but of history, both immediate and long-term. Long-term, the creative industries concept has evolved from previous conceptualizations of the “creative arts” and the “cultural industries” going back to the eighteenth century, and it also picks up some long-term changes in the idea of “the consumer” and “the citizen.” More immediately, the idea of the creative industries arose from recent changes in technology and the world economy, especially during the 1990s, and the beginnings of broad uptake of interactive media forms. It found favor in the framework of national and urban or regional policy formation, in countries where creativity caught the imagination of politicians and policy-makers who wanted to promote “jobs and GDP” (as the economic development mantra has it). Increasingly the creative industries are also named as such in higher education in the same countries, especially in universities with a direct stake in educating creative personnel, nurturing the next generation of wealth creators, and researching cultural and media policy. Decoding “creative industries” term Hartley argue that “certainly the ‘creative industries’ idea combines – but then radically transforms – two older terms: the *creative* arts and the cultural *industries*. This change is important for it brings the arts (i.e. culture) into direct contact with large-scale industries such as media entertainment (i.e. the market)”⁹.

⁷ Small chicken farm near Podgorica, capital of Montenegro

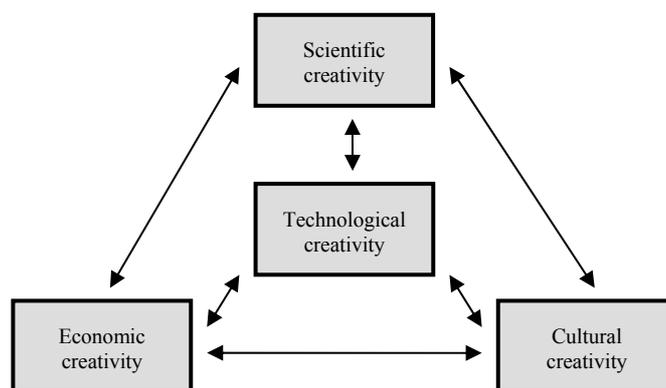
⁸ Hartley, pg. 11-12

⁹ Hartley, pg. 13

Creative industries are nothing else but traditional entrepreneurship approach with one difference - they do not focus on external resources only but also on the creative human capital. Such an approach can change the overall understanding of economy and promote business in a new manner. Among other things creative industries include advertising and marketing, architecture, arts, antiques, crafts, design, fashion, film, music, publishing, software, television and radio, etc.

The links among cultural, economic, scientific and technological creativity are shown in Figure 1. Every aspect of these four creativity segments imply ability to create intellectual capital and has the potential to generate income, job creation and export earnings while at the same time promoting social inclusion, cultural diversity and human development. This is what the emerging creative economy has already begun to do as a leading component of economic growth, employment, trade, innovation and social cohesion in most advanced economies.

Figure 1. Creativity in today's economy



Source: KEA European Affairs (2006:42).

Table 1. Comparison of UNCTAD definitions of creative industries and creative economy

Creative industries	Creative economy
<ul style="list-style-type: none"> • Are the cycles of creation, production and distribution of goods and services that use creativity and intellectual capital as primary inputs; • Constitute a set of knowledge-based activities, focused on but not limited to arts, potentially generating revenues from trade and intellectual property rights; • Comprise tangible products and intangible intellectual or artistic services with creative content, economic value and market objectives; • Are at the cross-road among the artisan, services and industrial sectors; and • Constitute a new dynamic sector in world trade. 	<ul style="list-style-type: none"> • It can foster income-generation, job creation and export earnings while promoting social inclusion, cultural diversity and human development. • It embraces economic, cultural and social aspects interacting with technology, intellectual property and tourism objectives. • It is a set of knowledge-based economic activities with a development dimension and cross-cutting linkages at macro and micro levels to the overall economy. • It is a feasible development option calling for innovative, multidisciplinary policy responses and interministerial action. • At the heart of the creative economy are the creative industries.

Source: Creative Economy Report 2008, pg. 13 and 15

Regardless of the way in which creativity is interpreted, there is no doubt that, by definition, it is a key element in defining the scope of the creative industries and the creative economy. To make sure one can clearly distinct between notions creative industries and creative economy Table 1. presents UNCTAD definition of both of them.

Creative economy and economic growth¹⁰

UN Creative Economy 2008 provides empirical evidence that the creative industries are among the most dynamic emerging sectors in world trade. Over the period 2000-2005, trade in creative goods and services increased at an unprecedented average annual rate of 8.7 per cent. World exports of creative products were valued at \$424.4 billion in 2005 as compared to \$227.5 billion in 1996, according to preliminary UNCTAD figures. Creative services in particular enjoyed rapid export growth – 8.8 per cent annually between 1996 and 2005. This positive trend occurred in all regions and groups of countries and is expected to continue into the next decade, assuming that the global demand for creative goods and services continues to rise. Worldwide, the creative industries are growing faster than other economic sectors, reflecting the changes in today's wealth-generating economies. Estimates value the world market for creative industries at over \$3.04 trillion. By 2020 this sector is estimated to be worth \$6.1 trillion.

The creative economy in developed countries. In the developed world during the 1990s, the creative industries grew faster than other sectors, including services and manufacturing. One of the major drivers of this growth was the extraordinarily rapid pace of technological change in multimedia and telecommunications that occurred during this period. In particular, digital technology opened up a range of new media through which cultural content could be delivered to consumers, and the creative industries responded by supplying an ever-widening array of creative products to the market. On the demand side, rising real incomes among consumers in developed countries, coupled with changing preferences for modes of cultural consumption, helped to sustain the growth of the creative economy. By the middle of the first decade of the new millennium, the proportion of GDP contributed by the creative industries in developed countries averaged around 3 to 6 per cent. For example, recent estimates collated by OECD for member countries indicate that the creative industries in France and the United States made up about 3 per cent of gross value added in 2002-2003 and almost 6 per cent of gross value added in the United Kingdom.

The creative economy in developing countries. The creative economy also seems to be a feasible option for developing countries. If effective public policies are in place, the creative economy generates cross-cutting linkages with the overall economy at macro and micro levels. It thus fosters a development dimension, offering new opportunities for developing countries to leapfrog into emerging high-growth areas of the world economy. The engagement of developing countries with the creative economy varies dramatically around the world partly because of differences in the industrial and export capabilities of different countries but partly also because of variation in the extent to which different countries have recognized and implemented a deliberate development agenda for the creative sector. In Africa, for instance, there has been only limited commercialization of creative products. Perhaps the most obvious illustration is music, a form of cultural expression that is of particular importance on the African continent. Much of the music industry in Africa remains based on live performance, with formal production and circulation of music products still awaiting further development. A salient issue here is that developing countries commonly lack the institutional resources to manage copyright collection and payment systems. Accordingly, star performers are frequently attracted overseas in search of wider opportunities or simply in pursuit of payment for what they do. Some areas of Asia, by contrast, are at the leading edge of innovation in creative production, as in the case of video games in the Republic of Korea. Likewise, a number of Asian cities are formulating urban development strategies with a strong emphasis on cultural and creative activities. In the Caribbean and Central and South America, the state of the creative industries varies considerably across the board, with different industries being the focus of attention in different countries, such as publishing in Argentina, music in Jamaica or the film industry in Mexico.

The creative economy in SEE region. According to the Inga Tomić-Koludrović and Mirko Petrić¹¹ the social context of the “transitional markets” of the SEE region differs significantly from the social con-

¹⁰ The data and interpretations in this paragraph are based on Creative Industries Report 2008

¹¹ “Creative Industries in Transition: Towards a Creative Economy?”, *The Emerging Creative Industries in Southeastern Europe*, pg.7

text of the developed countries, in which both the notions of the “creative industries“ and “creative economy“ originated. These are the societies which, according to the Becks characterization, include “nation state society, collective patterns of life, full employment society and rapid industrialization with ‘unseen’ exploitation of nature“. Although Beck’s characterization has a little bit changed in the meantime, it is still valid. For example, in Richard Florida’s¹² emerging Global Creativity Index, a composite measure of national competitiveness based on his presumed 3T’s of economic growth: technology, talent and tolerance, the only three countries from the SEE region are Bulgaria, Romania and Croatia. Unfortunately, in 2005 Croatian rank was thirtieth, Bulgarian thirty-one while Romanian was the last forty-fifth. To make things worst, other SEE countries were not represented.

The role of education

Although a lot depends on the individual and his family, it is the education system on all its levels that is responsible for the quality of learning in a society. Since „learning refines the existential value of behaviour“, the knowledge acquired through learning is then the basis of such values. Unfortunately, this knowledge is still acquired through passive techniques used by our educational institutions that turn the users of education into mere prompters of the scientific truth. In any case, before designing curricula in its education system, the state must take into account its development orientation and find and clearly express its answer to a very important question: Does it see its people as agents or as objects of social policy? Logically, the answer to this question provides the basis for designing strategies of economic reforms, particularly the educational ones. If a state manages to make even the slightest progress in encouraging creativity of pupils and students, then on the level of society it will gain much more in developing creative entrepreneurship. In such a way, all the educational institutions, particularly universities, become brokers in the labour market. This encourages job creation, reduces the brain drain and creates the preconditions for having sustainable economic development and not only the growth *per se*.

Bernadette Walker-Gibbs in her recent article¹³ emphasize the impact of creative industries that has potentially changed the higher education sector. If the link between higher education and industry has been emphasised, argue Walker-Gibbs, so too has how higher education engages with these sectors. One of the biggest challenges that face the higher education sector with regards to engaging with creativity and knowledge as commodities is how academic knowledge is conceived and managed. From the perspective of Richard Florida “what’s more fundamentally true is that we now have an economy powered by human creativity... In virtually every industry, from automobiles to fashion, food products, and information technology itself, the winners in the long run are those who can create and keep creating“.

The universities are the necessary but insufficient elements of economic growth. The societies must have the ability to «transform and capitalize on what the university produces». In order to be an effective contributor to regional creativity, innovation, and economic growth, the university must be seamlessly integrated into that broader creative ecosystem.¹⁴

Policy issues

It is quite evident that the policy advantages of developing creative industries seemed clear: jobs and GDP. The creative industries idea “brought creativity from the back door of government“. As a logical consequence, creative industries helped to revitalise cities and regions that have moved out of heavy industry. The creative industries came to be seen as a worthwhile investment in *public policy*. In the UK it has been linked with city and business services, education and health, and science based industries, as part of a new creative innovation services sector that comprises fully one third of the United Kingdom economy (Budget speech, March 2006). The term has been picked up in diverse settings and

¹² Florida (2005), pg. 156

¹³ Bernadette Walker-Gibbs, pg. 5

¹⁴ Florida, R., Gates, G., Knudsen, B., & Stolarick, K., pg. 31

adapted to meet various national and regional agendas. Australia, New Zealand and other Commonwealth countries, as well as Hong Kong and Taiwan were among the early adopters. Now China is catching up too.

The appropriate treatment of the creative industries depends on how society perceives itself – what values, ideologies and practices are accepted. Anyhow, a broad range of measures and instruments are available to governments at all levels to stimulate the creative economy; to reinforce the connections between the economic, technological, social and cultural aspects of its functioning; and to promote the achievement of sustainability through linking economic and cultural development. Here we present some policy directions United Nations consider of use worldwide (UN Creative Industries Report 2008):

Provision of infrastructure. It is a fundamental function of government to create and maintain the conditions under which the economic, social and cultural life of the citizens can prosper. This responsibility takes shape through the ways in which the public sector provides both tangible and intangible infrastructure. Given the predominance of the market economy as the basic form of economic organization in the world today, the types of infrastructure required are those institutions that enable markets to function effectively but at the same time to protect and promote the public interest.

Provision of finance and investment. A major problem in this respect is that entrepreneurs in the creative industries often find it difficult to present a convincing business model and many of the professional skills involved – e.g., choreography, dancing, drawing, editing, weaving, doll-making – simply are not perceived as leading to profitable businesses. Because of this, many small creative industries do not have access to credit facilities or to the loans and investments that would make their businesses more viable. Sources of finance for businesses in the creative economy may arise from public-sector funding programmes of various sorts, private-sector investment, and public-private partnerships involving joint contributions and responsibilities.

Creation of institutional mechanisms. Public finance and investment in the creative economy are likely to extend beyond cultural ministries and to involve, in particular, ministries responsible for industrial development and technology. There is a need for a workable and flexible institutional mechanism to put in place cross-cutting policies.

Development of export markets. Strategies for developing domestic creative industries that are outward-looking and that actively target FDI and export markets in addition to local markets for creative products have proved successful (in this context East Asia countries stand out).

Protection of creator's rights. Because creative industries are based on intellectual property, an important aspect of the legislative framework for creative industries is the enforcement of intellectual property rights relating to cultural activities and creative goods and services. Effective intellectual property regimes that protect the originators' interests and stimulate creation and innovation are therefore a pre-requisite for access to global markets.

Establishment of creative clusters. Clustering is a system for networking of independently functioning units that optimizes the individual unit's function and potential instead of exploiting them. A cluster brings together individuals and groups that create products that compete but must also cooperate within the broader context of the creative industries. Cluster development also contributes to the creation of synergy both within and between different subsectors of the creative industries.

Institution of effective data-collection measures. Analysis of creative industries points to the need for the establishment of a methodology for the collection and analysis of universally comparable and reliable data on creative industries.

Concluding remarks

Creative industries join the two separate entities - creativity and industry - in order to develop innovative and entrepreneurial practices for the creative professional. Competitiveness also nowadays goes through a metamorphosis - it changes from the quality and economic efficiency of the product to the

prestige in innovations, patents and copyrights which ensure profit on the basis of creativity. In contemporary economies it is the industry that generates the fastest growth.

It is evident that economic contribution of the creative industries in the developed countries is widely recognized. Recent research (UN, OECD, NESTA) shows that the creative industries have grown strongly in rural regions too, although they account for a smaller share of economic activity than in urban area. The creative economy also seems to be a feasible option for developing countries.

The success of an education reform can be measured by the number of people employed in the private sector and the number of self-employed. An economic crisis may not be an excuse! Somebody nicely said that the crisis situations are an excellent incentive for moving faster. Let us just recall the image of an ambulance car that moves fast in the traffic having the priority only in emergency cases. Our social and economic moment is such that the reform of education has to switch on the rotation light and be given the priority right to move faster than the others.

The Creative Industries Report 2008 is the first to present the perspectives of the United Nations as a whole on this important issue. It provides empirical evidence that the creative industries are among the most dynamic emerging sectors in world trade and addresses the challenge of assessing the creative economy with a view to informed policy-making by outlining the conceptual, institutional and policy framework in which this economy can have higher growth rates and widely contribute economies and societies as well.

Concluding my presentation in the round table on creative industries organized in Podgorica in 2005 by the British Council, I pointed out that the aluminium production participates in the gross domestic product of our 'ecological' country with more 40% and that the time has come to replace the aluminium in Montenegrin GDP with the products and services of creative industries. Every economy, particularly a small one, has to take care of adequate valorisation not only of natural but also of human resources. This is particularly emphasized if the economic development is based on extensive industries like tourism and agriculture, as it is the case in Montenegro. We often forget that these are the industries where, if you want to give an estimate of the potential profit, you have to look at the sky first. It is obvious that we will have to extend the definition of natural resources to include the human brain as well.

References

- “The Emerging Creative Industries in Southeastern Europe“, collection of papers from the course on *Managing Cultural Transitions: Southeastern Europe – The Impact of Creative Industries*, Inter-University Centre, Dubrovnik, 8-15 May, 2005
- Creative Economy Report 2008, The Challenge of Assessing the Creative Economy: towards Informed Policy-making*, United Nations, 2008
- Evans, Richard I.(1988): *Creators of Psychology – Talks with Creative Contributors*, Nolit, Beograd
- Florida, R., Gates, G., Knudsen, B., & Stolarick, K. (2006). *The university and the creative economy*. Retrieved November 23, 2008, from <http://www.creativeclass.org/>
- Florida, Richard (2005): *The Flight of the Creative Class*, New York, HarperBusiness
- Hartley, John (2007): *Creative Industries*, CLIO, Belgrade
- Naisbitt, John (1982): *Megatrends – Ten Directions Transforming Our Lives*, Warner Books
- Shakespeare, William (2003): *Hamlet*, Yale University Press

Challenging Human Capital Measurement – Learning Process

Živka Pržulj, Gordana Vukelić¹, Marija Vuksan Delić²

ABSTRACT – *The importance of information and communication technologies (ICT) for the development of information society (IS) and new economy (NE) is more than evident. But less obvious is their negative influence on the uneven economic development and rising differences between individuals, households, companies, or regions related to the access to and usage of ICT. This phenomenon is called “digital divide” and it is very important to develop corresponding system of measurement of its effect at national and international level. The aim of this paper is to review the existing concepts and systems of IS indicators and measurement of digital divide present in the economic theory. The paper attempts to analyze challenges, problems and opportunities for economic analysis and statistical monitoring emerging from the social and economic influence of digital divide. We conclude that the economic and statistical concepts and methodologies of research need to pay more attention to composite indexes over particular indexes. Only composite indicators can present adequate guides for creators of economic policy to reduce the social and economic digital gap during building and development of IE and NE in the country. The role and significance of human capital in modern-day business is not a question any more. The environment characterized by limited natural resources, intensive competition on global market and common business crises is recognizing the importance of human capital for economic activities. Consequently, there is greater need for defining indicators for its measuring and valuing. The aim of this paper is to discuss current issues, applicability and usefulness of existing solutions, and answers for this problem.*

KEY WORDS: *human capital, strategy, measuring process, organizational performances*

New focus

Process of globalization, higher financial capital accessibility and new business concept on the open market initiated the need for defining more dynamic, adaptable and sustainable competency model. The process of analyzing external competition is replaced with analyzing internal competencies. Practices have shown how harder is to copy competencies, knowledge and skills than the products. This is the root of the *model of key competency* which identifies learning and knowledge creating as a main tool for gaining competitive advantage. Strategies that are based on the competencies depend on people, thus the lack of knowledge and expertise influence development of new products.

Human capital is becoming a fundament for value creation in the New Economy. Various studies are showing that 85% of modern corporations are based on intangible assets. [1] This change in value recognition has resulted in companies' understanding that educated human capital is limited resource; hence it is important to define appropriate techniques for managing it. Therefore, top management need to focus on companies' purpose, processes and people, alongside its strategy, structure and system.

The term “human capital” mainly symbolizes people capacity to create added value for the company. This is particularly associated with knowledge as a core resource in information era. As owners of knowledge and skills, people have unique capacity to influence all other resources. Recognition of this capacity is supported with a difference between companies' accounting and market value. At the same time, this could represent the formula for measuring human capital. This is inducing the need to position human capital as a base for defining and creating strategy.

¹ Živka Pržulj, Gordana Vukelić, Belgrade Banking Academy, Belgrade

² Marija Vuksan Delić, American University of Central Asia

Measuring issues

One of the most popular questions in modern management of human resources is related to process of measuring and valuing. Such trend is rooted in widespread thinking about HR influence on organizational performance and attempt to justify focus and investments in HR activities. At the same time specificities of individuals with knowledge and capacities are becoming more evident, and numerous factors that can influence usage of those capacities. For these characteristics Cost-benefit analysis is not providing sufficient results. Because of behavior factors, determination and social interactions this asset is hard to measure, so logically there is question - how to manage something you cannot measure? This is clearly shown in Table 1. where Becker and allies compare companies' indicators of tangible and intangible assets. [1]

Table 1. Tangible versus Intangible assets

Tangible Assets	Intangible Assets
Readily visible	Invisible
Rigorously quantified	Difficult to quantify
Part of the balance sheet	Not tracked through accounting
Investment produces known returns	Assessment based on assumptions
Can be easily duplicated	Cannot be bought or imitated
Depreciates with use	Appreciates with purposeful use
Has finite applications	Has multiple applications without value reduction
Best managed with "scarcity" mentality	Best managed with "abundance" mentality
Best leveraged through control	Best leveraged through alignment
Can be accumulated and stored	Dynamic, short shelf life when not in use

Source: Becker/Huselid/Ulrich: The HR scorecard: Linking People, Strategy, and Performance, Harvard Business School, 2001, pg.7

Measuring human capital refers to three aspects: measuring and valuing human potential as organizational capacity to gain strategic plans, measuring process efficiency of human capital management, and measuring individual and team performance.

HR as strategic potential

Measurement of intangible asset has been thoroughly analyzed by Kaplan and Norton, whom have embodied human capital in Balanced Scorecard strategy map. [5] Such concept is suggesting perception of human resources as strategic resources. This implies necessity to link human capital with process of strategy implementation. As an alternative to financial indicators these authors have recommended group of balanced performance indicators (Balanced Scorecard) which including both, financial results and intangible outcomes of those results. Balanced Scorecard is contributing to the identification of strategically relevant HR factors and activities that brings us closer to the solution of measuring problem.

Brian E. Becker/Mark A. Huselid/Dave Ulrich are developing implementation process of HR as a strategic partner in Balanced Scorecard concept and stating necessity for development of the new perception for HR role within organization. They are identifying five steps that are related to defining base for managing human resources as strategic resource. The next is to define measuring system that would not only lead managing process, but would also formalize HR performance contribution to organization. However, Balanced Scorecard is a strategic tool, not a tool for measuring human capital, therefore Becker and allies are developing HR Scorecard concept that is supplementing Balanced Scorecard. The objective to measure HR contribution to organizational performance implies as necessary to create HR deliverables and to measure them precisely. Perceiving HR as a strategic partner

demands new perception of lines managers and HR professionals. It is important to comprehend the nature of strategy implementation process and to define what is required to adequately manage such resource.

Developing HR measurement system is directing us to the following four themes:

1. **High Performance Working System (HPWS)** which is based on policies, processes and practices with high performance. By Pfeffer these group contains: selective employment, high salaries, benefit packages, shareholding, information exchange, development and training focus, participation and self-sufficiency, job protection, etc. [3]
2. **HR system linking** with initiators for strategy implementation.
3. **HR efficiency** that indicates differentiation between HR costs and investments required for development of strategic HR within organization (e.g. training).
4. **HR deliverables** over which HR system is generating values within organization. These are characterized as organizational capacities relevant for strategy implementation and combine individual competencies with organizational systems and add value within organizational value chain. Becker and allies are underlining possibility for hypothetical strategic influence of HR deliverables and advice managers to secure its real influence to organizational performance. [1, pg. 71]

HR processes

When elaborating measuring and valuing capacities of HR processes to generate performances, it is important to analyze each process from the view point of the organizational success. This is not only a question about the effect on organizational costs, although it is important, but equally about support to the strategy implementation and development of employee's potential. In addition, it is important to create proper motivational tools that will satisfy employee's needs and help them to identify with organizational goals. Even the Michigan School at the beginning of 80s has pointed importance of generic HR processes that entails selection, development and education, performance valuing and awarding.

Dave Ulrich is pointing on future strategic focus of HR management in comparison with daily operational and administrative management. [6] While developing such concept, Write and allies are dividing HR management activities to three layers: transactional, traditional and transformational. [7] **Transactional layer** covers administrative activities and in the past was covering 65-75% of time; **traditional layer** entails basic HR functions (recruitment and selection, training, managing professional success, awarding and relations with employees) and takes 15-30% of HR professionals time; and **transformational layer** (5-15% of time) that covers knowledge management, strategic decisions, culture change and development of management. Organizational performance is strongly contributed by transformational level, so it's underlined that HR professionals are primarily directed to these activities. Based on survey with 429 companies from 1998, Becker and allies have developed the table which is summarizing influence of individual HR practices on organizational performance.

Table 2. Comparison of High and Low HR Management Quality

	Bottom 10% HR Index (42 firms)	Top 10% HR Index (43 firms)
HR Practices		
Number of qualified applicants per position	8.24	36.55
Percentage hired based on a validated selection test	4.26	29.67
Percentage of jobs filled from within	34.90	61.46
Percentage in a formal HR plan including recruitment, development, and succession	4.79	46.72
Number of hours of training for new employees (less than 1 year)	35.02	116.87
Number of hours of training for experienced employees	13.40	72.00

Percentage of employees receiving a regular performance appraisal	41.31	95.17
Percentage of workforce whose merit increase or incentive pay is tied to performance	23.36	87.27
Percentage of workforce who received performance feedback from multiple sources (360)	3.90	51.67
Target percentile for total compensation (market rate=50%)	43.03	58.67
Percentage of the workforce eligible for incentive pay	27.87	83.56
Percentage of difference in incentive pay between a low/performing and high/performing employee	3.62	6.21
Percentage of the workforce routinely working in a self/managed, cross/functional, or project team	10.64	42.28
Percentage of HR budget spent on outsourced activities (e.g. recruiting, benefits, payroll)	13.46	26.24
Number of employees per HR professional	253.88	139.51
Percentage of the eligible workforce covered by a union contract		

Source: Becker/Huselid/Ulrich: The HR scorecard: Linking People, Strategy, and Performance, Harvard Business School, 2001, pg.16

This table is conforming high influence of valuing professional success (performance appraisal), training, awarding and recruitment on organizational performance. Hence, for each of the HR management processes there is challenge to conduct efficiency measurement (particularly selection and training). Gomez-Meija and allies value HR management efficiency through the client satisfaction indicators, where by clients they consider employees and line managers to whom HR professionals provide services. [2]

Individual level

Grading performances of individual employees represents the nucleus of human capital measurement. Such HR management process is securing feed back information to employees and assessment to management regarding strengths and weaknesses of human capital. Within HR management practices are developed different methods and techniques for valuing professional success in relations to the factors (results, knowledge, behavior, relations, etc.) that are relevant for organizational success. Symbolically they are named HR Tools for Global Competitiveness. Key purpose of the process is development of employee's competence as basis for human capital. Assessment of employee's performance is the key process for decision making in relation to employees (development, training, awarding, firing, etc.) and in this way establish criteria that are important for organizational success.

Conclusion

Human capital is perceived as strategically the most important asset of modern organizations and knowledge as key resource in informatic revolution. For its importance, as well as specificities of human capital, measurement of such precious asset becomes huge challenge for theory and practice of HR management. Measurement is referred to three levels: overall organizational human capital, human resources management processes and individual level.

It is important to underline that all three levels of HR measurement and valuing are interlinked and conditioned. Therefore, valuing and assessing individual performances is basis for perception of overall human potentials and direction of development. Without efficient HR processes we cannot speak about contributing to strategies. Linking HR architecture with strategic map is framing solutions for HR influence to organizational performance.

Beside plethora of theoretical and practical solutions, problems of HR measurement are still remaining as challenge for professionals and practitioners in the field. These are related with a nature and specifi-

cum of human resources in relation to other business resources. Therefore, the measurements are also carrying subjective elements and we should rather use the term evaluation than measurement.

References

- Brian E. Becker, Mark A. Huselid, Dave Ulrich, 2001, *The HR Scorecard*, Harvard Business School Press, Boston.
- Gomez-Mejia, Anne S. Tsui, 1988, *Human Resource Management: Evolving Roles and Responsibilities*, Washington DC.
- Jeffrey Pfeffer, 1998, *The Human Equation*, Harvard Business School Press.
- Rao, TV, 2004, *Performance Management and Appraisal Systems*, Response Books.
- Robert S. Kaplan, David Norton, 1996, *The Balanced Scorecard: translating Strategy to Action*, Harvard Business School Press.
- Ulrich, Dave 1998, *Human Resource Champions*, Harvard Business School Press.
- Wright, P. ,G. McMahan, S. Snell, B. Gerhart, 1998, *Strategic Human Resource Management: Building Human Capital and Organizational Capability*, Cornell University.

Appliance of the Concept of Learning Organization in Developing Tourism of Bosnia and Herzegovina

Zijada Rahimić, Amra Kožo¹

ABSTRACT – *The unpredictable trends in global market and the constant mobility of world population unquestionably confirm that international travelling have ceased to be a privilege of just rich people. The opening of new markets, the continuously growing offer and the numerous effects of globalisation impose to tourist organisations an obligation to consider the needs and wishes of their customers more than ever before. From the aspect of geography, B&H is just a small part of the global tourist market. The very market of B&H is manifested in a quite unsystematic current tourist offer and relatively undetermined management. The quality of service depends both on the synergetic activities and team work of all employees and on their individual results. It is unquestionable that knowledge contributes to the quality of service and that it is the only reliable source of long-lasting competitive advantages.*

The main purpose of this paper is to stimulate B&H managers of tourist organizations to systematically and constantly work on development of knowledge, abilities and creative traits of their employees. In this way the concept of lifelong learning should become a basis of competitive advantages. Therefore, the main thesis advocated herein is based on the assumption that learning organization may create tourism offer that would be with more quality and attractiveness for the demands and high standards of global customer. Throughout the paper we will try to confirm the correctness of this thesis based on the empirical research in the current educational structure of the people employed in tourist organisations.

KEY WORDS: *learning organisation, lifelong learning, knowledge economy, human resource development, tourism*

Introduction

The word "learning" was coined in the 1980s to describe organizations that experimented with new ways of conducting business in order to survive in turbulent, highly competitive markets². The learning organization and the concept of continuous learning do not mean a continuous attendance of certain formal learning programs – it implies how the learning should be so that your personal experience becomes your own experimental laboratory. Simply put, continuous learning is the ability to learn how to learn. Analog to this, all organizations regardless to their activity need to establish structure and processes that cultivate the continuous learning.

The main purpose of this paper is to stimulate B&H managers of tourist organizations to systematically and constantly work on development of knowledge, abilities and creative traits of their employees. In this way the concept of lifelong learning should become a basis of competitive advantages. Therefore, the main thesis advocated herein is based on the assumption that learning organization may create tourism offer that would contain more quality and attractiveness for the demands and high standards of global customer. Throughout the paper we will try to confirm the correctness of this thesis based on the empirical research in the current educational structure of the people employed in tourist organizations.

¹ Zijada Rahimić, Amra Kožo, School of Economics and Business, Sarajevo

² Schon, D. A. (1987): „Educating the reflective practitioner: Toward a new design for teaching and learning in the professions“, San Francisco, CA: Jossey-Bass

Human resource development

The unpredictable trends in global market and the constant mobility of world population unquestionably confirm that international traveling have ceased to be a privilege of just rich people. The opening of new markets, the continuously growing offer and the numerous effects of globalization impose to tourist organizations an obligation to consider the needs and wishes of their customers more than ever before. From the aspect of geography, B&H is just a small part of the global tourist market. The very market of B&H is manifested in a quite unsystematic current tourist offer and relatively undetermined management. The quality of service depends both on the synergetic activities and team work of all employees and on their individual results. It is unquestionable that knowledge contributes to the quality of service and that it is the only reliable source of long-lasting competitive advantages.

Human resource development (HRD) has been equally important in small and large companies but has been differently manifested in both respectively. It is indisputable that small companies do not possess equal resources as the large one do, but nevertheless they must keep their employees content and productive. HR practice in small companies is rather informal, reactive and short term oriented. As it will be further described, even more than 90% of the B&H tourists companies have been classified in the domain of small and medium enterprises (SME). Considering the fact that small and medium enterprises are places where people represent the key of competitive advantages therefore the significance of the organizational learning research in the context of small companies has to be emphasized. The direct communication between managers and employees in SMEs tends to decrease the need for the formal control systems and reduces paper work.

Also, the work impact of each employee in the achievement of the organizational performances has been much clearer. Thus the employee may easily observe own contribution in the fulfillment of the company goals. Clear picture of own contributions represents the way of motivation for the employees and manager has been a direct link between the strategic planning and the employee. The fact that the manager usually does not have enough time and/or knowledge that he can invest in the education of the employees can arise as a problem. As one of the major problems that the managers may be faced with has been a frequent employee turnover, especially among the young staff in whose development managers of small enterprises should invest.

In the context of small companies' business as the most appropriate would perhaps be the definition of the learning organizations given by Huber in 1991 „an organisation learns if any of its units acquires knowledge that it recognizes as potentially useful to the organisation.³“. Also, the same author emphasized that learning does not always have to be conscious or intentional, which is especially important for the small companies in which the tacit knowledge represents an important part of the overall process of the socialization. Regardless to the definition of the learning concept, learning has to be part of the overall strategy and part of the company's structure. The change has to be obvious on all levels of the company. In relation to this the main task of all B&H tourist organization's management has to be creation of such organizational culture that would promote development of the knowledge, skills, capabilities and personal characteristics of its employees (KSAT).

Analysis of the human resources potentials among the B&H tourism sector

The research whose main aim was the analysis of the human resources potentials in the B&H tourism sector has been performed electronically in April 2008. This research has served for detailed elaboration and analysis of the B&H tourism sector. Based on this the initial analysis was published in the article „The significance and role of the University Institutions in Supporting and Developing the

³ Huber, G.B. (1991), „Organizational learning: the contributing processes and the literatures“, *Organization Science*, Vol. 2 No. 1, pp 88-115

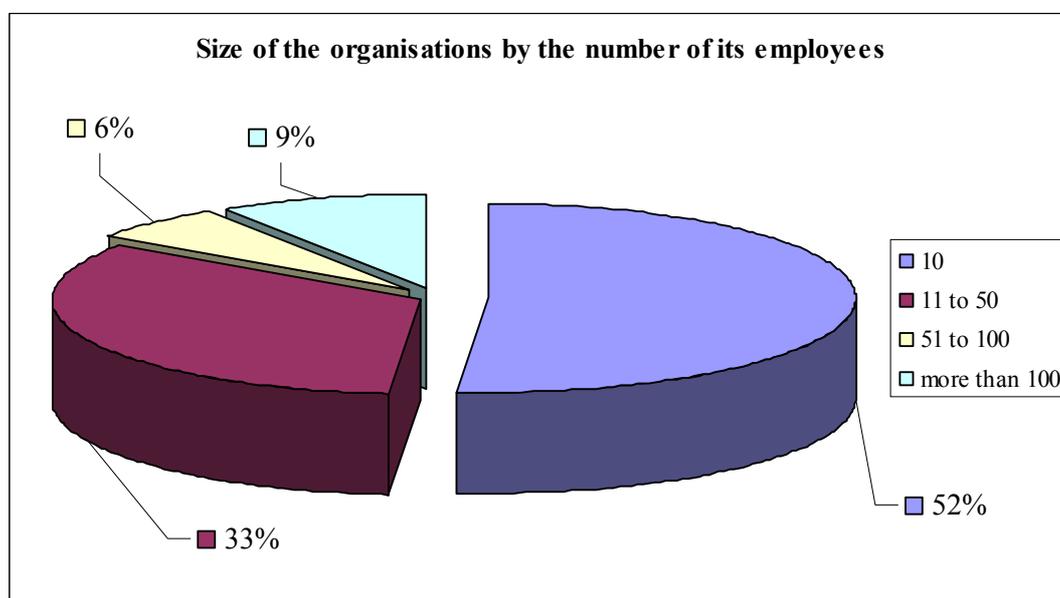
⁵ Rahimić Z., Kožo A. (2008): „The significance and role of the University Institutions in Supporting and Developing the Tourism of B&H“, *ICES Conference Proceedings Transitional Challenges of EU Integration and Globalization*, School of Economics and Business, Sarajevo, (October 2008): 267 - 269

Tourism of B&H^{4c}. While the aforementioned article emphasized the role of the educational institutions and state sector in developing of the B&H tourism this article should initiate the internal developing of each company through the encouragement of the human resources development.

Although aware that visible and significant results require far more investments and efforts comparing to what was presented through the aforementioned and this article, we emphasize still that one of the main aims of this paper was the assistance to the B&H sector to (re)define its HRD strategies leading to the higher level of the tourist requirements satisfaction.

Survey questionnaires with corresponding questions were forwarded to 189 addresses (139 tourist agencies and 50 hotels) in Bosnia and Herzegovina. It should be noted at the beginning that, in technologically developed environment, from 50 addresses (26,45%) the survey questionnaires have been returned or rejected automatically because the e-mail addresses were not regularly updated. A total number of 70 organizations have answered to the survey that equals 50,36 % of the total number of successfully sent questionnaires.

Figure 1. Size of the organizations by the number of its employees

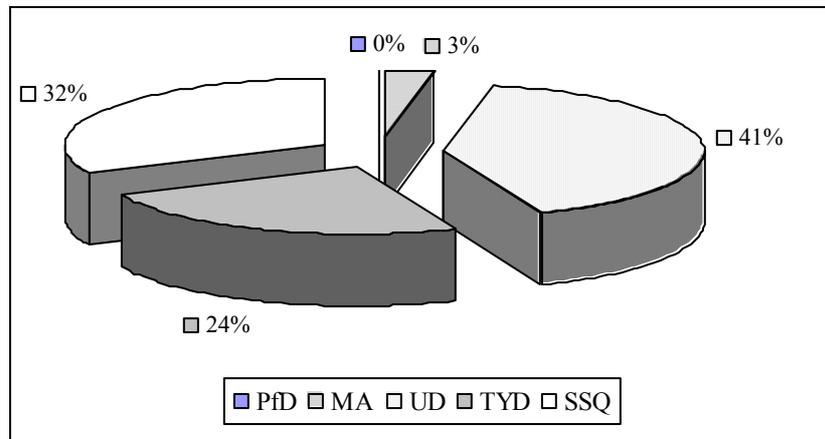


The research performed over the tourist agencies and hotels in Bosnia and Herzegovina shows that 51,52% of these organizations employees up to 10 employees while 33,33% of them have 11 – 50 employees. Only 6,06% of the tourist organizations employees whose number range between 51 and 100, while the 9,09% of them employees more then 100 employees⁵.

Data on formal education indicates that the employees are predominantly with University degree UD (41,18%), followed by Secondary school qualifications/education SSQ/SSE (32,35%), employees with Two-year Post Secondary School Degree (23,53%), with Master's Degree MA (2,94%) while there were none of the employees in this field with a PhD degree.

⁵ Rahimić Z., Kožo A. (2008): „The significance and role of the University Institutions in Supporting and Developing the Tourism of B&H“, *ICES Conference Proceedings Transitional Challenges of EU Integration and Globalization*, School of Economics and Business, Sarajevo, (October 2008): 267 - 269

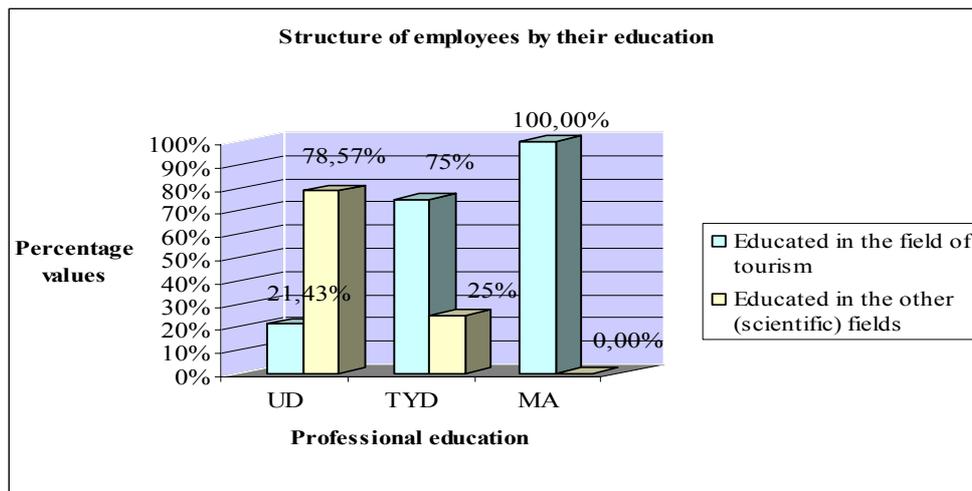
Figure 2. Qualifications/educations of employees



(Legend: PhD, MA - Master's degree, UD - University degree, TYD - Two-year post secondary school education/ two-year degree, SSQ/SSE - Secondary school qualifications/ education)

Out of all employees with university degree 21.43% have graduated at faculties of tourism in USA (in the field of Food and Beverage Management), Canada (training segment of Travel and Tourism Foundation), Serbia and B&H (at the Faculty of Economy in Sarajevo). The others (78.57%) have graduated economics, information technology, political sciences or stomatology. 75% of the category of two-year post secondary school education consists of employees with education in tourism (Two-year Post-secondary Tourist School in Dubrovnik, Croatia) while 25% have been educated in the field of economics. According to the sample, 2.94% of respondents have MA in Tourism and Hotel Management (Croatia), while none of them has PhD in this field.

Figure 3. Structure of employees by their education



Organization learning has become one of the most important strategy to create competitive advantage in organizations, particularly because competent employees are valuable resource for them. Regardless to which fundamental type of the organization we talk about and the type of the organization which

uses them, each company should incorporate in its culture the elements of the learning organizations. These elements should be independent from the stiff organizational variables. „An important feature of the learning organization has been that the invention of new knowledge has not been a specialized activity...it represents the way of behaviour, the way of existence in which each knowledge worker is to say an entrepreneur⁶“.

The model which can be of special use in small enterprises to help them in building the core values, norms and beliefs that would support the creative and positive atmosphere in the organizations, is the „OCAPAC“ model. OCAPAC⁷ is the acronym of the following words: openness, collaboration, authenticity, proactively, autonomy and confrontation where each of them is characterized by:

1. Openness – openness to new proposals, ideas and suggestions by all employees in the organizations
2. Collaboration – encouraging and motivating the individuals to create synergetic teams as well as connecting individual departments into joint cooperation
3. Authenticity – mutual trust among employees, excellent internal communication
4. Proactivity – employees are encouraged to take the initiative
5. Autonomy – employees are given certain degree of autonomy to work independently
6. Confrontation – open discussion on each problem and confrontation with each controversial matter without delay.

In the company able to create atmosphere like described each event could be observed as a learning opportunity. Certainly, the learning should always include growth, capacity increase and change. Within the context learning should include personal and professional change parallel with increased comprehension of own personality and educational role that each employee in the organization plays.

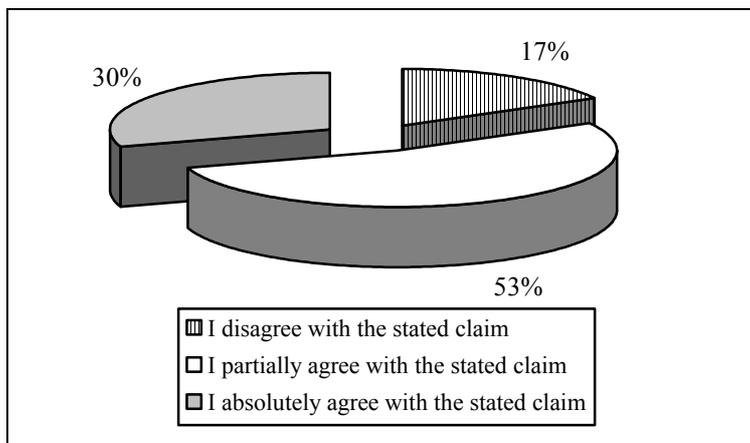
Furthermore, the learning has to include both personal and professional change, parallel with increased comprehension of own personality and educational role that each employee holds in the organization. The concept of visionary thinking, the key philosophy creation and inspiring goals have been usually linked to the large and successful companies. However, if the small companies have wish to advance their developing then they should reject the mental view that these companies have long been perceived as. The managers of the companies, mostly their founders and owners should create the atmosphere of support in which the potentials of all employees should be expressed and in which there will be no difference between the job performance and learning; yet the learning will be the integral part of each work. Entrepreneurial companies, as B&H companies predominantly are, at the initial phases of their development should nurture the entrepreneurial spirit itself, the spirit that has tendency towards risk, fast changes, easy adjustments to the newly developed opportunities in the market etc. Such atmosphere could be encouraging to the employees because it can easily bring vast number of challenges and chances to prove oneself. Secondly, small companies have often been disputed to have the undeveloped organizational spirit and that the organizational culture in these companies depends from the attitude created by the management of such company.

The research carried out in the B&H tourist sector, unfortunately, shows data in favor of the last statement. According to the results of the research, the B&H tourist sector does not show tendency to recruit and to develop people formally educated in this field. To the following question: „Preference in the employment of the new staff in my organization, has been given to the candidates in the tourist field“ where three answers were offered the following results have been obtained:

⁶ Bahtijarević-Šiber, F. (1999): *Menadžment ljudskih potencijala*, Golden marketing, Zagreb

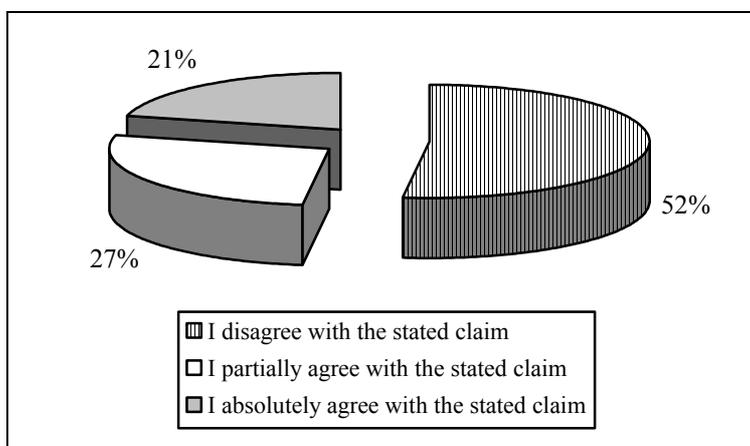
⁷ Nageshwar R., (2002.): *Reorienting HRD Strategies for Tourist Satisfaction*, Journal of Services Research, Volume 2, No. 1

Figure 4. Preference in the employment of the new staff in my organization, has been given to the candidates in the tourist field



Very similar answers have been obtained to the questions about the openness of the organization to the young employees that have just been trained for the work in the tourist field. To the question “The organization I have been employed by usually receives students of Tourism for internship, practice, specialization etc” the results are shown in figure 5.

Figure 5. The organization I have been employed by usually receives students of Tourism for internship, practice, specialization etc.



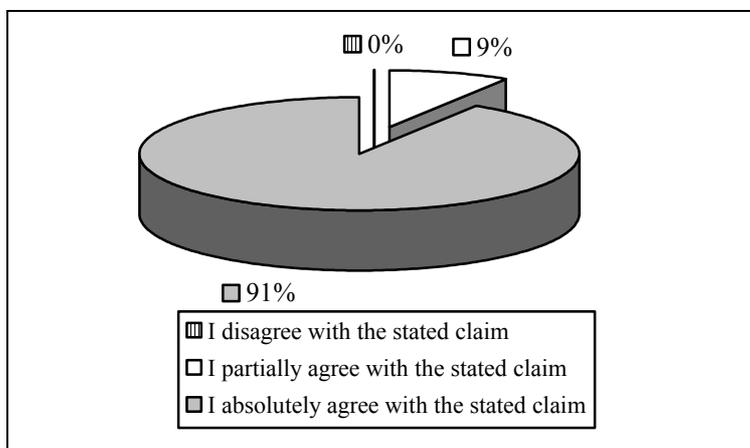
The results of the aforementioned research clearly show that the small organizations have not been ready to invest in the human resources development even when talk about partially engagement of students in the form of part time jobs, specialization, internships and similar. The factor of weak business operating can not be considered as justification for this non-engagement because the student praxis has usually been in the form of volunteering. Most probably the organizations have not yet noticed the benefits they could gain from the young potentials that have most certainly been innovative, creative and have the possibility of further progress. A very important fact to be considered is the fact that the strongest battles led in nowadays world market have been exactly the battle for the human resources. Taking into account the effects of the globalization and increasing presence of the multinational companies in Bosnia and Herzegovina, observed talents and human resources may easily move to other companies if the parent company fails to create adequate motivation mechanisms. “With a better qualified younger workforce occupying the position in the future, and with a tremendous oppor-

tunities opening for them elsewhere, the key task before the policy makers in organizations is to keep the tourist contact employees satisfied. The greatest challenge will be to empower people by creating new form of work organizations with new structure and work culture...⁸⁷⁷

Building blocks for development of learning organization

As being faced with strong forces from the markets, all organizations have learning and creating knowledge workers as an imperative. Concept of the learning organization is not new; it has been crystallized in 1990 in *The Fifth Discipline* by Peter M. Senge. According to this concept employees should help companies to create tolerance, strengthen open discussion and to think comprehensively and systematically. Organizations should more easily respond to the unpredictable situations from the market in relations to their competitors who have been applying this concept.

Figure 6. In accordance with the concept of the lifelong learning, I am interested for continuous improvement in the field of tourism



It encourages that in the research conveyed in the B&H tourist sector the fact that the whole sample responded with a positive answer to the question „In accordance with the concept of the lifelong learning, I am interested for continuous improvement in the field of tourism”.

Employees that have expressed their readiness for the realization of the lifelong learning concept may fulfill their intentions more easily if their organizations are learning organizations that is the organization adaptable to the changeable environment. In relation to this the theory contains the three fundamental blocks (building blocks of the learning organization): a supportive learning environment, concrete learning processes and practices and leadership behavior that provides reinforcement⁹. Each of these blocks can be observed and measured independently in relation to the other two blocks. Each company should identify strengths and weaknesses it should work on in order to be able to accept, in a long-term, the concept of the learning organization. The following will be represented through the building blocks:

A supportive learning environment.

A supportive learning environment has four main provisions:

Psychological safety – in order to learn employees must feel safe disagreeing with others, asking “naive” questions, owning up to mistakes and presenting minority viewpoints.

⁸ Nageshwar R., (2002.): *Reorienting HRD Strategies for Tourist Satisfaction*, Journal of Services Research, Volume 2, No. 1

⁹ Garvin David A., Edmondson Amy C., Gino Francesca (2008): „Is Yours a Learning Organization?“, *Harvard Business Review*, (March 2008): 109 - 116

Appreciation of differences – learning happens when people become aware of other different ideas. A competitive spirit could favour arrival of the new energy and motivations and thus nivelate the letargy and sleepiness.

Openness to new ideas – learning is not a plain correction of errors and resolution of problems. It considers new approaches and inventions which happen only if the employees are being encouraged to take the risk.

Time for reflection – When people are overloaded with deadlines and overcrowded schedules their ability for analitical and creative thinking becomes questionable.

1. Concrete learning processes and practice.

Learning organization does not become that by chance or without efforts investment. It develops due to the series of planned steps. Learning process includes generalization, collecting, interpretation and dissemination of information. It also includes experimenting with many projects that could be oriented to client, internal organization, new products, services and concepts development etc.

2. Leadership that reinforces learning.

Learning in the organizations is under the influence of leaders. When leaders actively question and listen to employees, and thereby prompt dialogue and debate, people in the organization feel encouraged to learn. The employees feel free to offer new ideas when people who have power in the organization through their own behaviour demonstrate the willingnes to explore new alternatives.

The three blocks in the organization are supporting each other and in some areas they may overlap/match one another (i.e. the more the leaders of the company support the learning the more it will contribute to creation of a better learning atmosphere).

Psychological safety of the employees where they feel free in expressing their attitudes is considered as one of the crucial factors contributing to embracement of the learning organization concept. In psychologically safe environment employees are glad to express their ideas, questions, worries, it is even considered that they are willing to „fall“ and to learn in that way. The matrix bellow presents the four company types identified through the analysis of the two variables: The Psychological Safety and Accountability for Meeting Demanding Goals¹⁰.

Figure 7. Does Psychological Safety Hinder Performance?

		Accountability for Meeting Demanding Goals	
		Low	High
Psychological Safety	High	<p>Comfort zone: Employees really enjoy working with one another but don't feel particularly challenged. Nor they work very hard.</p>	<p>Learning zone: Here the focus is on collaboration and learning in the service of high performance outcomes.</p>
	Low	<p>Apathy zone: Employees tend to be apathetic and spend their time jockeying for position. Typical organizations in this quadrant are large, top-heavy bureaucracies, where people fulfil their functions but the preferred modus operandi is to curry favour rather than to share ideas.</p>	<p>Anxiety zone: Such firms are breeding grounds for anxiety. People fear to offer tentative ideas, try new things, or ask colleagues for help, even though they know great work requires all three. Some investment banks and high-powered consultancies fall into this quadrant.</p>

¹⁰ Edmondson Amy C. (2008): „The Competitive Imperative of Learning“ *Harvard Business Review*, (July –August 2008): 60 - 67

Companies of the B&H tourist sector are according to the number of employees in the quadrant four and the feeling of psychological safety as well. However, although the characteristic of the quadrant is the high level of psychological safety yet it is noticeable that the B&H hotels and tourist organizations have been on the lower level of psychological safety as indicated in the results of the aforementioned survey. On the other hand, the level of Accountability for Meeting Demanding Goals has been very low due to the fact that many employees do not have an opportunity to implement their ideas in the working environment.

Conclusion

According to Baum „tourism can be conceptualized as a client purchasing the skills, service and commitment of a arrange of human contributors to the experience that they are about to embark upon highlighting the importance of human resource management (HRM) issues and the challenge this poses for tourism managers¹¹“. In large tourist companies human resources issues and factors affecting their performances have been related to their staff thus the role of recruitment and their further development in the aim of strategic goals realization becomes the crucial factor. Large organizations usually have a clearly defined HR department with its activities while in the small organizations the HR activity is usually performed by the owner/founder of the company without separately systematized and planned approach.

Challenges and responsibilities before the B&H tourist sector have most certainly been huge. Factors in the environment in which the B&H companies operate their business have been imposing the need for continuous developing and improving. In order to position suitable competitors advantages it is necessary to answer adequately to very unique demands of consumers specific for the tourism. B&H tourist organizations have been faced with double challenges: to create additional value for both, their clients and their employees as it is the only way they can keep, motivate and encourage them to a more innovative and sophisticated operating. Various challenges could only be met with well educated, trained, energetic, multi-lingual and entrepreneurially educated staff.

The framework of the B&H tourist companies consists of small enterprises that are usually without an adequate material development support. The practice and experience of successful companies has shown that the investment in human resources may advance the overall business manner. This has been especially emphasized in tourism, since people are those who make the difference in the tourist business also being called as people business. The learning organizations and knowledge workers, as the soft element in the organizational culture of each company, form the basis for building the knowledge society (knowledge economy) that the B&H tourist sector should be transformed into.

To achieve the above mentioned elements we would like once again to emphasize the importance of the following elements and the necessity to work on their advancement continuously:

- Appraisal and staff performance evaluation
- Effective staff communication
- Rewarding initiative and excellence
- Empowering staff
- Improved industry – education collaboration¹².

The human resources effectiveness, quality and complete dedication to organizational goals are the critical factors of success in each business. Learning and knowledge should be the way of attitude and existence of organizations especially in developing countries such as Bosnia and Herzegovina.

¹¹ Baum, T. (ed.) (1993): *Human Resource Issues in International Tourism*, London: Butterworth - Heinemann

¹² Page, S. J. And Connell, J. (2006) *Tourism: A Modern Synthesis*, 2nd edn. London: International Thomson Publishing

References

- Bahtijarević-Šiber, F. (1999): Menadžment ljudskih potencijala, Golden marketing, Zagreb
- Edmondson Amy C. (2008): „The Competitive Imperative of Learning“ *Harvard Business Review*, (July – August 2008): 60 – 67
- Essi Saru (2007): „Organizational Learning and HRD: how appropriate are they for small firms?“, *Journal of European Industrial Training*, Vol. 31 No. 1, 2007, pp 36-51
- Garvin David A., Edmondson Amy C., Gino Francesca (2008): „Is Yours a Learning Organization?“, *Harvard Business Review*, (March 2008): 109 – 116
- Huber, G.B. (1991): „Organizational learning: the contributing processes and the literatures“, *Organization Science*, Vol. 2 No. 1, pp 88-115
- Nageshwar R., (2002.): *Reorienting HRD Strategies for Tourist Satisfaction*, Journal of Services Research, Volume 2, No. 1
- Nunes, P.F. and Spelman, M. (2008): 'The Tourism Time Bomb', *Harvard Business Review* (April 2008): 20-23
- Page, J.S. (2007): *Tourism Management: Managing for Change*, Second Edition, Elsevier Linacre House, Jordan Hill, Oxford
- Popisi: Hoteli, moteli i ostali smještajni kapaciteti, Agencije, <http://www.uhr-bih.ba/old/pohotel.html> (accessed 10th March 2008)
- Porter, M.E. (1985): *Competitive advantage*, ed: *Konkurentaska prednost*, Novi Sad: Asee, 2007
- Rahimić Z., Kožo A. (2008): „The significance and role of the University Institutions in Supporting and Developing the Tourism of B&H“, *ICES Conference Proceedings Transitional Challenges of EU Integration and Globalization*, School of Economics and Business, Sarajevo, (October 2008): 267 – 269
- Rowold Jeans, Hochholdinger Sabine, Schilling Jan (2008): „Effects of career – related continuous learning: a case study“, *The Learning Organization*, Vol 15 No. 1, pp 45-57
- Schon, D. A. (1987): „Educating the reflective practitioner: Toward a new design for teaching and learning in the professions“, San Francisco, CA: Jossey-Bass
- Sooyoung Kim (2007): „Learning goal orientation, formal mentoring, and leadership competence in HRD, A conceptual model“, *Journal of European Industrial Training*, Vol. 31 No.3, pp 181 – 194

E-Presentation of Accounting Information

Andijana Rogošić, Branka Ramljak, Ivana Bilić¹

ABSTRACT – Modern forms of communication (such as the Internet) can be used by transparent management to provide more information about the financial performance and position of a business. One of the purposes of financial statements is making information available to all interested external users, especially existing and potential investors and creditors. The management of a modern business can decide to present its organization on a website as the easiest form of corporate communication with stakeholders and the general public. The aim of this paper is to determine the amount of accounting information given by companies with the highest value added in the Republic of Croatia. We assume there is a positive link between achieving higher value added and voluntary disclosure of main financial statements on the company's official website. Statistical methods used to argument this hypothesis will also be used to research how managers, who successfully achieve value added, communicate financial information to interested stakeholders.

KEY WORDS: management, corporate communication, accounting, financial reporting, Internet

Introduction

The main purpose of obligatory accounting activities is to prepare financial statements at least annually. Financial statements provide information about the financial position, performance, cash flow, etc. of an entity - they are the mirror of a company presented to the public, therefore it is very important to produce them (Ramljak, 2006). The accounting information included in those reports are useful to potential investors, employees, creditors and other stakeholders in the economic decision-making process. The globalization in the field of accounting made financial statements more similar and comparable. The Internet, as a new medium of company's management corporate communication with stakeholders, is one of the means of its presentation that allows fast access to financial information. The decision regarding corporate disclosure on the company's official website is on the management.

Corporate communications is a management function that offers a framework for effective coordination of all internal and external means of communications with the overall purpose of establishing and maintaining a favorable reputation with stakeholder groups upon which the organization is dependent (Cornelissen, 2008).

The advent of the Internet is changing the meaning and process of corporate public relations (Iharator, 2001). Nowadays, many companies use the Internet as a very important medium of communications with customers, suppliers, and all interested stakeholders. Financial reporting on the Internet is voluntary in Croatia. Companies that publish their financial statements on the Internet on a timely basis try to establish and maintain a favorable reputation with stakeholder groups. Financial reporting has a critical role in the corporate communication function of building and maintaining relationships with existing and potential investors and creditors.

The primary objective of financial communication is to promote the value, credibility and reputation of the organization in order to achieve a favorable market image about its financial strength (Belasen, 2008). According to IFAC (International Federation of Accountants), Directors and Management have similar responsibilities when the information is communicated by electronic media or hard copy.

¹ Andijana Rogošić, Branka Ramljak, Ivana Bilić, Faculty of Economics, University of Split

Literature review on voluntary corporate reporting on the Internet

A recent extensive research on voluntary financial reporting on the Internet showed that only 32.7% of Croatian listed companies published their balance sheets and income statements (Pervan, 2006). Even fewer companies published other fundamental financial statements. According to the same research (that was fully comparative), 93.3 % of Slovene listed companies published the aforementioned financial statements on the Internet. The analysis showed that larger and more profitable companies publish more financial reports on the Internet. Pervan (2006) concluded that Slovene corporations had statistically significant higher level of financial reporting (as measured with IFR score).

The research carried out on companies in Eastern European countries (Bulgaria, Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia, Slovenia, and Turkey) revealed statistically significant relationship between the extent of information disclosure on the Internet and the company size, the company's activity being in the financial sector, and the fact of employing one of the world's Big Four accountancy firms for auditing the company's books (Bonsón & Escobar, 2006).

Ettredge et al. (2002) carried out a research on US corporations' Internet reporting which showed that there was a statistical and positive correlation between total reporting and the need for capital, corporation size and quality of reporting. This research also revealed that mandatory reporting was statistically significant and positively correlated with the size and the return on profit ratio and that voluntary reporting was correlated with the need for capital, size, information asymmetry and quality of reporting.

The study of the timeliness of corporate Internet reporting by UK listed companies showed that boards with less cross directorship, more experience in terms of the average age of directors, and lower length in service for executive directors provided more timely corporate Internet reporting (Abdelsalam & Street, 2007).

Marston and Polei (2004) studied corporate reporting on the Internet by German companies and concluded that firm size was the only significant explanatory variable for the amount of information disclosed at corporate websites.

Xiao et al. (2004) found out in their research on 300 largest Chinese listed companies that foreign share listings/ownership, use of Big Five international auditor, proportion of independent directors and the IT industry membership had a positive effect on voluntary Internet disclosure.

Most of the authors cited above agree that there is positive statistical correlation between voluntary financial reporting on the Internet company size and the fact that companies use world biggest accountancy firms for auditing.

Since Internet reporting practices are still evolving, there is a great scope of research in this field regarding the type of reporting, extent of disclosure, authenticity of disclosed information, timely disclosure of information, standardization of form of disclosure, accountability issues, acceptability of disclosed information to regulators and auditors, security issues related to disclosed information (Divya & Garg, 2008).

Hypotheses

Motivated by the assumption that there was no study on the relationship between value added and corporate disclosure, we decided to do a research on that subject.

Value added is a relatively new performance measure whose basic concept was developed on income statement elements (Belak, 2003). Belak pointed out that traditional business performance measures, such as profitability, did not give enough information on company's achievement and that those measures were the result of different business and accounting practices. The value added ratios can significantly supplement improve the vision of company's performance.

Bearing the above, the first hypothesis is:

H₁: The amount of information for investors published on company's official website is positively related to company's value added.

The Supervisory Board is an important part of corporate management structure and is also a link between stakeholders and Board of Directors who often have different interests and goals. Since listed companies have the obligation to be more transparent than other companies, their Supervisory Board information should be published on corporate website.

The second hypothesis is therefore as follows:

H₂: Listed companies publish Supervisory Board information on their websites more often than unlisted companies.

Research methodology and results

Our research was carried out in Croatia in October 2008 and focused on 50 Croatian companies with the highest value added in the year 2007 (according to the Institute for Business Intelligence).

This research was based on three aspects of Corporate Web Communication (CWC):

- Corporate Web presentation,
- Accounting information in financial statements,
- Voluntary management information.

Corporate Web presentation (CWP) includes the basic elements of Web presentation such as: the existence of an official website, English version of the website, internal search engine, and direct link to contact information. In the context of financial statements disclosure, part of CWP are also the existence of a direct link from home page to financial reporting page, the quality of financial statements presentation and the availability of additional information useful to investors.

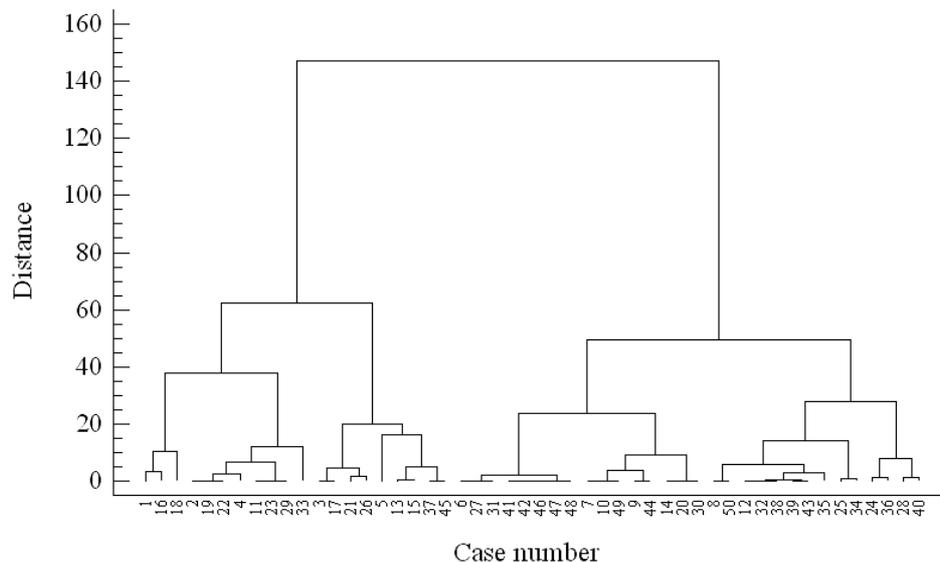
Accounting information relevant to economic decision-making are available in the fundamental financial statements: balance sheet, income statements, cash flow statement, statement of changes in equity and notes to the financial statements. Annual reports included in the study are related to the year 2007. The estimation index of corporate disclosure of financial information using the Web was founded in this research.

In this research voluntary management information referred to information regarding: owner's transparency, ethical code transparency, audit report, Supervisory Board report and Annual General Meeting report.

Voluntary management information was studied in the context of timeliness of its presentation because the investors need timely information, especially when trading on the stock exchange. The development of techniques and technologies has wiped away physical borders around the globe. Indeed, the flow of information has no limits (Ramljak, 2003). This is what makes the Internet the best medium for voluntary financial statement disclosure.

The aforementioned hypotheses were tested using the statistical program SPSS. The empirical research indicated that 98% of studied companies had an official website and 75.5% among them had English version of the site.

The multivariate analysis was used to elaborate the first hypothesis. The cluster analysis resulted in two clusters shown in Figure 1. Dendrogram indicates that all companies can be optimally grouped into two clusters with similar characteristics.

Figure 1. Dendrogram computed by cluster analysis

Namely, hierarchical cluster analysis was used to determine which subsets had better Corporate Web Communication. Before clustering procedure all three variables were standardized. This procedure then created two clusters from the 50 observations (companies) using Ward's method with squared Euclidean distance metric. The clusters are groups of observations with similar characteristics.

The mean value of each variable's participation in Corporate Web Communication is shown in Table 1.

Table 1. Cluster analysis - Corporate Web Communication

Mean CWC participation	Cluster 1	Cluster 2
Corporate Web presentation	61.65	41.47
Accounting information	98.95	8.39
Voluntary management information	44.74	10.75

The analysis of variance (one way ANOVA) shows (Table 2) that variables indexed as Corporate Web presentation, Accounting information, Voluntary management information are all significant. The ANOVA table decomposes the variance of these variables into two components: between-group component and within-group component. The F-ratios (presented in Table 2) are ratios of between-group estimates. Since the P-value of the F-test is less than 0.05, there is a statistically significant difference between the means from one cluster to another at 95.0% confidence level. The main characteristic of companies assigned to Cluster 1 is disclosure of financial information and the companies that are members of Cluster 2 are those that are not so financially transparent on the Internet.

Table 2. The analysis of variance - Corporate Web Communication

Variable	F	P-value (Sig.)
Corporate Web presentation	14.315	.000
Accounting information	799.763	.000
Voluntary management information	52.010	.000

Table 3 shows the significant difference between the two mentioned clusters according to companies' value added achieved in the year 2007. The mean value of value added amount for companies mem-

bers of Cluster 1 is 142,528,000 EUR and that value for the companies members of Cluster 2 is two times lesser (precisely 68,161,000 EUR).

Table 3. Cluster analysis on value added

Variable	Cluster 1	Cluster 2
Value added (000 EUR)	142528	68161

The significance of the ANOVA test of value added differences between those two clusters is shown in Table 4.

Table 4. The analysis of variance - value added as dependent variable

	Sum of Squares	df	Mean Square	F	Sig.
Between groups	65149057154.445	1	65149057154.445	7.805	.007
Within groups	400659667915.556	48	8347076414.908		
Total	465808725070.001	49			

Bearing the above, it can be stated that the first hypothesis is valid.

Chi-Square Test of two variables, that is of Web transparency of Supervisory Board report and of the company's listing status was done to test the second hypothesis. According to the results shown in Table 5 chi-test was performed to determine whether or not to reject the null-hypothesis of variables independence. Since P-value is less than 0.01, for one degree of freedom, we can reject the hypothesis that rows and columns in Table 5 are independent at 99% confidence level (Chi-square value is 7.83).

Table 5. Crosstabulation between Supervisory Board reporting and company's listing status

Supervisory Board report	companies		Total
	unlisted	listed	
not published	17	12	29
published	4	17	21
Total	21	29	50

The empirical data indicate that 58% of listed companies publish their Supervisory Board report. According to the above mentioned statistical results of empirical research, second hypothesis can be considered as proved.

Table 6. The correlation between financial statements disclosure and publishing Supervisory Board report (on the company's official website)

			Accounting information	Supervisory Board report
Spearman's rho	Accounting information	Correlation coefficient	1.000	.861(**)
		Sig. (2-tailed)	.	.000
		N	50	50
	Supervisory Board report	Correlation coefficient	.861(**)	1.000
		Sig. (2-tailed)	.000	.
		N	50	50

** Correlation is significant at the 0.01 level (2-tailed).

To substantiate the second hypothesis, the correlation between Web presentation of accounting information and Supervisory Board report was determined (Table 6).

According to the results presented in Table 6, the correlation between the two mentioned variables is very strong (0.861) and statistically significant. It can be pointed out that companies that disclose their annual financial statements also publish the Supervisory Board report.

Conclusion

The advent of the Internet has changed ways companies communicate. The management of a modern business can decide to present its organization on a website as the easiest and cheapest form of corporate communication with all interested stakeholders and the general public. Website can be used by transparent management to provide more information about the financial performance and position of a business.

Many Croatian companies have their own website and use the Internet as a strategic tool for establishing and maintaining relationships with all stakeholders. The purpose of publishing financial statements on the Internet is making information available 24 hours a day to all interested internal and external users, especially to existing and potential investors and creditors.

The analysis of independent variables showed that value added, as a performance measurement tool, is related to the level of Corporate Web Communication. The companies with the highest value added in Croatia have (exactly 98% of them) an official website which was the starting point of this research.

The results of empirical research carried out on 50 Croatian companies with the highest value added amount showed that those companies are the ones that have official website and that financial statements of most of them are disclosed. Some of those companies also publish on their websites additional information as decided by their management like names of major stakeholders, ethical code (or code of corporate governance), audit report, Supervisory Board report and Annual General Meeting report.

Future research might cover a broader set of criteria for measuring the levels of Corporate Web Communication and should also include more observations.

References

- Abdelsalam, O. H., Street, D. L. (2007): "Corporate governance and the timeliness of corporate internet reporting by U.K. listed companies", *Journal of International Accounting, Auditing and Taxation*, 16, p. 126
- Belak, V. (2003): "Računovodstvo dodane vrijednosti", *Računovodstvo, revizija i financije*, 3, p. 18
- Belasen, A. T. (2008): "The Theory and Practice of Corporate Communication: A Competing Value Perspective", Sage, London, p. 17
- Bonsón, E., Escobar, T. (2006): "Digital reporting in Eastern Europe: An empirical study", *International Journal of Accounting Information Systems*, 7, p. 299
- Cornelissen, J. (2008): "Corporate Communication: A guide to theory and practice", Sage, London, p. 5
- Divya, M., Garg, M. C. (2008): "Web-Based Corporate Reporting Practices: A Survey", *The ICAI University Press*, 7 (3), p. 54
- Ettredge, M., Richardson, V. J., Scholz, S. (2002): "Dissemination of information for investors at corporate Web sites", *Journal of Accounting and Public Policy*, 21, p. 366
- Iharator, A. S. (2001): "Communication style in the information age", *Corporate Communications: An International Journal*, 6 (4), p. 201
- Marston, C., Polei, A. (2004): "Corporate reporting on the Internet by German companies", *International Journal of Accounting Information Systems*, 5, p. 307
- Pervan, I. (2006): "Voluntary Financial Reporting on the Internet - Analysis of the Practice of Croatian and Slovene Joint Stock Companies", *Financial Theory and Practice*, 30 (1), p. 20

- Ramljak, B. (2003): "Experiences of the countries in transition regarding the financial statements standardization - case study of Croatia", Proceedings of the Fifth International Conference on "Enterprise in Transition", Split, May 22-24 2003, University of Split, Faculty of Economics, p. 1963
- Ramljak, B. (2006): "Adjustment of financial reporting in Croatia to the requirements of the European Union", Proceedings of the Third International Conference "From Transition to Sustainable Development: The Path to European Intergration", School of Economics and Business in Sarajevo, p. 204
- Xiao, J. Z., Yang, H., Chow, C. W. (2004): The determinants and characteristics of voluntary Internet-based disclosures by listed Chinese companies, *Journal of Accounting and Public Policy*, 23, p. 220

Is It Possible to Teach Leadership?

Laurent Lapierre¹, Pierre-Péladeau², Dragan Milinkovic Fimon³

ABSTRACT – *Leadership is without any doubt among the world’s oldest preoccupations, whose understanding has always depended of very specific knowledge. Knowing that leaders cannot be found on every street corner, Napoleon expressed his feelings about the importance of leadership in his quip that would rather have an army of rabbits led by a lion than an army of lions led by a rabbit. But even those “chosen rabbits” have to be trained and to learn something about leadership, at least about the lion’s behaviour, if pretending to lead them without risking to be eaten. So the question is: Is it really possible to teach leadership or to “really train” leaders? How can leadership be developed? How to train people to be leaders?*

KEY WORDS: *leaders, leadership, knowledge, teaching leadership, the case method, training*

Introduction

If one takes the word “teach” to refer to the transmission of knowledge, then some leaders do not believe that leadership can be taught. Being knowledgeable about a subject is not sufficient to make one a leader. Indeed, to have a “well-filled head,” to borrow Montaigne’s expression, is no guarantee of one’s ability to achieve new and bold goals by mobilizing an entire community or society. **One must also have a “well-made head.”**

As the word itself implies, leadership is a direction that originates with an individual. Despite what we have been taught, and despite the prevailing “theories” to which we have been exposed or to which we adhere, we actually teach as we are,⁴ with all our talents (our gifts and imperfections), our qualities and faults, our strengths and weaknesses, our skills and personal shortcomings. How, then, can leadership be developed? How do we train people to be leaders?

The case method

One can learn and develop one’s potential. This can be a life-long process, in which any opportunity to learn is seized upon, whether it be training programs, significant encounters, personal or professional experiences, readings, works of fiction, etc. In fact, for a person who is eager to learn and develop their potential, the possibilities for learning are endless and they take full advantage of them. To grow as a leader, it’s all grist to the mill. The case method offers particularly rich potential in this regard, whether one is exposed to it through a formal program or on one’s own.

To state that one “teaches with the case method,” however, is a contradiction in terms, even though this is what one regularly hears from professors who base their teaching on case studies. This contra-

¹ Laurent Lapierre, HEC Montréal, Canada

² Pierre-Péladeau, Chair in Leadership, HEC Montréal, Canada

³ Dragan Milinkovic Fimon, Institut of Economic Sciences, Belgrade, Serbia

⁴ See “Gérer, c’est créer,” published in *Gestion, revue internationale de gestion*, Vol. 30, n° 1, Spring 2005, p. 10-15, and a series of short articles in *Les Affaires*; “On gère comme on est,” Saturday, January 29, 2005, *La Presse*, Special section, p. 4; “Le temps d’un nouveau refus global,” *La Presse Affaires*, Monday, February 28, 2005, p. 5; “L’expertise ne remplace pas l’expérience,” *La Presse Affaires*, Monday, March 7, 2005, p. 5; and “Enseigner sans avoir pratiqué,” *La Presse Affaires*, Monday, March 14, 2005, p. 5.

diction is not entirely innocent. What it implies is that the “pupils” and “masters” who use this method must begin by “unlearning” prevailing modes of teaching and scholarly acculturation that have led them to forget their true nature as “natural learners.” It is this true nature that they must reclaim.

To practise the case method is to train people in the same way that a trainer of a performing artist accompanies the artist in a rigorous, disciplined, delicate process that, beyond the simple mastery of the skills essential to their practice, is finely tuned to the particular learning and learner involved. In both cases, the goal is to help the “pupil” discover his own way of “seeing,” “reading,” “hearing,” “feeling,” “interpreting,” “expressing,” “doing,” “playing,” or simply “being” – the only way which, for him, will be authentic.

Leadership as practice

Leadership is a practice that is learned for the most part from experience, first that of others, and then one’s own. This learning occurs through action that is enriched by simultaneous or *a posteriori* reflection and that, by dint of repetition, can then be more solidly integrated into the construction of an action that is all one’s own. Leaders are often very interested in the practice of other leaders, finding therein not only a source of inspiration but also of self-discovery. It’s no coincidence that they have a propensity to read biographies and autobiographies.

The case method we refer to here⁵ represents an inductive approach to learning that ideally is based on concrete and direct experience or, failing that, on empirical and “lived” material: real-life situations, simulations, “cases,” etc. The basic postulate is two-fold: one learns by doing and by observing the action of others. In fact, all learning inevitably begins with the observation of others, whether they be early role models, mentors, masters, etc. The case method can be accompanied by pedagogical or supporting documents (software, slide shows, theoretical texts, discussion papers) that are read before or after the class session. But for the most part, learning is devoted to practice itself, to the study of the phenomenon, case by case, where one examines the wisdom of the actions undertaken by those who succeed (or fail). Learning is derived from the observation and analysis of what actually happens in real life, and the lessons extracted can then be applied in one’s own practices.⁶

Finding one’s way or one’s own personal style is not as simple as it may seem. And it is precisely this complexity that led to the introduction of the case method, not only in business schools but also in several professional schools (law, medicine, nursing, engineering, architecture, writing and literature, automobile mechanics, etc.) both inside and outside of universities.

One of the reasons this learning method has had difficulty finding its place and even being recognized in universities resides in the confusion existing between “handing down information or knowledge” and “directing learning in a systematic fashion.” This confusion, which is needlessly maintained by ideological debates, is a serious problem because we all know from our experience as professors and students that a body of knowledge is virtual learning and that learning does not occur without the acquisition, whether explicit or implicit, of a precise knowledge.

We have often affirmed that the teacher comes to his task with his qualities and faults, his strengths and weaknesses. Based on our own experience in learning about management and the case method as a teaching approach, we are deeply convinced of the validity and effectiveness of the case method of teaching, particularly in leadership training.

⁵ The cases we refer to are not of the “decision-making” type that can be pertinent in management. Rather, they are based on what Clifford Geertz calls “thick descriptions” of people in leadership positions.

⁶ Many cases are used in various leadership development programs. The list of these cases is available on the Web page: <http://www.hec.ca/pages/laurent.lapierre/>. All of these cases are deposited with the Centre for Case Studies and most of them can be accessed online at the following address: <http://www.hec.ca/centredecas/>. Simply register and choose a password on the catalogue’s site in order to download cases free of charge: <http://www.hec.ca/centredecas/catalogue/>

The perspective of the master

Let us to begin by stating a fact that bears constant repeating: most of the professors who resist the case method do so simply because they do not believe in it. In our eagerness to try to understand the professors who put up such resistance (as is their right), we have been slow to recognize and accept the full weight of this simple fact. The truth is that this method is not easy to use; it requires strong conviction, special talent and considerable preparation time from professor and students alike. It also presupposes that both professor and students are comfortable with the very idea of learning and of being only indirectly in control of the process. Of course, having been personally exposed to this method as a student helps one recognize its benefits. Learning by the case method does not leave one with the impression (or illusion) of closure one may feel after a lecture course. Rather, it implies a long-term, open learning process that is constantly redefined.

It is probably safe to say there are professors and students who do not have a “natural” affinity for the case method. The traditional scholarly process suits these professors very well, most likely because it suited them earlier when they were themselves pupils and students. We have also noticed that such persons themselves often have trouble learning by doing. As such, they are not inclined to appreciate this type of knowledge acquisition and this pathway to learning enough to devote all the energy, time and efforts it requires. Indeed, people learn in many different ways, and the case method, which is a substitute for practice and direct experience, cannot be considered a panacea, even by a “believer” and “practitioner.”

It can be said, however, that when a person truly believes in the power of this teaching approach, while at the same time recognizing its limitations, that person will be able to trust the learner, not only in relation to a specific learning objective, but also in relation to the process itself of “learning to learn.” He will then be capable of trusting this process of learning through action or through reflection on action and of relying on the rich potential of this inductive approach.

Such a firm conviction changes the professor’s role considerably. And this is what makes some people feel deeply insecure. For the professor, applying the case method means resisting the “natural and legitimate” need to teach and, above all, the propensity to lecture and to strive to make a favourable impression, all of which have been instilled in him throughout his education.

To be a professor is to hold a position of extraordinary power, a power which both professor and student may find seductive. Self-effacement and resisting the desire to impress will not come easily to a professor who is a brilliant performer, especially when it comes to leadership. In ancient Greek, a “pedagogue” was not the person who taught, but rather the person who led the students to the master.

Using the case method in any particular course presupposes being able to count on the availability of a rich bank of cases.⁷ There must be a range of cases covering the principal aspects of the learning objectives (for each of the topics proposed for discussion in the different sessions). The cases must provide information on the field and sector of activity in question; they must be pedagogically stimulating (readable and interesting documentation capable of sustaining a period of dynamic learning); and they must be topical and up to date. The professor must also be able to draw on a collection of texts containing information, reflections, models or theories that support the acquisition of knowledge in ways that are conducive to self-directed learning. It is not a matter of simply applying a theoretical, abstract discourse to a reality.

The professor’s preparation immediately preceding each learning session is of prime importance. He must master the content of the case (teaching skills are best tailored to specific learning objectives), or quickly risk losing all credibility; he must establish a precise teaching approach that is clearly explained in the pedagogical notes included in the case; he must familiarize himself with the teaching tools available and select those that are most appropriate (tables, slides, Internet sites, etc.); he must decide what contributions might be expected from students (opening discussion, individual opinions, team opinions, etc.); he must remain a flexible and dynamic observer so as to take advantage of seren-

⁷ See note 5.

dipitous moments;⁸ and he must know how to draw conclusions and wrap up the discussion⁹ in order to create the pleasant impression of having laid the final plank in a springboard for further learning.

Just as crucial, however, is the professor's earlier groundwork, which requires a deep reflection on his new role. Among other things, he must learn to let go of the very idea of teaching; to trust his students' desire to learn; to trust the process of learning through action or substitutes of action; to trust his material; to listen (be attentive to questions, discoveries, wonder, silences, interest, boredom, etc.); to let people talk and encourage them to talk; to give the group time to reflect and "listen to their thinking" as a group; to develop dynamic teaching skills in order to feel more comfortable and competent; and, finally, to realize and accept that these things take time. In fact, learning to use the case method can itself be a life-long process.

Unless there is serious and rigorous preparation on the part of both professor and students, the case method is doomed to failure. Participants in a training session based on the case method do not come to class to take notes. Students accustomed to spending their time in class with their nose buried in their notebook or computer may feel somewhat insecure when faced with the case method approach. Indeed, contrary to what they were always told at the primary, secondary and collegiate level, and even in some university courses, notes are taken before and after the class. They are there to actively participate in a learning session (a sort of happening). The professor organizes the period: he orchestrates the timing and transitions and introduces the appropriate techniques, technologies, logistics, etc. C. Rolland Christensen¹⁰ liked to say that the professor who works with cases can be compared to a stage manager or even an usher, whose job is to see to the comfort of the participants and the concrete aspects of the session.

The use of teaching tools such as tables, slides, PPT presentations, and Internet sites must not be an end in and of itself. Rather, these tools must be worked in seamlessly, without disrupting the process or creating uneasiness. The professor must strike a paradoxical balance between preparation and improvisation and moderate the group effectively so as to ensure that all participants have their fair share in the discussion. A session is like climbing a mountain toward the lesson or lessons proposed, and this climb must be carefully prepared and led. Establishing links with past and future sessions, mapping the learning territory still to be covered: these are true skills in synthesis-making that students learn from the professor by example.

People who do not really believe in the case method find many ways to justify their reticence. There is the attitude which consists in labelling the case method "easy" and then failing to do what is required to make it work. Then there is the attitude which consists in finding it too difficult and then failing to make any attempt to learn how to make it work. The teacher who wishes to work with cases must avoid a multitude of pitfalls: failure to master the skills required because of their unsuspected complexity; failure to offer a rich diversity of learning situations and materials; failure to prepare oneself mentally and concretely for a learning process; failure to remember that the form and content of material are inseparable; inability to spark and sustain the group's interest; failure to take individual differences and levels of maturity and motivation into account; failure to respect the lack of interest in learning on the part of some, etc. To become truly skilled in the use of the case method requires patience, mental preparation, a willingness to learn from colleagues (watching them teach), developing one's own competence, daring to find new approaches and to learn the tricks of the trade, and producing or seeking out appropriate teaching materials, etc.

It should be noted that the case method does not exclude the possibility of the teacher giving a more formal lecture now and again in order to transmit certain technical or theoretical concepts relevant to situations of learning by action.

⁸ "Good things come to those who wait." (Pierre Laurin, former director of HEC Montréal, used this aphorism often in his MBA leadership courses.)

⁹ "The end crowns the work" according to ancient Latin (*Finis coronat opus*).

¹⁰ "Apprendre peut devenir très amusant – C. Rolland Christensen et la méthode des cas," Centre de cas, HEC Montréal, 9 99 1995 001, 21 pages. English version: "Learning Can be Fun. C. Rolland Christensen and The Case Method," in Klein (ed.), *Interactive Teaching & Emerging Technologies*, WACRA, Boston, 1996, p. 219-231.

The perspective of the learner

There are students who have succeeded well in their studies based on traditional methods of learning. While all well and good, this same “scholastic success” may in fact be an obstacle to learning through action. Indeed, if these students have found their “scholastic facility” gratifying, they will not be inclined to appreciate learning through action. We have even had the occasion to meet students who had no idea what real learning was all about and who felt that learning was a waste of time or an activity which was not up quite up to university standards.

We have noticed a difference in learning styles between students of Anglo-Saxon background, who are comfortable with an inductive learning process based on empirical material, and students of Germanic or Latin background, who are much more comfortable with a deductive learning process using concepts, models, theories, and processes which are later applied to real situations. But we have also noticed that, no matter what the student’s cultural background, if an inductive, “experiential” learning session is based on rich empirical material and competently led, it will very quickly bring to the fore the same natural talent for independent learning, regardless of the participant’s education, cultural origin or sex. When you scratch the cultural veneer, the universal human nature very quickly appears, with its spontaneous propensity for learning. Sadly, the school milieu can stifle this natural propensity in some students.

The case method presupposes that the students or participants are well prepared. The teacher’s prime responsibility is to encourage them to invest in the learning objectives proposed by drawing on their natural desire to know and learn. When the material proposed is rich and relevant, when the suggested readings are stimulating and enlightening, when the classroom learning process is designed to spark interest and facilitate discovery, students will appropriate the process and develop independent learning skills, or what I call “learning to learn.”

Learning leadership and writing one’s own cases

As we wrote earlier, leadership is a direction that originates with an individual and that comes from inside that person. Each of us has at least an intuitive idea of what leadership is and of what type of people can be qualified as leaders. For example, there is universal consensus that communication is a key component of leadership. Speaking is a means of communicating with others, with an individual, a group, a crowd of people, etc., whereas writing is a more solitary activity. Writing is more introspective than speaking. Even when writing only for oneself, one must organize, structure and fine tune one’s thoughts. Personal writing involves even greater commitment and risk.

Most of the leaders we have studied have turned to writing at one time or another in their lives. Like artists and authors, many of them carry “notebooks” with them which they use to sketch out not only work documents, but also deeper, more personal, and often secret reflections. “If people only knew!” they often say to us. But people rarely do...

In the leadership training programs that we lead, we ask participants to compromise themselves by producing two short documents in the form of case studies. In the first, they are required to describe an individual that they personally regard as a leader. It can be a famous leader (Kennedy, Mao, Gandhi, Churchill, De Gaulle, Mandela, etc.) or an unknown figure (boss, uncle, grandparent, etc.). The choice they make is not entirely innocent. In their second text, we ask them to describe themselves as leaders. They have to write about themselves in the third person, using a different first name, which allows them to take a step back. Both of the documents are short (1,000 words), forcing the participants to get to the heart of the matter. These two types of “case study” can serve as the material around which a session is built. For the person who wrote one of these “cases” and who volunteers it for use in class, as well as for the others present, these sessions can constitute rich and instructive happenings.

Teachers must not be afraid to be demanding of students when it comes to preparing cases (answers to preparatory questions, reading the supporting texts, written opinions to be handed in before discussions, preparatory discussions in small groups if required, etc.). We have said it before, but it bears

repeating: experience has taught us that the case method will work only if the professor believes in it strongly enough to make it interesting and challenging for students. If he does not, he will inevitably find himself obliged to spend his sessions either playing catch-up or scolding or lecturing his uncomprehending students. If the students are well aware of the demands exerted on the professor by the case method of teaching, they can easily turn those reproaches against him.

By way of conclusion

The message of this text is a very simple but crucial one. Leaders cannot be found on every street corner. This is probably a good thing, since a world full of leaders, and visionaries to boot, would be unbearable. People who claim most loudly to be visionaries are usually the least visionary, or else they are visionary in a poorly adapted or sometimes even outrageous manner, or in a manner designed to give the appearance of following the latest trend. Nothing is perfect.

In order for the case method to produce the results sought, the professor wishing to use it must truly believe in it. This means he must be ready to provide all the conditions needed to make it work: notably, he must place the learner at the centre of the learning process; provide the learner with rich empirical material, supporting texts and documents that allow quick access to the information and knowledge prerequisite to or underlying the learning proposed; and create a learning climate conducive to complete confidence, by insuring that time spent is not time lost but part of an inductive learning process which takes time but produces results.

There is a comprehensive intelligence – that component of natural intelligence which serves as the basis for management decisions and which can never be replaced by artificial intelligence. It is this kind of intelligence that the case method is designed to discover, to develop, and to nourish.

References

- Bass, Bernard M., 1990. *Handbook of Leadership: A Survey of Theory and Research*, Free Press, New York
- Baumol, Blackman, and Wolf, 1989. *Productivity and American Leadership: The Long View*, Cambridge: MIT Press
- Bennis, Warren, & Nanus, Bart, 1985. *Leaders*, Harper & Row, Perennial Library, New York
- Bennis, Warren & Goldsmith, Joan, 1997. *Learning to Lead*, Addison-Wesley, Reading
- Galvin, Robert, 1990. *The paradox of Leadership*, Reflections on Leadership symposium, University of Chicago, May 11, 1990.
- Gardner, John W., 1990. *On Leadership*, The Free Press, New York
- Heifetz, R.A., 1994. *Leadership without easy answers*, MA: Harvard University Press, Cambridge
- Maltby, Daniel E., 2006. *The State of Leadership Theory and Training Today*, Biola University (online: www.biola.edu/academics/scs/leadership/bornormade.cfm)
- Nanus, V. Burts, 1989. *The Leader's Edge*, Contemporary Books, Chicago
- Johnson, Henry, 1990. *The Corporate Dream*, Carol Publishing, New York
- Komives, S. R., Lucas, N., & McMahon, T. R., 1998. *Exploring leadership: For college students who want to make a difference*, CA: Jossey-Bass, San Francisco
- Kouzes, J. M., & Posner, B. Z., 1995, *The Leadership Challenge: How to keep getting extraordinary things done in organisations*, CA: Jossey-Bass, San Francisco
- Parks, Ch. D., 2005. *Leadership can be taught: A bold Approach for a Complex World*, Harvard Business School Press, Boston
- Rost, J. C., 1991. *Leaders for the twenty-first century*, Praeger, New York
- Senge, P. M., 1990. *The fifth discipline: The art and practice of the learning organization*, Double-Day, New York
- Vail, Peter, 1988. *Managing as a Performing Art*, Jossey-Bass, San Francisco
- Yukl, Gary, 2005. *Leadership in Organizations*, Pearson Prentice, Hall Upper Saddle River
- Zaleznik, Abraham, 1977. *Managers and Leaders: Are They Different?* Harvard Business Review, May-Jun 1977.

SECTION IV
FINANCIAL SYSTEMS INTEGRATION
OF BALKAN COUNTRIES IN THE
EUROPEAN FINANCIAL SYSTEM

Financial Sector Restructuring and Integration of Western Balkan Countries in the European Financial System¹

Claude Berthomieu, Jean-Charles Briquet-Laugier, Irina Syssoyeva (Masson)²

ABSTRACT – *The impact of international financial integration on economic performance continues to be one of the most debated issues among international economists. Theoretical models have identified a number of channels through which international financial integration can promote economic growth and economic development in developing countries and countries in transition. However, in spite of its benefits, financial integration can also be dangerous, as it has been witnessed in many recent financial crises. In fact, there are some evidences that financial globalisation leads to better macroeconomic outcomes only when certain “threshold conditions” are met. Therefore, this paper discusses the potential benefits and potential costs of financial integration, which could face transition countries from Western Balkans while integrating their financial systems into the European financial system. Since the financial sector of Western Balkan countries is characterised by an increasing presence of foreign bank, this paper points out the potential advantages and a possible “danger” of the excessive presence of foreign banks in the host-country. This paper concludes with the idea that it is important to determine the optimal level of foreign banks participation in local banking sector and that financial integration should be approached cautiously, with good institutions and macroeconomic frameworks viewed as important preconditions.*

KEY WORDS: *banking sector, European Union, financial integration, financial systems, stabilization and association process, Western Balkan countries*

Introduction

The idea of European integration is not a new one; it was stimulated by the Marshall Plan. The preamble to the *Economic Cooperation Act* voted by the American Congress in 1948 invites Europe to follow the example of the United States and to form a common economic market spanning the continent. The first tangible element of the European integration in the aftermath of the Second World War was the formation of the *European Coal and Steel Community (ECSC)*, which was created by the *Treaty of Paris (1951)*, following a proposal from French foreign minister Robert Schuman. Six countries (Belgium, France, Italy, Luxembourg, the Netherlands and West Germany) signed the *Treaty of Paris*, pooling their coal and steel resources. For half a century, the European Union (EU) has pursued ever-deeper integration while taking in new members. The number of Member States has increased since the signing of the *Treaty of Rome (March 1957)*³.

Recently, the governments of the EU Member States have agreed to extend the EU perspective to countries in South East Europe – Croatia, the Former Yugoslav Republic of Macedonia, Albania, Bosnia and Herzegovina, Montenegro and Serbia. At present, among these countries, there are only two

¹ This paper is one of results of the research project of *Hubert Curien Partnership* program « Pavle Savic » (Serbian-French technology cooperation for years 2008/2009) titled *FINANCIAL SYSTEMS INTEGRATION OF BALKAN COUNTRIES IN THE EUROPEAN FINANCIAL SYSTEM* realized in the research cooperation between University of Nice-Sophia Antipolis, CEMAFI (France) and Institute of Economic Sciences, Belgrade (Serbia).

² Claude Berthomieu, Jean-Charles Briquet-Laugier, Irina Syssoyeva (Masson), University of Nice-Sophia Antipolis

³ Denmark, Ireland and the United Kingdom joined the EEC in 1973, followed by Greece eight years later. Portugal and Spain became Member States in 1986, while Austria, Finland and Sweden joined the EU in 1995. This expansion continued on May 1, 2004 with accession to the EU of Estonia, Hungary, Cyprus, Latvia, Lithuania, Malta, Poland, the Czech Republic, Slovenia, and the Slovak Republic. Since January 1, 2007, the EU counts two new Member States: Bulgaria and Romania. These two accessions have brought to an end the fifth wave of the EU's enlargement.

candidates for EU membership – Croatia and FYR of Macedonia. Other countries of the region are considered as *potential candidate countries* (Albania, Bosnia and Herzegovina, Montenegro and Serbia).

The EU integration process implies legally binding, sweeping liberalisation measures – not only capital account liberalisation, but investment by EU firms in the domestic financial services and the maintenance of a competitive domestic environment, giving this financial liberalisation process strong external incentives (and constraints).

The integration of potential candidate countries into the enlarged Europe is currently realised through *Stabilization and Association Process (SAP)* which aims to bring these countries progressively closer to the EU. The centerpiece of the process is a *Stabilisation and Association Agreement (SAA)*, which represents a contractual relationship between the EU and each potential candidate country, entailing mutual rights and obligations. For each of the potential candidate countries of the Western Balkans⁴ the *Commission of European Communities* negotiates SAAs which have three aims: first, to encourage regional cooperation; second to promote economic stabilisation and a swift transition to a market economy; and third to offer the prospect of EU accession. Thus, SAAs explicitly include provisions for future EU membership of the country involved. These Agreements are similar in principle to the *Europe Agreements* signed with the Central and Eastern European Countries (CEECs) in the 1990s.

In case of CEECs countries, the *prospective EU accession* served as the ultimate anchor for financial liberalisation. The EU candidate countries had to fully liberalise their financial system by the time of EU accession at the latest, as the free movement of capital is one of the leading principles of the EU. However, even if the SAAs are based mostly on the *EU's acquis communautaire* and predicated on its promulgation in the cooperation states legislation, the depth of the policy harmonisation expected by them is *less* that for EU member states.

Globally, the financial integration has progressed dramatically over the past 30 years. This current wave of financial globalisation was urged by liberalisation of capital controls in many of developing countries and transition economies, in anticipation of the benefits that cross-border flows would bring in terms of better global allocation of capital and improved international risk-sharing possibilities. With the surge in financial flows, however, came a spate of currency and financial crises⁵. These developments have provoked an intense debate among both academics and policy circles on the *costs* and *benefits* of financial integration, which has intensified and become more polarised over time. Thus, this article proposes to analyse the *potential benefits* and *potential costs of financial integration*, which could face the potential candidate countries from Western Balkans during integration of their financial systems into the European financial system, as well as into the world financial market⁶.

The paper is structured as follows. Paragraph 1 presents the current situation of financial systems in the EU potential candidate countries (Albania, Bosnia and Herzegovina, Montenegro and Serbia). Paragraph 2 discusses the potential benefits (§2.1) and the potential costs (§2.2) of financial integration. The paper concludes with some recommendations concerning the integration process of financial systems for these countries.

Financial sector restructuring in the Western Balkans

Analytically, any financial system can be divided in three sub-sectors: the banking sector (regrouping the commercial or deposits banks), the non-banking financial institutions (like savings-institutions, insurance companies, private pension funds, mutual funds societies, investment funds,...) and capital (or financial) markets. Banks act as credit-suppliers from the deposits they collect and funds they bor-

⁴ SAA signature: Albania – 12/06/2006; Montenegro – 15/10/2007; Serbia – 29/04/2008; and, Bosnia and Herzegovina – 16/06/2008.

⁵ There is a widely held perception that developing countries or countries in transition that opened up to capital flows have been more vulnerable to these crises than industrial economies, and have been much more adversely affected.

⁶ It seems important to study this question since the countries of Western Balkans are highly dependent on foreign capital.

row from the Central Bank; such specific financing facility is not available to the non-banking institutions.

In the majority of transition economies, the role of non-banking institutions in mobilisation and allocation of financial resources was and remained quite negligible during the 1990s, and the same appears in Western Balkans countries, where the *banking sector continues to dominate the financial system*, managing for over 90% of total financial assets, while capital markets and non-banking financial institutions play only marginal roles (D. Müller-Jentsch, 2007).

However, the financial sector in the Western Balkans has improved significantly in recent years and a deep restructuring process has been (and proceeds to be) implemented. This owes to comprehensive reforms by governments and the support of international financial institutions like the IMF, the World Bank, and the EBRD. However, fifteen years ago, financial markets in former Yugoslavia and in Albania were poorly developed. The break-up of Yugoslavia led to the fragmentation of financial services companies, the establishment of new regulatory institutions and a freezing of foreign currency deposits. During the 1990s, pyramid saving schemes in Albania, hyperinflation in Serbia and Montenegro, the wars in Bosnia and Kosovo as well as banking crises in several countries of the region weakened the financial sector. Macroeconomic disturbances, a weak rule of law, a large stock of bad debt and low capitalisation rates further undermined the stability of financial markets.

The inefficiency in the financial sector was also influenced by its underdeveloped structure. It was characterised by domination of the banking sector, while the role of non-banking sector in mobilisation, concentration and allocation of financial resources was almost non-existent. In addition, the majority of banks were insolvent and unable to fulfil the requirements established by prudential norms while the banking balances were burdened by a high level of risky and non-performing loans (S. Golubović and N. Golubović, 2005).

As the consequence, the policy agenda during the late 1990s and early 2000s was dominated by efforts to clean up and stabilise the banking industry. Regulatory frameworks have been modernised and financial supervision has been strengthened. The share of bad loans has been reduced dramatically. Privatisation has helped to reduce state ownership in banking down to less than 20 percent in most countries and has attracted foreign banks into the market.

Despite these positive developments cited above, financial markets in the Western Balkans remain small, fragmented, and at an early stage of their development. The general characteristics of this market are: activity on the equity market is considerably lower than activity of the banking sector; majority of the countries are characterised by low liquidity on the capital market, with exchange concentrated on small number of shares of listed companies; and, an increased sensitivity of the financial markets to the movements of speculative capital (S. Golubović and N. Golubović, 2005).

Western Balkan banking sector has recently attracted considerable attention from foreign investors through a removal of national restrictions, the liberalisation of market access, and the sale of state-owned banks. The transition process from plan to market economy has proved to be an opportunity for many foreign banks to expand their activities to countries of the region. In the early years of transition, many EU banks set up small representative offices in the Western Balkans in order to serve their home clients who were entering the region. As cross-border linkages became more familiar with local conditions, they gradually expanded their presence in the region. Now some of them have established branch networks throughout the region and act as “*universal banks*” that offer a *broad range of financial services*.

It is notable that the majority foreign-owned banks still retain the highest share of the total assets of the banking system in the region. In 2007, banks with majority of foreign capital, controlled approximately 75% of banking market of Albania, Bosnia and Herzegovina, Montenegro and Serbia. In 2005-2007, the market share of foreign banks stood at around 90% in Albania. Banks with majority of foreign capital controlled 86.1% of Bosnia and Herzegovina banking market in 2005, 90.3% in 2006 and 91% in 2007. In Serbia, it increased from 37% in 2005 to 75.5% in 2007, due to privatisation and organic growth of the subsidiaries of EU banks. Share of foreign capital, in Montenegrin banking sector, was around 78.8% by the end of 2006.

Owners include international banking groups coming primarily from EU countries (such as Austria, Italy, Greece, France, etc.). Austrian and Italian banks in particular operate across the Western Balkans. For instance, the Austrian investors are dominant in Bosnia and Herzegovina (59% of banking assets in 2007) and in Albania (55% of banking sector in 2005). Greek banks have also entered the region; by mid 2005, they had invested around EUR 750 million in the Western Balkans, half of which in Serbia alone. Since the start of financial system reform, these groups introduced numerous positive changes in the region, improving the performances of the domestic banking sector and providing stable foreign sources of financing domestic credit expansion.

Thus, the process of *financial integration* of the Western Balkans has primarily been driven by foreign direct investments (FDI) of EU banks into domestic banking sector. These strategic investors have been a way to strengthen the banking system in the region and to improve the low level of financial intermediation. They brought with them *technical know-how*, such as modern risk-management and marketing techniques. They tend to raise governance standards, introduce new financial products. They come with the resources to re-capitalise domestic banks and modernise branch networks. Moreover, FDI from the EU also helps the Western Balkan countries to “import” modern prudential regulation from EU.

However, there are also some concerns about the growing influence of foreign banks in these regional banking markets. These, mainly, relate to the possibility that foreign banks turn out to be instable sources of bank credit, especially during financial crises or during economic downturns (either in Western Balkan countries or in their home markets).

Financial integration, its potential benefits and costs

Financial globalisation and *financial integration* are, in principle, two different concepts. *Financial globalisation* is an aggregate concept that refers to rising global linkages through cross-border financial flows. *Financial integration* refers to an individual country's linkages to international capital markets. Nevertheless, these two concepts are closely related. For instance, increasing financial globalisation is necessarily associated with rising financial integration on average⁷.

Some academic economists consider increasing financial liberalisation and unrestrained capital flows as a serious hazard to global financial stability (e.g., D. Rodrik, 1998; J. Bhagwati, 1998; J. Stiglitz, 2002) and dispute its utility for reasons of provoking the generation and propagation of serious financial crises. Thus, these economists call for maintenance of capital controls and the imposition of frictions, such as “Tobin taxes”, on international asset trade.

Others⁸ argue that free movements of international capital can encourage a relatively more efficient allocation of economic resources, offer good risk diversification opportunities and help to promote financial development⁹. According to these authors, the abolishment of capital controls should allow a more efficient global capital allocation, which would transfer capital from capital-rich countries (industrial countries) to capital-poor countries (developing countries or transition economies). The capital inflows, resulting from financial liberalisation, should facilitate the transfer of foreign technology and management experience, encourage the competition and promote higher levels financial development, spurring economic growth. Moreover, increased openness to capital flows has, by and large, proven essential for countries aiming to upgrade from lower- to middle-income status, while significantly enhancing stability among industrialized countries (e.g., S. Fischer, 1998; L. Summers, 2000).

⁷ In this paper, we use these two terms interchangeably.

⁸ Among partisans of financial liberalisation, we can find the World Bank, the International Monetary Fund, B. Eichengreen (2001), M. Obstfeld and K. Rogoff (1998), M. Klein and G. Olivei (1999), and others.

⁹ The beneficial effects of financial liberalization were underlined by L. Summers in his American Economic Association speech in 2000: "... insofar as international financial integration represents an improvement in financial intermediation (whether because of the transfer of saving from low- to high-return jurisdictions, because of better risk-sharing, or because institutions involved in the transfer of capital across jurisdictions improve the efficiency with which capital is allocated), it offers a potentially significant increase in economic efficiency...", p. 3.

Some argue that the increasing presence of foreign firms in financial sectors can bring the important benefits to the markets they enter: added investment, cutting edge technologies and managerial practices (especially risk management), and because they tend to be more diversified than local institutions, more financial stability.

From this point of view, the financial integration potentially benefits both capital-importer and capital-exporter countries. Thus, the process of financial integration can be considered as a sign of country's attachment to a good economic policy. Consequently, it seems quite natural, from this point of view, to expand the process of international financial integration to other less economically developed countries. However, even if the deregulation of international capital movements is certainly desirable, some authors argue that *such reforms should be implemented slowly*¹⁰.

Potential benefits of financial globalisation in theory

In theory, there are a number of *direct* and *indirect channels* through which financial globalisation could enhance growth.

Among the *direct channels* we can distinguish the *augmentation of domestic savings* (cross-border capital flows, in principle, allow to increase investment in capital-poor countries while they provide a higher return on capital from capital-rich countries); the *reduction in the cost of capital through better global allocation of risk* (it was predicted that stock market liberalisation can improve the allocation of risk (P. Henry, 2000)); the *transfer of technological and managerial know-how* (financially integrated economies seem to attract a large share of FDI inflows, which have the potential to generate technology spillovers and to serve as a conduit for passing on better management practices); the *stimulation of domestic financial sector development* (international portfolio flows can increase the liquidity of domestic stock markets and increased foreign ownership of domestic banks can also generate a variety of other benefits (R. Levine, 1996).

There are also a number of *indirect channels* through which financial globalisation could enhance economic growth. It could help *promote specialisation* by allowing for sharing of income risk, which could in turn increase productivity and growth as well. Financial flows could *foster development of the domestic financial sector* and, by *imposing discipline on macroeconomic policies*, lead to more stable policies.

Since the *financial sector in the Western Balkans is bank-dominated*, it seems important, for us, to pay more attention to the benefits that can bring foreign participation in the local bank sector.

Theoretically, *foreign bank participation* can generate a variety of benefits (R. Levine, 1997, 2005). First, foreign bank participation can facilitate access to international financial markets. Second, it can help improve the regulatory and supervisory frameworks of the domestic banking sector. Third, it can improve the quality of loans, as the influence of the government on the financial sector should decline in more open economies. Fourth, in practice, foreign banks may introduce a variety of new financial instruments and techniques and also foster technological improvements in domestic markets. Fifth, the entry of foreign banks tends to increase competition, which, in turn, can improve the quality of domestic financial services as well as allocative efficiency. Sixth, the presence of foreign banks can also provide a safety valve when depositors become worried about the solvency of domestic banks. Finally, foreign banks entry enhances legislative framework, financial monitoring, reduces corruption and stimulates the development of transparent intermediary operations (R. De Haas and I. Van Lelyveld, 2003).

Even if theoretical models have identified a number of *channels* through which international financial integration can help to promote economic growth, and on the surface, there seems to be a positive association between embracing financial globalisation and the level of economic development¹¹, it is

¹⁰ For more details see "Communiqué of the International Monetary and Financial Committee of the Board of Governors of the International Monetary Fund", IMF 2000.

¹¹ Industrial countries in general are more financially integrated with the global economy than developing countries. So embracing globalization is apparently part of being economically advanced.

quite difficult to empirically identify a strong and robust causal relationship between financial integration and growth, especially for developing countries (B. Eichengreen, 2000; E. Prasad and al., 2003). Besides, many of empirical papers have often found *mixed results*, suggesting that the benefits are not straightforward.

One of the reasons for the lack of consensus can be ascribed to the difficulty in properly *measuring the extent of financial integration* (M. Chinn and H. Ito, 2007). Although many measures exist to describe the extent and intensity of capital account controls, it is generally agreed that such measures fail to capture fully the complexity of real-world capital controls for a number of reasons¹².

In fact, we can distinguish three main measures of the extent of financial integration: *de jure* measures (that capture the legal restrictions on cross-border capital flows based on data from IMF's AREAER¹³); *de facto* measures which includes the *price-based measures* (CIP, UIP and RIP¹⁴) and the *quantity-based measures* (based on actual flows); another *de facto* measure of financial integration is *saving-investment correlation* (M. Feldstein and C. Horioka, 1980). Apparently, the distinction between *de jure* and *de facto* integration appears to matter a great deal in understanding the macroeconomic implications of financial globalisation. The basic problem with *de jure* measures is that implementation and enforcement differ so greatly across countries that international comparisons are doubtful. Consequently, even if most empirical papers analysing the effects of financial integration rely on *de jure* measures, *de facto* integration measures may be more appropriate for analysing the direct and indirect benefits of financial integration.

An alternative line of inquiry into the effects of financial globalisation is based on the notion that *not all capital flows are equal*. Flows like Foreign Direct Investment (FDI) and, perhaps, international portfolio flows are not only presumed to be more stable and less prone to reversals (S-J. Wei, 2006), but are also believed to bring with them many of the indirect benefits of financial globalisation such as *transfers of managerial* and *technological expertise*. Thus, the composition of capital inflows can have an important influence on the benefits of financial integration for developing countries as well as for transition countries.

Finally, it seems that is not just the capital inflows themselves, but what comes along with the capital inflows that drive the benefits of financial integration for developing and transition countries (M. Kose and al., 2006). There is considerable evidence that financial integration serves as an important catalyst for a number of indirect benefits, which M. Kose and al. (2006) name potential "*collateral benefits*" since they may not generally be the primary motivations for countries to undertake financial integration. They could include *development of the domestic financial sector*, *improvements in institutions* (defined broadly to include governance, the rule of law, etc.), *better macroeconomic policies*, etc.

These collateral benefits then result in higher growth, usually through gains in allocative efficiency. The empirical implications of this perspective are powerful. Actually, these collateral benefits affect growth and stability dynamics through indirect channels rather than just directly through financing of domestic investment, implying that the associated macroeconomic gains may not be fully evident in the short run. Moreover, in cross-country regression, it may be difficult to uncover the effects of financial integration if one includes measures of institutional quality, financial sector development, quality of macroeconomic policies etc (M. Kose and al., 2006).

While it is difficult to find a strong and robust effect of financial integration on economic growth, there is some evidence in the literature of various kinds of "threshold effects". For example, there is some evidence that the effect of foreign direct investment on growth depends on the level of human capital in a developing country. The list of "threshold effects" includes: *financial sector development*, *overall institutional quality*, *corporate governance*, *macroeconomic policies framework*, and *trade*

¹² The majority of empirical studies are unable to find robust evidence in support of the growth benefits of financial integration. However, studies that use measures of *de facto* integration or finer measures of *de jure* integration tend to find more positive results. Moreover, studies using micro data are better able to detect the growth and productivity gains coming from financial integration.

¹³ The *Annual Report on Exchange Arrangements and Exchange Restrictions* (AREAER) measures over 60 different types of controls.

¹⁴ CIP: Covered Interest Parity; UIP: Uncovered Interest Parity and RIP: Real Interest Parity.

integration. In fact, these threshold effects play important roles in shaping the macroeconomic outcomes of financial globalisation. In other words, countries meeting these threshold conditions are better able to reap the growth and stability benefits of financial globalisation. This generates a deep tension as many of the threshold conditions are also on the list of collateral benefits (M. Kose and al., 2006).

Potential costs of financial integration

In spite of its beneficial effects, financial integration can also be dangerous, as it has been witnessed in many past and recent financial, currency and banking crises. It can make countries more vulnerable to exogenous shocks. In particular, if serious macroeconomic imbalances exist in a recipient country, and if the financial sector is weak, be it in terms of risk management, prudential regulation and supervision, large capital flows can easily lead to serious financial, banking or currency consequences.

In fact, the experience of the past three decades has led economists and policy makers to recognize that, in addition to the potential benefits discussed above, open financial markets may also generate significant costs. Such *potential costs* include *a high degree of concentration of capital flows and a lack of access to financing for small countries* (either permanently or when they need it most); *an inadequate domestic allocation of these flows* (which may hamper their growth effects and exacerbate pre-existing domestic distortions); *a loss of macroeconomic stability*; *a pro-cyclical nature of short-term capital flows and the risk of abrupt reversals*; *a high degree of volatility of capital flows* (which relates in part to herding and contagion effects); and *risks associated with foreign bank penetration* (P-R. Agénor, 2001).

Again, since financial sector of Western Balkan countries is bank-dominated, we would like to point out the potential “danger” of presence of foreign bank on the domestic financial sector. Although foreign bank penetration can yield several types of benefits (as discussed earlier), it also has some potential disadvantages as well.

First, foreign banks may ration credit to small firms to a larger extent than domestic banks, and concentrate instead on larger and stronger ones. If foreign banks concentrate their lending operations only to the most creditworthy corporate borrowers, their presence will be less likely to contribute to an overall increase in efficiency in the financial sector. More importantly, by leading to a higher degree of credit rationing to small firms, they may have an adverse effect on output, employment, and income distribution (P-R. Agénor, 2001).

Second, entry of foreign banks, which tend to have lower operational costs, can create pressures on local banks to merge in order to remain competitive. Furthermore, the process of concentration (which could also occur as foreign banks acquire domestic banks) could create “too big to fail” banks. A too-big-to-fail problem may, in turn, increase moral hazard problems: knowing the existence of an (implicit) safety net, domestic banks may be less careful in allocating credit and screening potential borrowers (P-R. Agénor, 2001). Concentration could also create monopoly power that would reduce the overall efficiency of the banking system and the availability of credit. In particular, a high degree of banking system concentration may adversely affect output and growth by yielding both higher interest rate spreads (with higher loan rates and lower deposit rates relative to competitive credit and deposit markets) and a lower amount of loans than in a less concentrated more competitive system.

Third, entry of foreign banks may not lead to enhanced stability of the domestic banking system, because their presence *per se* does not make systemic banking crises less likely to occur – as it may happen if the economy undergoes a deep and prolonged recession, leading to a massive increase in default rates and an across-the-board increase in non performing loans, and because they may have a tendency to “cut and run” during a crisis (P-R. Agénor, 2001).

Conclusion

The common characteristic of the Western Balkan countries is that, in the early transition, these countries avoided any radical reform of their financial sector. Instead, they undertook partial changes like transformation of the monobank system into two-tiered banking system. The transition countries experience points out that the financial sector restructuring is necessary if macroeconomic crises are to be avoided. Therefore, the financial sector development is an important segment of economic transformation.

On the other hand, the financial sector reform is one of the first steps of the process of financial integration, both on a regional basis and on an European perspective. The main goal of the financial sector reform in the Western Balkan countries is the change of the financial sector role. It means that the financial sector must have an active role in mobilisation, concentration and allocation of financial resources.

Until now, the most important changes in financial system in these countries were realised only in banking sector, while the changes were almost insignificant in the other segments of the financial sector.

In the banking sector, the very strong entry and presence of foreign banks in Western Balkans seem to bring great advantages in terms of efficiency and banking performance. Among these foreign banks, the Austrian ones hold the first place that settles more firmly Vienna's position as regional financial hub in the Central Europe.

However, it would be necessary to determine the *optimal level* of foreign banks participation in order to leave enough space for the domestic banks which would risk to become entirely dependent from these foreign banks. In fact, the local banks play a very important role in these countries by financing the numerous small and medium size enterprises which are not financial attractive for banks from abroad.

Moreover, in order to "successfully" integrate the EU financial market, the potential candidate countries should envisage to develop the two other financial sectors of their financial system in following a gradual and orderly sequencing of external and internal financial liberalisation. The current worldwide crisis shows that a too large financial liberalisation can easily lead to serious financial and banking risks. Therefore, local authorities should adopt a cautious attitude towards financial liberalisation and take in consideration the current macroeconomic situation which, in fact, is specific to each country.

References

- Agénor, P-R. 2001. "Benefits and Costs of International Financial Integration: Theory and Facts." *World Bank*, Policy Research Working Paper No. 2699.
- Bhagwati, J. 1998. "The Capital Myth. The Difference Between Trade in Widgets and Dollars." *Foreign Affairs*, Vol. 7, no.3, pp. 7-12.
- Chinn, M. Ito, H. 2007. "A New Measure of Financial Openness." May, 2007. <http://web.pdx.edu/~ito/>.
- De Haas, R., Van Lelyveld, I. 2003. "Foreign Banks and Credit Stability in Central and Eastern Europe: Friends or Foes?" MEB Series no. 2003-04, Research Series Supervision No. 58 De Nederlandse Bank, <http://www.dnb.nl>.
- Eichengreen, B. 2001. "Capital Liberalization: What Do Cross-Country Studies Tell Us?" *The World Bank Economic Review*, Vol 15, No. 3, pp. 341-365.
- Feldstein, M., Horioka, C. 1980. "Domestic Savings and International Capital Flows." *The Economic Journal*, Vol. 90, No. 358, June 1980, pp. 314-330.
- Fischer, S. 1998. "Capital Account Liberalization and the Role of the IMF," in "Should the IMF Pursue Capital Account Convertibility?" *Essays in International Finance, Department of Economics*. Princeton University, Vol. 207, pp. 1-10.

- Golubović, S., Golubović, N. 2005. "Financial Sector Reform in the Balkan Countries in Transition." *Facta Universitatis, Series: Economic and Organisation*, Vol. 2, No. 3, pp. 229-236.
- Henri, P.B. 2000. "Stock Market Liberalization, Economic Reform, and Emerging Market Equity Prices." *Journal of Finance*, Vol 55 (April), pp. 52-64.
- Klein, M., Olivei, G. 1999. "Capital Account Liberalization, Financial Depth, and Economic Growth." *NBER Working Paper* No. 7384.
- Kose, M.A., Prasad, E.S., Rogoff, K., Wei, S-J. 2006. "Financial Globalization: A Reappraisal." *IMF Working Paper*. WP/06/189.
- Levine, R. 1997. "Financial Development and Economic Growth: Views and Agenda." *Journal of Economic Literature*, Vol. 35, No. 2, p. 688-725.
- Levine, R. 2005. "Finance and Growth: Theory and Evidence." <http://www.econ.brown.edu>.
- Mathieson, d., Roldós, J. 2001. "*The Role of Foreign Banks in Emerging Markets*." Third Annual Conference on Emerging Markets Finance. World Bank, IMF, and the Brookings Institution, April 19-21, 2001.
- Müller-Jentsch, D. 2007. "Financial Sector Restructuring and Regional Integration in the Western Balkans." Office for South East Europe, European Commission – World Bank. <http://www-wds.worldbank.org>.
- Obstfeld, M., Rogoff, K. 1998. *Foundations of International Macroeconomics*. Cambridge, Massachusetts: MIT Press.
- Prasad, E.S., Rogoff, K., Wei, S-J., Kose, M.A. 2003. "Effects of Financial Globalization on Developing Countries: Some Empirical Evidence." International Monetary Fund (FMI). March 17, 2003.
- Rodrik, D. 1998. "Who Needs Capital-Account Convertibility?" » <http://ksghome.harvard.edu>.
- Stiglitz, J. 2002. *Globalization and Its Discontents*. New York: W.W. Norton and Company.
- Summers, L.H. 2000. "International Financial Crises: Causes, Prevention, and Cures." *American Economic Review*, Vol. 90, No. 2, pp. 1-16.
- Sysoyeva (Masson), I. 2008. "Capital Account Liberalization in the New Member States of the European Union and Financial Integration in the Enlarged Europe." Presented at the 1st Doctoral Meeting of Montpellier (D.M.M.), February 27th-29th, 2008, Montpellier, France, (unpublished).
- Wei, S-J. 2006. "Connecting two views on financial globalization: Can we make further progress?" *Journal of Japanese and International Economies*, 20 (2006), pp. 459-481.

Other sources

- Bank of Albania. 2007. "*Financial Stability Report*." <http://www.bankofalbania.org>
- Central Bank of Bosnia and Herzegovina. 2007. "*Annual Report for 2007*." <http://www.cbbh.ba>
- Montenegro Central Bank. 2006. "*Central Bank of Montenegro Bank Supervision*." <http://www.cb-mn.org>
- Montenegro Central Bank. 2006. "*Banking Sector Safety and Soundness*." <http://www.cb-mn.org>
- Montenegro Central Bank. 2008. "*Bulletin of Central Bank of Montenegro*." <http://www.cb-mn.org>
- National Bank of Serbia. 2007. "*Financial Stability Report*." <http://www.nbs.yu>

Testing Convergence in Europe: The Case of Integration of Balkan Countries in the European Financial System¹

Fabienne Bonetto, Anna Tykhonenko², Srdjan Redžepagić³

ABSTRACT – This paper aims to show the impact of financial variables on the process of convergence between selected European Union and Balkan countries. Indeed, after a delay in the realization of structural changes – result of historical legacy and circumstances in which the transition process took place –, Balkan countries started at the end of 1990s essential reforms in their financial systems with the adoption of concrete measures directed towards the growth and increase of the financial sector efficiency. So, using panel data over the period 1999-2007 for a sample of 21 countries, we test the convergence's hypothesis by the Bayesian iterative estimation method; two financial variables are introduced to control the differences in steady-state. Our empirical results sustain the importance of the domestic credit and the market capitalization in the catching-up process by a significant increase in the speed of convergence.

KEY WORDS: Balkan countries, European Union financial systems, convergence, empirical analysis, finance-growth model estimations

Introduction

The aim of this paper is to check if Balkan countries are converging with the European Union (EU) countries. According to Kocenda (2001), a certain degree of convergence in macroeconomic fundamentals was achieved among advanced Central and Eastern European countries. Contrary to studies which are exclusively focused on the convergence of real measures of economic activity of the transition economies with those of the EU countries (Korhonen, Fidrmuc [2001]), our empirical analysis introduces variables relating to the financial system (the domestic credit provided by banking sector in percentage of GDP and the market capitalization of listed companies in percentage of GDP). Indeed, several studies test convergence of financial variables in the EU or among transition economies (Brada, Kutan [2001]; Kocenda [2001]; Murinde et al. [2004]). Moreover, the relationship between financial system and economic growth is subject to academic discussion (Beck et al. [2001]; Wachtel [2001]). There would exist a positive link between financial development and long-run growth rate (Pagano [1993]) so that the financial system would be a growth-factor : “countries with larger banks and more active stock markets grow faster over subsequent decades even after controlling for many other factors underlying economic growth” (Levine [1997], p.?). Indeed, the financial system affects economic growth by reducing some of informational asymmetries (Schiantarelli [1995]), by influencing the capital accumulation of endogenous growth factors (Romer [1986]; Lucas [1988]; Rebelo [1991]) and by altering the rate of technological innovation (Romer [1990]; Grossman, Helpman [1991]; Aghion, Howitt [1992]). Many empirical analyzes support the assump-

¹ This paper is a part of researching project no.159004, financed by the Ministry of Science and Technological Development of Republic of Serbia, named: "The Integration of Serbian Economy into the EU - Planning and Financing of Regional and Rural Development and Enterprise Development Policy"

This paper is one of results of the research project of *Hubert Curien Partnership* program « Pavle Savic » (Serbian-French technology cooperation for years 2008/2009) titled *FINANCIAL SYSTEMS INTEGRATION OF BALKAN COUNTRIES IN THE EUROPEAN FINANCIAL SYSTEM* realized in the research cooperation between University of Nice-Sophia Antipolis, CEMAFI (France) and Institute of Economic Sciences, Belgrade (Serbia).

² Fabienne Bonetto, Anna Tykhonenko, University of Nice-Sophia Antipolis

³ Srdjan Redžepagić, Institute Of Economic Sciences, Belgrade

tion that the financial system is an important determinant for growth and economic development (King, Levine [1993a, 1993b, 1993c]; Galetovic [1994]; Rajan, Zingales [1996, 1998]; Beck et al. [2000]; Cetorelli, Gambera [2001]; Carlin, Mayer [2003]). In addition, the insufficiency of financial development can even be a real barrier to growth and blocks the economy in a poverty trap (Berthelemy, Varoudakis [1996]). Empirical evidence also suggests that the positive relationship between financial development and economic growth is associated with large differences across the structure of financial systems of countries (World Bank [1989]; Boyd, Smith [1996]). According to Rajan and Zingales (2000) or Holmström and Kaplan (2001), the market-based system is better for economic growth. However, it's difficult to draw conclusions about the dominance of one financial structure over another (Levine [1997]). Indeed, stock market liquidity (measured by stock trading relative to GDP and market capitalization) and the level of banking development (measured by bank credits to private firms divided by GDP) both predict economic growth (Levine, Zervos [1996, 1998]). In the same way, Rousseau and Wachtel (2000) find a positive influence of both stock market activity (per capita value traded) and banking sector development (per capita liquid liabilities [M3]) on growth. Thus, "the debate should not focus on bank-based versus market-based systems because these two components of the financial system enter the growth regression significantly and predict future economic growth" (Levine [1997], p.?). In practice, the two types of financial system coexist in the same country (Hölzl [2003]) so that the financial systems are a configuration of complementary elements. Consequently, this paper is organized as follows. Section 2 describes the financial system of Balkan countries and gives us some ideas about the progress steps of European Union financial market integration. Section 3 introduces the empirical methodology of test of (absolute and conditional) convergence (the Bayesian iterative estimation method) and presents results for a panel of 21 countries (selected European Union and Balkan countries) over the period 1999-2007. Finally, section 4 concludes.

Financial system of Balkan countries

The financial institutions of the South-East of Europe hold out, in spite of the world-wide crisis which abuses the stock exchange places. In 2007, the banking credits increased by 30% in the area, and the rise continued the first months of 2008. Until now, the relative insulation of the banks of Balkans protected from the world-wide crisis. However, whereas their activity of credit increased much to stimulate the economic growth, will they be able to remain with the variation of the total tendencies?

The Balkan banking environment recorded strong growth during the last year, in spite of the financial crisis which currently shakes Wall Street, the UE and the stock markets of Asia⁴. Extension of the crisis to the other sectors of the money market and the economy world its long duration, marked the development of the banking environment during first half of the year 2008, the dynamics of growth in the area of Balkans remained vigorous. The rather low level of exposure to the international financial institutions, weak integration at the international markets and the strong capitalization of the international banks operating in the Balkan area are some of the factors quoted to explain connect it immunity of the area vis-à-vis the current financial disappointments. Nevertheless, the financial experts of Balkans and the large bankers warn against any kindness. They estimate that there are serious risks which could materialize very well and inflict serious damage with their financial system.

The area remains moreover heterogeneous from the economic point of view, like in terms of European integration. Slovenia joined the UE in 2004, Romania and Bulgaria in 2007. As for Croatia, it will be undoubtedly the next one to join the club, having started into 2006 the negotiations for its adhesion. Macedonia for its part signed the *Agreement of stabilization and association* (the first step towards adhesion) in 2001 and obtained the statute of applicant country to the EU in 2005. But, contrary to Croatia, the talks for its adhesion supplements did not start yet. Albania, Serbia, Montenegro and Bosnia-Herzegovina are even less advanced. These States signed only the *Agreement of stabilization and association*, without to have obtained the statute of applicant country. The reorganization of the finan-

⁴ Indicates one report of the *Raiffeisen Bank*, entitled the "EEC Banking 2008".

cial sector, the banking environment and privatizations took steps of giant in Balkan countries these last years and are almost finished (probably not yet!). We find that the privatization of the public credits had a decisive impact on "the improvement of the banking services and the stimulation of competition".

New legal and institutional, obligatory reforms under the terms of the process of European integration, should also have durable positive effects on the regional economies and the banking structure. The volume of loans thus knew a growth record of 42 % in 2007, pulled by a boom of the national economies which reached almost 4 % of the GDP in 2007. The economists, of which those of the IMF⁵, expect that the growth of the GDP turns around 5 % this year in this part of South-East Europe. Over all, the economies of the area now need co-operation as regards credit whereas these last years, the stress was laid on the maintenance of the profitability of the companies and the diversification of the sources of income, it acts from now on to finance the growth of the credit. Indeed, because of the contraction of the credit available on the international markets, the companies of the area turn more and more to the local banks to secure a loan. In a number growing of countries of Balkans, the mortgage loans became besides one of the most dynamic products in the sector of the detail. The financial institutions became able to support the strong growth of the deposits of the last years, as confidence increased in the banking environment. To that are added the completion of the privatization of the banks, various institutional reforms in financial systems and the rise of the levels of incomes. Slovenia enjoys the strongest base of saving of all Balkan countries, with approximately 108% of the GDP in 2007. This significant increase followed the inclusion of the country in the euro zone (also, these figures are compared favorably with the 144% recorded in the euro zone). As, increasingly solid confidence in the banking environment of Balkan countries (and their financial system), stimulated by privatizations and the arrival of foreign banks during last years, was confirmed by a continuous increase in the saving expressed as a percentage of the GDP. The opinion of the most of Balkan countries citizens is: "One always thought as the banks of the West were sure and that the banks of the East were risky", but it is confirmed in their economies that the banks (presented there) showed a very responsible attitude in businesses in this part of the world – region of the Balkan!

Test of convergence: empirical methodology and results

In this article, data used are from the source "World Development Indicators" (World Bank Group, 2007). The variables analyzed by authors are based on the following data:

- GDP per capita, PPP (constant 2005 international \$): GDP per capita based on purchasing power parity (PPP). PPP GDP is gross domestic product converted to international dollars using purchasing power parity rates;
- Domestic credit provided by banking sector (% of GDP) includes all credit to various sectors on a gross basis, with the exception of credit to the central government, which is net. The banking sector includes monetary authorities and deposit money banks, as well;
- Market capitalization of listed companies (% of GDP): also known as market value, the market capitalization is the share price times the number of shares outstanding. Listed domestic companies are the domestically incorporated companies listed on the country's stock exchanges at the end of the year.

In the following "panel", we've especially focused for the period from 1999 till 2007 for 21 countries: Austria (AUT), Belgium (BEL), Bulgaria (BLG), Croatia (HRV), Denmark (DNK), Finland (FIN), France (FRA), Germany (DEU), Greece (GRC), Ireland (IRL), Italy (ITA), Luxembourg (LUX), Macedonia (MKD), Netherlands (NLD), Portugal (PRT), Romania (ROM), Serbia (SRB), Slovenia (SVN), Spain (ESP), Sweden (SWE), United Kingdom (GBR).

⁵ See reports of the IMF on these economies of Balkan countries!

Absolute Convergence Testing

The test of absolute or unconditional convergence consists in identifying the correlation between the growth rate ($\log(y_{i,t}/y_{i,t-1})$) and the initial income per capita. Barro R. and Sala-I-Martin X. [1996] specified the model of absolute convergence (rewritten in dynamics for panel data) :

$$\log\left(\frac{y_{i,t}}{y_{i,t-1}}\right) = a - (1 - e^{-\beta}) \log y_{i,t-1} + \varepsilon_{it} \quad (1)$$

with a indicating the constant term, and $-(1 - e^{-\beta})$ the slope coefficient. Note that, if β is a positive value, the annual growth rate, $\log(y_{i,t}/y_{i,t-1})$, is negatively correlated with $\log(y_{i,t-1})$. In this case, the poor economies tend to grow faster than the rich ones, which implies the absolute convergence.

Table 1. Empirical Iterative Bayes' Estimators of the Rates of Convergence ($\hat{\beta}_i$).
Hypothesis : Absolute Convergence.

"Beta-shrinkage" country by country :				
Number of iterations 8				
Country	Half-life	Beta	StdErrors	T-Stat
AUT	12,6	0,023826	0,007016	3,3960518
BEL	12,4	0,024317	0,007069	3,4397074
BLG	11,4	0,026336	0,007606	3,4625103
HRV	11,6	0,025885	0,007458	3,4706773
DNK	12,5	0,024089	0,007035	3,4240816
FIN	13,4	0,022441	0,007102	3,1597696
FRA	12,3	0,024509	0,007096	3,4537230
DEU	12,3	0,024460	0,007102	3,4440032
GRC	12,0	0,024986	0,006535	3,8233106
IRL	13,0	0,023188	0,006955	3,3342152
ITA	12,2	0,024767	0,007176	3,4535731
LUX	14,0	0,021547	0,006549	3,2901620
MKD	11,2	0,026982	0,008359	3,2277620
NLD	12,6	0,023981	0,007015	3,4184342
PRT	12,3	0,024453	0,007430	3,2911305
ROM	11,3	0,026678	0,008063	3,3088342
SRB	11,2	0,026919	0,008117	3,3166104
SVN	12,0	0,025135	0,007242	3,4709115
ESP	12,5	0,024037	0,007169	3,3529871
SWE	12,9	0,023370	0,007066	3,3072523
GBR	12,3	0,024390	0,007010	3,4793084

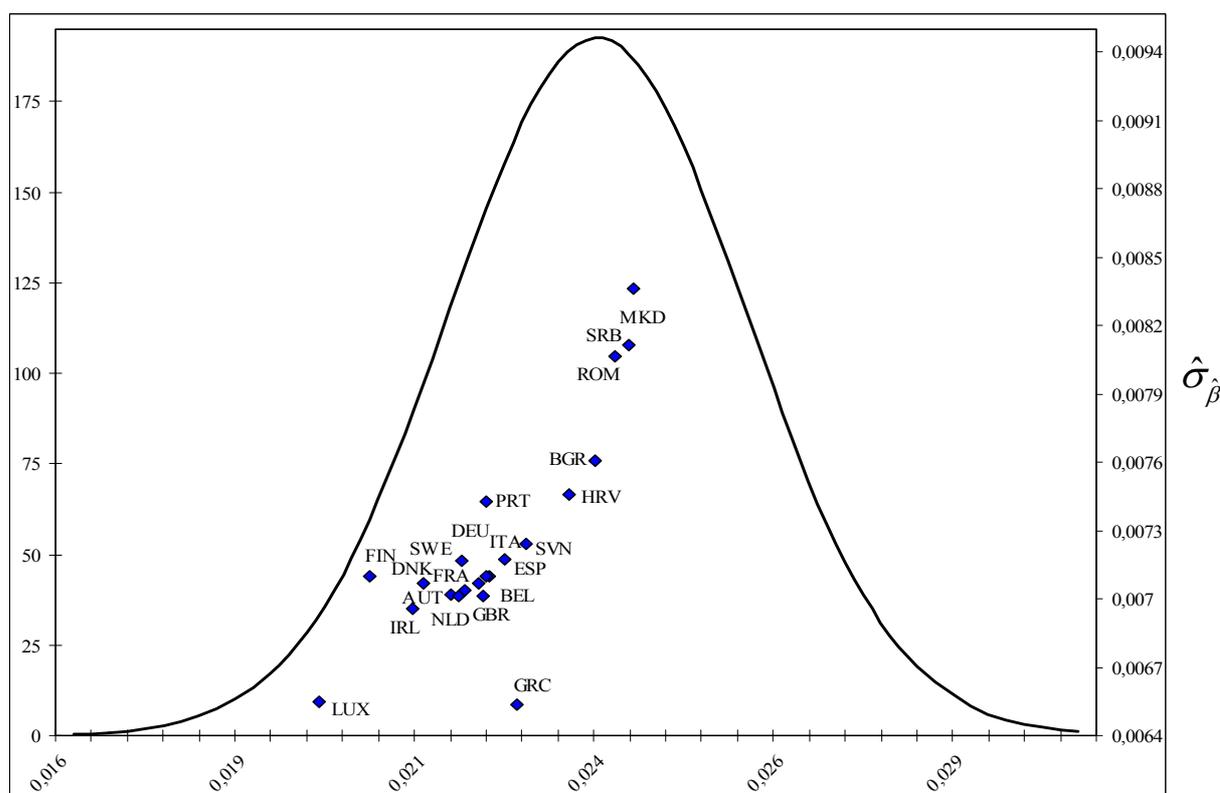
Table 1 contains the results of estimates: empirical iterative Bayes' estimators for rates of convergence and the computed "half-life", or the number of time periods necessary for the per capita income gap to be halved. The criterion to end the procedure being fixed at 0,005, there are eight iterations. The coefficients are significantly different from zero and have theoretically correct signs (positive for the constant and negative for $\log y_{i,t-1}$). Note that the less economically advanced countries like Bulgaria, Croatia, Macedonia, Romania and Serbia have higher rates of convergence than the richest countries of the Union. This result is in conformity with the theoretical lesson: the rate of convergence decrease with increasing in the per capita income level. According to predictions of the convergence theory, the "half-life" is longer for the countries of the EU's "core" than for the Balkans countries. Thus, according to these results, Luxembourg and Finland would need more than 13 years to catch-up a half of the

distance which separates their economies from the path of steady state growth. On the other hand, the “latecomers” of the sample, Bulgaria, Croatia, Macedonia, Romania and Serbia, need about 11 years.

The countries’ distribution according to their rates of convergence (Figure 1) seems to be consistent with the indicators of economic growth performance: “poor” countries having rates of convergence systematically higher than their “rich” neighbors of the sample. However, the dynamic convergence model is limited to only one explanatory variable, $\log y_{it-1}$. The augmenting of the model by the market capitalization and the ratio domestic credit on GDP lets to test the conditional convergence hypothesis.

Figure 1. Distribution of Convergence Rates for 21 European and Balkan countries over the period 1999-2007.

Hypothesis : Absolute Convergence



$\hat{\beta}$ (Bayesian Shrinkage Iterative Estimator for the Rates of Convergence)

Conditional Convergence Testing

Islam N. [2000]⁶ proposes to test the following specification for the model of conditional convergence in panel data:

$$\log\left(\frac{y_{it}}{y_{it-1}}\right) = a - (1 - e^{-\beta})\log(y_{it-1}) + \alpha x_{it-1} + \varepsilon_{it} \quad (2)$$

with $x_{it-1} = \log(\text{Capitalization}_{it-1}/y_{it-1}) - \log(\text{Credit}_{it-1}/y_{it-1})$

⁶ Islam N. [1995, 2000] (for the last reference, see p. 323 in Baltagi B.H. [2000]).

The specification introduces in the catching-up relation some “control” variables of the process of growth over the considered period. The model of conditional convergence contains thus three explanatory variables: initial GDP per capita $\log(y_{it-1})$, market capitalization of listed companies (% of GDP) and domestic credit provided by banking sector (% of GDP). The theoretically expected signs are positive for the market capitalization and the domestic credit.

$$\text{with } x_{it-1} = \log\left(\frac{\text{Capitalization}_{it-1}}{Y_{it-1}}\right) + \log\left(\frac{\text{Credit}_{it-1}}{Y_{it-1}}\right)$$

“Beta-shrinkage” country by country :				
Number of iterations 11				
Country	Half-life	Beta	StdErrors	T-Stat
AUT	2,0	0,148042	0,015285	9,685025
BEL	2,1	0,146572	0,016155	9,072594
BGR	1,9	0,159206	0,014725	10,81143
HRV	2,0	0,154251	0,016510	9,342487
DNK	2,0	0,147049	0,016250	9,048686
FIN	2,1	0,140719	0,015700	8,962594
FRA	2,0	0,150197	0,015947	9,418207
DEU	2,0	0,147697	0,016032	9,212349
GRC	1,9	0,154951	0,016480	9,402333
IRL	2,0	0,149956	0,015364	9,760194
ITA	2,0	0,154177	0,016070	9,593588
LUX	2,2	0,139275	0,015474	9,000329
MKD	1,8	0,165778	0,015478	10,710539
NLD	2,0	0,148543	0,016146	9,199613
PRT	2,0	0,150742	0,016710	9,020963
ROM	2,0	0,153703	0,016958	9,063638
SRB	1,9	0,160944	0,016474	9,769097
SVN	2,1	0,146568	0,015512	9,448136
ESP	2,0	0,150808	0,016560	9,106549
SWE	2,0	0,146932	0,016039	9,160919
GBR	2,1	0,145746	0,015342	9,499582

Table 2 contains the empirical iterative Bayes’ estimators of the rates of convergence obtained for 21 countries on the period 1999-2007. The column on the left of the table contains the rates of convergence estimated for the model of conditional convergence whose three explanatory variables are the initial GDP per capita, the market capitalization and the share of the domestic credit in the GDP. The sign of this “control” variable is theoretically expected and the estimated parameters are statistically significant. The rates of conditional convergence estimated over the considered period vary from 13,92 % (for Luxembourg) to 16,57 % per year (for Macedonia). As for the Balkan’s countries, their rates of conditional convergence are higher on average, which implies a “half-life” of two years only.

Table 2. Empirical Iterative Bayes’ Estimators for the Rates of Convergence ($\hat{\beta}_i$).
Hypothesis : Conditional Convergence

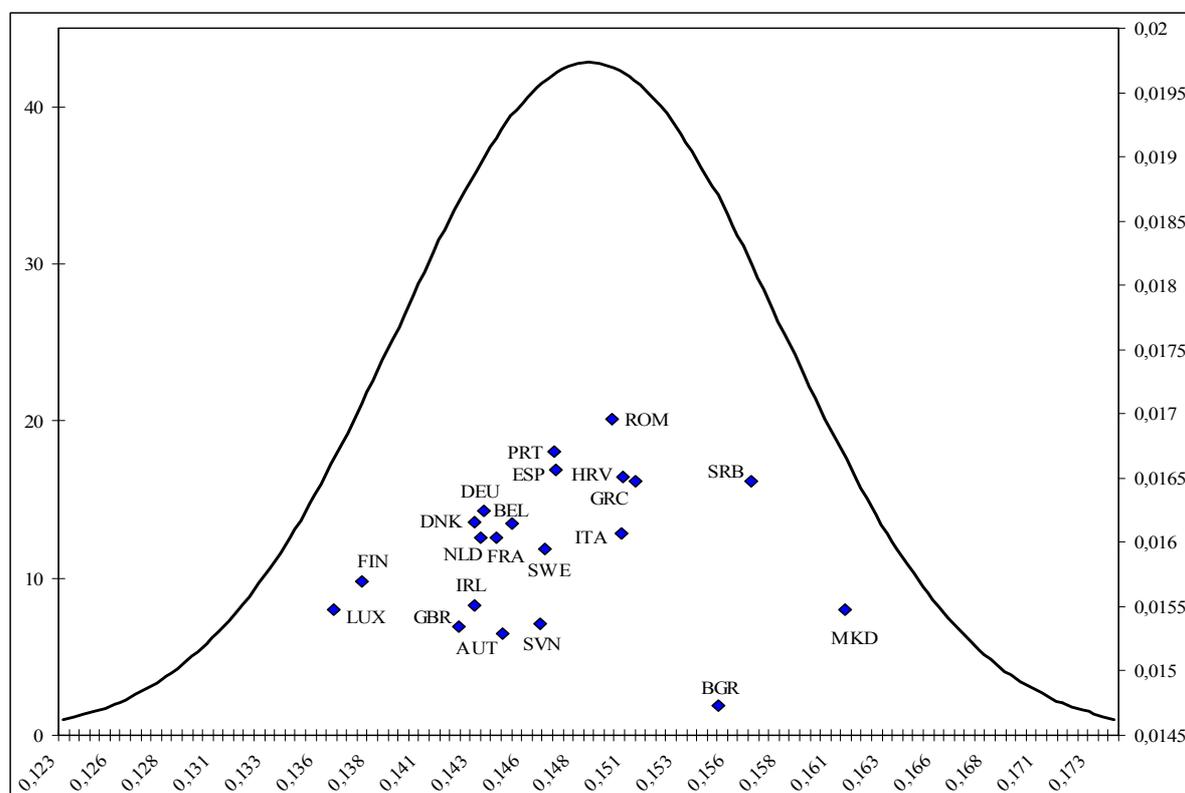
$$\text{Estimated Model : } \log\left(\frac{y_{it}}{y_{it-1}}\right) = a_i - (1 - e^{-\beta_i}) \log(y_{it-1}) + \gamma x_{it-1} + \varepsilon_{it}$$

The results of conditional convergence model's estimation are significantly different from the preceding results. Indeed, the augmenting the initial growth model by market capitalization and the share of domestic credit in the relation of conditional convergence lets to obtain higher rates of convergence. The rates of conditional convergence for countries like Serbia, Bulgaria and Macedonia begun higher (about 16 % per year), which implies a "half-life" of 1,9 years only. Figure 2 represents the distribution of the rates of conditional convergence estimated for the finance-growth dynamic model with. The Balkan countries' distribution in term of convergence dynamics leads us to stress the diversity of the growth trajectories borrowed over the "post-Socialist" period.

Figure 2. Distribution of Convergence Rates for 21 European and Balkan countries over the period 1999-2007.

Hypothesis : Conditional Convergence

$$\text{«Control» variables : } x_{it-1} = \log\left(\frac{\text{Capitalization}_{it-1}}{Y_{it-1}} + \log\frac{\text{Credit}_{it-1}}{Y_{it-1}}\right)$$



Conclusion

In order to reveal the national specificities of catching-up process within 21 European and Balkan countries, we introduce more heterogeneity into the specification of the equations of absolute and conditional β -convergence. The Bayesian iterative estimation method lets to calculate the rates of convergence for each country. Thus, contrary to the traditionally accepted idea of a common rate of convergence, considered countries don't converge at the same rate. The distributions of convergence rates (absolute and conditional) revealed the similarity of growth dynamics for certain EU's countries and their diversity for the others. Their economies could be classified according to their catching-up dynamics. Thus, Luxembourg, Finland and Ireland are the "leaders" of the sample in terms of income per

capita growth. These countries having known an economic "takeoff" in the 80's years for Luxembourg and more recently for Ireland are distinguished from the other EU's members by a slower rate of convergence. The relative distribution of the "core" in terms of rate of convergence seems relatively concentrated and proclaims a significant homogeneity. As for the Balkan countries, their distribution is characterized by the diversity of the growth trajectories borrowed over the period of economic transition. Slovenia and Croatia are "at the head" of the catching-up process compared to other transition countries. Macedonia and Serbia are the "latecomers" of the sample. The empirical results show that it's necessary to relativize the idea according to which the European construction process leads to the standardization of the economic development's trajectories.

References

- Aghion P., Howitt P. (1992), "A Model of Growth Through Creative Destruction," *Econometrica*, Mar., 60(2), pp. 323–51.
- Beck, T., Demirguc-Kunt, A., Levine, R., Maksimovic, V. (2001), Financial structure and economic development: firm, industry and country evidence. In Demirguc-Kunt, A., Levine, R. (Eds.), *Financial Structure and Economic Growth: A Cross-Country Comparison of Banks, Markets and Development*. MIT Press, Cambridge, MA.
- Beck, T., Levine, R., Loayza, N. (2000), Finance and the sources of growth, *Journal of Financial Economics*, 58, 261–300.
- Berthelemy J-C., Varoudakis A., (1996), "Economic Growth, Convergence Clubs, and the Role of Financial Development," *Oxford Economic Paper*, Apr., 48(2), pp. 300–28.
- Bianco M., Gerali A., Massaro R. (1997), "Financial systems across developed economies: convergence or path dependence?", *Research in Economics*, Vol. 51, Issue 3, Sept, pp. 303-331.
- Boyd J.H, Smith B. D., (1996), "The Co-Evolution of the Real and Financial Sectors in the Growth Process," *World Bank Economic Review*, May, 10(2), pp. 371–96.
- Brada, J.C., Kutan, A.M., (2001), "The convergence of monetary policy between candidate countries and the European Union", *Economic Systems*, 25, 215–231.
- Brada J. C., Kutan Ali M., Zhou S. (2005), "Real and monetary convergence between the European Union's core and recent member countries: A rolling cointegration approach", *Journal of Banking & Finance*, Volume 29, January, Pages 249-270.
- Carlin W. and Mayer C. (2003), "Finance, investment, and growth", *Journal of Financial Economics*, Elsevier, vol. 69(1), July, pages 191-226.
- Cetorelli, N., Gambera, M. (2001), "Banking market structure, financial dependence and growth: international evidence from industry data", *Journal of Finance*, 56, 617–648.
- Galetovic, A. (1994), "Finance and Growth: a Synthesis and Interpretation of the Evidence", Board of Governors of the Federal Reserve System, International Finance Discussion, Paper n. 477.
- Grossman G. M, Helpman E. (1991), "Quality Ladders in the Theory of Growth," *Rev. Econ. Stud.*, Jan., 58(1), pp. 43–61.
- Holmstrom B. and Kaplan S.N. (2001), "Corporate Governance and Merger Activity in the U. S", *Journal of Economic Perspectives*, 15: 121-144.
- Hölzl W. (2003), "Convergence of financial systems: Towards an evolutionary perspective", Working Papers 31, Vienna University of Economics and B.A. Research Group: Growth and Employment in Europe: Sustainability and Competitiveness.
- King, R., Levine, R. (1993a). Finance, entrepreneurship and growth. *Journal of Monetary Economics*, 32, 513–542.
- King, R., Levine, R. (1993b). Financial Intermediation and Economic Development. In C. Mayer & X. Vives, Eds. *Capital Markets and Financial Intermediation*. Cambridge: Cambridge University Press.
- King, R., Levine, R. (1993c). Finance and growth: Schumpeter might be right. *The Quarterly Journal of Economics*, 108, 681–737.
- Kočenda, E. (2001), "Macroeconomic convergence in transition economies", *Journal of Comparative Economics*, vol. 29, pp. 1–23.

- Korhonen, I., Fidrmuc, J. (2001), "Similarity of supply and demand shocks between the Euro area and the accession countries", *Focus on Transition*, 2, 26–42.
- Levine R. (1997), "Financial Development and Economic Growth: Views and Agenda", *Journal of Economic Literature*, American Economic Association, vol. 35(2), June, pages 688-726.
- Levine, R., Zervos, S. (1998), "Stock markets, banks and economic growth", *American Economic Review*, 88, 537–558.
- Levine R., Zervos S. (1996), "Stock Markets, Banks, and Economic Growth", World Bank Policy Research Working Paper, No. 1690, Dec.
- Lucas R. E. (1988), "On the Mechanics of Economic Development," *J. Monet. Econ.*, July, 22(1), pp. 3–42.
- Murinde V., Agung J. and Mullineux A. (2004), "Patterns of Corporate Financing and Financial System Convergence in Europe", *Review of International Economics*, Vol. 12, No. 4, September, pp. 693-705.
- Pagano M. (1993), "Financial Markets and Growth: An Overview," *Europ. Econ. Rev.*, Apr., 37(2–3), pp. 613–22.
- Rajan R.G. und Zingales L. (2000) The Governance of the New Enterprise, in X. Vives (ed.) *Corporate Governance: theoretical and empirical perspectives*, Cambridge University Press: Cambridge.
- Rajan, R., Zingales, L. (1998), "Financial dependence and growth", *American Economic Review*, 88, 559–586.
- Rajan, R., Zingales, L. (2001), "Financial systems, industrial structure, and growth", *Oxford Review of Economic Policy*, 17, 467–482.
- Rajan, R. Zingales, L. (1996), Financial Dependence and Growth, mimeo, University of Chicago.
- Rebelo S. T. (1991), "Long-Run Policy Analysis and Long-Run Growth," *J. Polit. Econ.*, June, 99(3), pp. 500–21.
- Romer P. M. (1986), "Increasing Returns and Long-Run Growth," *J. Polit. Econ.*, Oct., 94(5), pp. 1002–37.
- Romer P. M. (1990), "Endogenous Technological Change," *J. Polit. Econ.*, Oct., 98(5, Pt. 2), pp. S71– 102.
- Rousseau, P., Wachtel, P. (2000), "Equity markets and growth: cross-country evidence on timing and outcomes, 1980–1995", *Journal of Banking and Finance*, 24, 1933–1957.
- Schiantarelli F. (1995), "Financial Constraints and Investment: A Critical Review. Methodological Issues and International Evidence," in *Is bank lending important for the transmission of monetary policy?* Eds.: JOE PEEK AND ERIC S. ROSENGREN. Boston, MA: Federal Reserve Bank of Boston Conference Series No. 39, June, pp. 177–214.
- Wachtel, P. (2001), "Growth and finance: what do we know and how do we know it?", *International Finance*, 4, 335–362.
- World Bank (1989), *World development report* Washington, DC: Oxford U. Press.

Appendix

The empirical iterative Bayes' estimators belong to the family of the shrinkage estimators. In the framework of the random-coefficients model, a single equation model in its matrix notation for the i^{th} individual can be written as:

$$y_i = X_i \gamma_i + u_i \quad \text{with} \quad i=1, \dots, N$$

where y_i is a vector $(T, 1)$, X_i is a matrix with (T, k) observations and γ_i is a vector of $(k, 1)$ parameters.

The model is assumed to be dynamic: X_i contains lagged values of y_i . If all the parameters are treated as fixed and different for cross-sectional units and time periods, there are NTk parameters to estimate with only NT observations. Obviously, we cannot obtain any meaningful estimates of vector γ_i . Alternatively, each regression coefficient can be viewed as a random variable with a probability distribution. The random-coefficients specification substantially reduces the number of parameters to be estimated, while still allowing the coefficients to differ from unit to unit and/or from time to time.

In the Bayesian framework, the *prior* distribution of γ_i is given by: $\gamma_i \sim N(\mu, \Sigma)$. Since the parameters μ (average of γ_i), Σ (variance of γ_i allowed as a measurement of heterogeneity) and σ_i^2 (residual variance) are unknown, we must make some assumptions on the *prior* specification of these parameters. Then, we can obtain the *posterior* distribution of γ_i . If μ , Σ and σ_i^2 were known, then the *posterior* distribution of γ_i will be given by:

$$\gamma_i^* = \left[\frac{1}{\sigma_i^{*2}} X_i' X_i + \Sigma^{*-1} \right]^{-1} \left[\frac{1}{\sigma_i^{*2}} X_i' X_i \hat{\gamma}_i + \Sigma^{*-1} \mu^* \right] \quad (1)$$

where $\hat{\gamma}_i$ is the OLS estimator of γ_i^* . The *posterior* distribution means of γ_i and its variance are defined by:

$$\mu^* = \frac{1}{N} \sum_{i=1}^N \gamma_i^* \quad (2)$$

$$V[\gamma_i^*] = \left[\frac{1}{\sigma_i^{*2}} X_i' X_i + \Sigma^{*-1} \right]^{-1} \quad (3)$$

But, in general, Σ and σ_i^2 are unknown parameters, so we have to make some *prior* assumptions about them. Smith [1973] proposed for Σ^{*-1} the conjugate Wishart distribution and independent inverse χ^2 distributions for σ_i^2 (Lindley and Smith, 1972). The author used the mode of the joint *posterior* distribution:

$$\sigma_i^{*2} = \frac{1}{T + \zeta_i + 2} \left[\zeta_i \lambda_i + (y_i - X_i \gamma_i^*)' (y_i - X_i \gamma_i^*) \right] \quad (4)$$

$$\text{and} \quad \Sigma^* = \frac{1}{T - k - 2 + \delta} \left[R + \sum_{i=1}^N (\gamma_i^* - \mu^*)(\gamma_i^* - \mu^*)' \right] \quad (5)$$

where ζ_i , λ_i , δ and R are parameters arising in the *prior* distributions. Smith [1973] proposed to approximate these parameters by using $\zeta_i = 0$, $\delta = 1$ and R is a diagonal matrix with small positive entries (for example, equal to 0,001).

The estimators are:

$$\sigma_i^{*2} = \frac{1}{T+2} \left[(y_i - X_i \gamma_i^*)' (y_i - X_i \gamma_i^*) \right] \quad (6)$$

$$\Sigma^* = \frac{1}{T-k-1} \left[R + \sum_{i=1}^N (\gamma_i^* - \mu^*)(\gamma_i^* - \mu^*)' \right] \quad (7)$$

$$\gamma_i^* = \left[\frac{1}{\sigma_i^{*2}} X_i' X_i + \Sigma^{*-1} \right]^{-1} \left[\frac{1}{\sigma_i^{*2}} X_i' X_i \hat{\gamma}_i + \Sigma^{*-1} \mu^* \right] \quad (8)$$

and
$$\mu^* = \frac{1}{N} \sum_{i=1}^N \gamma_i^* \quad (9)$$

The equations (6) to (9) have to be estimated by iterative procedure. The initial iteration uses the OLS estimates of $\hat{\gamma}_i$ to calculate μ^* , Σ^* and σ_i^2 . The second iteration is based on the empirical iterative Bayes' estimator γ_i^* . The third iteration and the following ones are identical to the second.

The empirical Bayes' estimator has been proposed by Maddala G.S. and *alii* (1996). The only difference with Smith's estimator is the computation of the parameters σ_i^2 and Σ^* :

$$\sigma_i^{*2} = \frac{1}{T-k} (y_i - X_i \gamma_i^*)' (y_i - X_i \gamma_i^*) \quad (10)$$

$$\Sigma^* = \frac{1}{N-1} \left[R + \sum_{i=1}^N (\gamma_i^* - \mu^*)(\gamma_i^* - \mu^*)' \right] \quad (11)$$

Maddala G.S. and Hu W. [1994] have shown, by Monte Carlo study, those iterative processes for estimating Σ^* and μ^* tend to more efficient estimates for dynamic models than the two-step procedures. Hsiao C., Pesaran M.H. and Tahmiscioglu A.K. [1999] have also confirmed that, in the case of dynamic panel data model with coefficient heterogeneity, the Bayesian approach performs fairly well even if the time dimension is small.

The Relationship Between Bank and SME: Evolution After Basel Capital Accord 2

Valter Cantino¹

ABSTRACT – *Economic literature today focuses on creation of value and on its diffusion to shareholders. Financial transparency, therefore, becomes a decisive aspect in verifying whether the firm creates or destroys value and, ultimately, how this value is distributed amongst the stakeholders.*

The attainment of this result depends on the culture and tradition prevailing in the various national environments and on the rate of adaptability of the enterprises to the new market demands. In particular in the Anglo-Saxon environment the culture of “financial transparency” has already been accepted by having put in place a number of “social” control instruments (auditing, rating, internal control rules, codes of ethics, etc.).

In other countries the achievement of transparency is slow in spreading as a guiding principle. This is particularly true for the Small and Medium Enterprises (SME) which are very dynamic on the entrepreneurial side, but often lacking in the area of “formal” information procedures

The new Basel Accord on capital requirements (known as Basel 2) whose effect on firms is a stricter evaluation by banks of the firm’s business model is to be taken as an external influence on the world of enterprises imposing a different culture to the banking-enterprise relationship that aims at the achievement of greater transparency in financial communication

The requirement of conforming with the new rules that will govern bank rating must therefore be approached by the SMEs as a system that will allow better credit terms and improved financial consultancy service aimed at improving the firm’s financial management.

KEY WORDS: *value of the firm, financial transparency, Basel Accord on capital requirements (Basel 2), communication models, qualitative information, small medium enterprises (SME), rating*

Foreword

Rating is an overall evaluation of the firm to assess its financial risk. A wide variety of parties are interested in the firm’s rating. In addition to the owners of the firm, the shareholders, we find a variety of stakeholders, such as managers, banks, creditors, employees and unions, customers, suppliers, public entities.

Rating is important since, among other things, it provides to the firm financial “credibility” among the market and its players.

Credibility is essential for enterprises and is intrinsic to the principle of “*economicity*”, understood as the ability of the company to operate as a long-lasting economic entity. For a company, this ability is identified as the capacity to reach a given final result (basic objective), starting from different initial conditions (differentiated sub-objectives or sub-assemblies) and operating in different ways (co-existence of various policies).

If the market possesses the instruments necessary to recognize those who perform well, setting aside those that do not rapidly conform to the rules, it will be the “global relationships” that will create the selection that will promote those institutions that are more attentive to the needs of the stakeholders and that will inevitably reject those that are unresponsive to the relational change. In order to distinguish correct performers from the incorrect ones, it is essential to start from *public and reliable* eco-

¹ Valter Cantino, SAA, University of Torino

nomic-financial “reports” that are drawn up according to a shared “basic value”: that of *financial transparency*.

As mentioned above, the complexity of the company system and of the management requires the creation of a well-constructed series of relationships between different subjects directly involved in the operations of the firm (shareholders and stakeholders) and systems such as the market, technological, social, legislative and banking systems, the local communities, the consumers, environmental and political groups, the trade unions, the public administration

All the subjects and systems quoted above, as well as others, interact with the organizational and production structure of the enterprise in an attempt to influence its behavior and choices based on their own particular interests. Those with subjective interests that can be stronger or weaker based on the direct or indirect connection that they may have with the company, as mentioned above, constitute the stakeholders. The active influence of the various groups of stakeholders reflects on the entrepreneurial decisions taken and, ultimately, on the “operating result” and, through this, on the “value of the firm”.

Financial transparency, therefore, becomes a decisive aspect in verifying whether or not the enterprise creates or destroys value and, ultimately, how this value is distributed amongst the stakeholders.

Economic literature today focuses on creation of value and on its diffusion to the shareholders who are the subjects that receive “residual” remuneration once all the other production factors have been remunerated (labor, means of production, financial capital, etc.).

In any case, the other entities that confer resources (employees, suppliers, financial institutions, etc.) are remunerated according to the principle of “adequate remuneration of productive factors, so as to maintain the features of long-lasting competitiveness of the firm according to a basic principle of “equity considered from the social viewpoint”.

The attainment of this scenario depends on the culture and tradition prevailing in the various national contexts and on the rate of adaptability of the enterprises to the new demands stemming from the market. In particular, some environmental contexts, such as the Anglo-Saxon one, have already accepted the culture of “financial transparency” by having put in place a number of “social” control instruments (for example; auditing, rating, internal control rules, codes of ethics, etc.).

In other countries such as Italy, for example, with certain exceptions, this “value” is slow in spreading as a guiding principle for public and private economic operators (for example: the Draghi Law, the Stock Exchange Committee, Consob, etc.).

The new Basel Accord on capital requirements (known as Basel 2) is to be taken as an external influence on the world of enterprises that, first and foremost, imposes a different culture to the banking-enterprise relationship that is based on a relationship that aims at achieving greater transparency in financial communication, for those who are willing to make positive use of the novelty.

Financial transparency is firmly rooted on a system of formal communication of “assessments” and “evaluations” of the management of the firm.

The allocation of assessment and evaluations of the management of the enterprise makes it possible for the stakeholders to appreciate the quality of the management and the short and long-term repercussions on the economic financial results and on the capital value of the firm itself.

New models of communication between bank and enterprise

Currently, banks have not as yet clearly defined how to operate effectively in order to evaluate the SMEs under various factors:

- Basel has proposed settings that are still under discussion;
- it is rare to find ratings issued for small-sized enterprises;
- banks that use the method based on internal rating are experimenting the method of large-sized enterprises and the sensitivity needed to face the evaluation of the SMEs is still lacking.

Moreover, it is necessary to consider that these entities are not always compelled to draw-up financial statements and the tax and social security regulations allow for simplifications of administrative nature.

With regard to the above, it is necessary to learn to appreciate the qualitative elements of the management of the enterprise are seldom reported by “formal” financial statements

The qualitative elements may be “acquired” directly from the rating model, but they often remain foreign to the model in its stricter sense and can only be appreciated in the commercial relationship that is established between the bank executive and the entrepreneur.

In any case, from the viewpoint of the SME, it is necessary to acquire awareness of the value of financial transparency since in the relationship with banks the way in which information is disclosed (more than the quantity disclosed), influences the firm’s possibilities of being granted a loan or the determination of a rate of interest that is advantageous to the enterprise itself

The information needed can generally be found within an enterprise but, in the same way as an untidy drawer, it cannot always be found within the time frame and in the form required.

An overview of the various features impacting the qualitative information impacting the assessment of the firm’s business model capable of improving the relationship with the bank is submitted below.

“Qualitative” information to evaluate enterprise business model

In order to enter the information in the rating model, banks continue to gather information on the company by means of interviews with the management and the firm’s personnel and complete a form that outlines the enterprise, its functional areas and type of process, and that summarizes the competitive advantage of the enterprise with respect to its competition.

More in general, for industrial firms, the evaluation process may take the following factors into consideration:

Diversification factors:

The purpose of diversification is that of limiting the effect of economic cycles and smoothing their effects on the performance of the enterprise. The assessment of creditworthiness suffers if the various businesses react in the same way during the general cyclical trend.

Each business area contributes to the overall risk scheme of an enterprise, not as an aggregate but as a sub-system that is “co-targeted” in the wider company framework; it is necessary, therefore, to proceed with the separate analysis of each segment in order to comprehend the specific limits and opportunities it involves.

Size factors.

Size in itself does not represent an absolute element of performance on which to base assessment, but does represent a starting point. In fact, there are a number of small-sized companies that successfully compete achieving dominant positions on the local market by offering differentiated products and services and that are targeted towards a well-defined population that a large-sized enterprise is not capable of reaching.

The greatest limits to the size factor can be observed in the financial area; in fact a small-sized company does not possess the financial flexibility needed to devote adequate resources to support its business. Moreover, larger enterprises have a capital base that enables them withstand moments of crisis and financial turbulence. Most of the times this is something unavailable to smaller size firms with more promising specific features and operating in sectors of strong development, but with a limited capitalization that is typical of those who are at the beginning of their economic adventure.

Quality of management.

Management is decisive in defining the success of operations of the firm. The subjective assessments of the analyst are influenced by the information gathered through interviews with the firm’s top man-

agers. These opinions are needed in order to understand how much of the success of the enterprise depends on the quality of the management with respect to other factors such as the ownership structure, the development of the market or yet other factors.

Organisational factors.

Organisational factors are significant to understand a number of critical aspects of the enterprise that may result in serious problems from the economic-financial standpoint. For example, these situations may be the following:

- Attribution of excessive weights of responsibility that may considerably weaken a company area in the event of resignation of the employee;
- lack of an adequate delegation mechanism that does not allow for an efficient system of internal control aimed at safeguarding company capital;
- lack of adequate involvement of middle management in strategy decisions that could hinder the process of generational turn-over;
- excessive personnel turnover and re-definition of organisational roles that indicates unclear views in the management of human resources;
- incoherence between strategy and organisational structure.

Structure and composition of the company's control.

The ownership structure is decisive in understanding the governance rules. It is important to assess, for example if the ownership is stable, if the enterprise belongs to a group, if there are disputes running between the partners. For small and medium-sized companies, it is necessary to assess the involvement of the family members in managing the company so as to express an assessment on company continuity.

Trustworthiness of accounting data.

The rating process requires the analysis of trustworthy data. In order to ensure that the ratios, statistics and series of data obtained from the financial statement accurately define the performance and competitive position of the enterprise, analysts assess the quality of the data and the accounting criteria used. The control of data by auditors is a good indicator of data trustworthiness. For companies of smaller size, it is important to co-relate the accounting data to measures of productivity of physical factors such as, for example, the consumption of energy or water used for the production process, so as to obtain an indication of the quality of production and the real potential of the enterprise.

Degree of financial risk.

The financial policies used by the enterprise are assessed from an historical perspective and by projecting the future, identifying the respective quantitative and qualitative levels.

Regarding the quantitative aspect, the bank attempts to understand whether or not there are forecasted profitability or expectations of distribution of dividends. Results are usually compared with those of companies operating in the same or within different markets that have already been assessed by the bank itself. The approach of the company's management to the level of indebtedness can be extremely varied and may be influenced by the strength of the local financial market, by the relationships established with local banks.

Financial policies, however, must not be bent to reach a predefined rating. assessment. Above all they must be coherent with the needs of the business and with the objectives of the firm.

From the qualitative aspect, consistency is, perhaps, the most important element. It implies a shared of interest, among the top management of the company, and a general desire to reach challenging goals. This potential risk is not demonstrated by any financial indicator, but emerges within the framework of the discussions and meetings with the management.

A fundamental task for the analysis of financial risk is defining the mix of sources expressed in terms of maturity dates, structure of interest rates and currency of denomination. Obviously, the capacity of remunerating loan capital diminishes with the increase of the degree of indebtedness and with the reduction of the coverage rate of shareholders' equity; in many cases, however, enterprises maintain

consistent indebtedness even while in possession of a vast portfolio of securities that can easily be converted.

This decision will need to be considered in building these factors into the ratios used. This is one of the frameworks in which the distorting effects connected to the diversity of accounting principles in use in various countries is hardest felt: for example, the lack of asset revaluation laws or the specificity of accounting regulations in force may cause balance sheet values to diverge considerably from the real ones and it is for this reason that it is advisable, if necessary by means of specific appraisals, to keep under control the formation of hidden reserves that originate from the application of accounting principles themselves, such as the application of the LIFO criteria used to evaluate inventory and the principle of property valuation at cost price.

Degree of operating risk.

The analysis of the earning power of an enterprise is important for our purposes since it brings to light the capacity to service debt, or in other words, the capacity to generate a sufficient level of resources for payment of interest expenses. The analysis includes both the absolute measure of the company to produce income, and the ratios that relate income various variables. Obviously, the greater the profitability of the enterprise, the easier the access to financial market the greater the attraction of third-party capital at a reasonable cost.

The most frequent measures used in analysing the profitability of an firm are the ROI (Return on Investment), the ROS (Return on Sales), the Return on operations broken down by lines of business, the Analysis of operating leverage (composition of fixed costs and of variable costs), the Interest coverage ratio (EBIT related to interest expense)

As mentioned previously, the analysis of earning power makes it possible to determine the company's ability to meet its interest charges: a firm deserves high creditworthiness when its management is able to produce sufficient resources to satisfy all the production factors used, including the remuneration of risk capital.

In order to determine the significant rates of return, it will be important to grasp all the aspects of the management by integrating into the accounting data hidden reserves (unsold inventory evaluated at historical cost, foreign currency denominated accounts). Other items that will need to be considered are court disputes underway, availability of intangible elements, such as trademarks and know how not as yet recorded, commitments to pay dividends to the parent company.

Analysis of financial data will need to be made in conjunction with, comparisons with the main competitors and considering long-term trends (both past and forecasted) since each sector follows different cyclic trends and has specific characteristics of profitability. Moreover, the average levels of profit vary from country to country based on competitive pressure and different accounting criteria, incidence of taxation on business income, etc.

Off balance sheet guarantees and risks.

The analysis must also encompass operations underway but not entered yet into the accounts. Some examples are leasing operations; debts of controlled companies in the event that the consolidated balance sheet is not drawn up, guarantees lent to other companies of the group options, risk of regression on transferred credits, contingent risks regarding legal or fiscal disputes.

The determination of the value of these operations must be considered in various ways, for example, in order to obtain an overall assessment of the degree of risk on indebtedness, in the case of credit discounting, the debt value in the balance sheet is corrected by adding the transferred credits not due at date on which the risk of regression remains.

Composition of the sources of financing.

In assigning an assessment on creditworthiness, it is essential to understand the financial policy of the firm by identifying the different nature of the sources of funds. In particular, the funds collected may depend on the contribution of capital from shareholders, from loans, from the transfer of assets owned by the enterprise, from self-financing. It is clear that a high degree of self-financing and of cash flow

generated by operations guarantee the other suppliers of capital about the capacity of the firm to serve its commitments (payment of dividends, interest, repayment of principal, etc.).

The importance and criticality of cash flow resides in the fact that, whereas profits are an indicator of future liquidity and a partial guarantee of the reliability of the company servicing, when we consider the time factor, the degree of their reliability may differ from the that evidenced by the profitability ratios. The requirements for past and future liquid resources for fixed and working capital, for the distribution of dividends, payments of duties and tax, service to other indebtedness already in existence, are compared to the capabilities of the enterprise to generate the same resources within itself. Cash flow is a measure that is exempt from balance sheet strategies and accounting distortion and for this reason it can be used to make comparisons between various international operators.

There are several balance sheet ratios normally used in the cash flow analysis. Their interpretation is not always easy and immediate: analysts put emphasis on the fact of how high values of the indicators often signify critical situations for a company operating in a slow-growing or declining market. It possesses cash flow that exceeds its investment requirements, whereas a dynamic and developing company may face low if not negative levels of cash flow.

Ultimately the analyst must consider that each business is distinguished by cycles and that each firm goes through periods that, especially if one limits oneself to the analysis of one financial period, may outline positive results that in fact are the result of past choices and other periods of economic crisis that are actually further penalised by the efforts that the company makes to guarantee a better future, backed by substantial investments in research and development.

Rating must express an assessment of tendency that reduces the effect enhanced by economic cycles, informing the market as to the deep rooted potential of the company.

The final result, i.e. the issue of an assessment of the company's creditworthiness, is reached by entering the information gathered systematically into the "formula". The procedure for gathering the information may be facilitated by a questionnaire that the analyst could use during the evaluation procedure.

The prospectus identifies, by area of analysis (e.g. country risk, features of the sector, competitive position, etc.), the individual elements of assessment that the analyst takes into consideration: for example, for the area of management evaluation, the economic-financial results achieved are assessed, as well as the forecasting and planning capabilities, the characteristics of the control system. The header also contains the type of information source that, depending on different cases, may be within the bank, or external to it or otherwise obtained from interviews with the representatives of the enterprise. The assessment column is to be completed based on the data necessary for the determination of the rating. The assessment may be expressed in alphabetic letters or in numbers based on an agreed-upon scale.

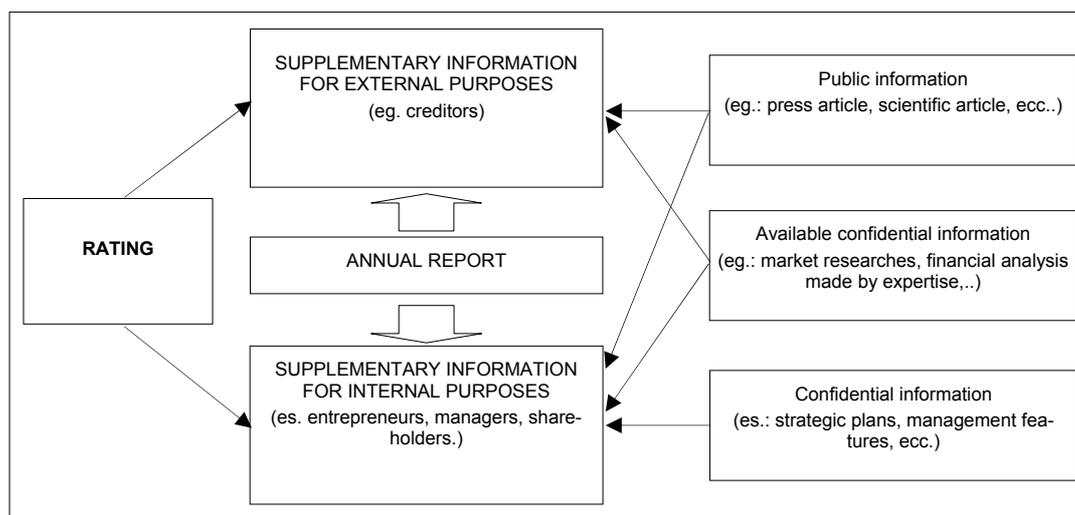
Basel Accord 2 and SMEs

The main effect of Basel Accord 2 on firms is a stricter evaluation by banks of the firm's business model. The new evaluation methodology is the main cause of the firms mistrust towards the evaluation criteria. Firms have reported to be worried by restrictions on bank credit because, in their opinion, Basel 2 methodology is likely to make it harder for firms to get credits or it is increasing the cost of financing. But the last version of the Basel Accord 2, at the instance of Italy and Germany, rules for SME have been simplified. According to Italian banks, Basel methodology is not expected to reduce credits to SMEs, but just increasing their opportunity of increasing their financial disclosure.

Basel Accord 2 requires rating to be primarily based on a statistical and mathematical model instead of the personal evaluation of the bank credit supervisor. Firms, and SMEs first of all, are afraid of losing their personal relationships with the bank credit supervisor and to have to negotiate credit terms with a "system". But banks are urged to increase the quality of the rating process and to make it as objective as possible, in order to reduce the amount of capital to be tied up.

As rating process needs both public and confidential information (see figure 1), all these information have to be reported in formal way to the bank, SME have to make an effort in producing these reports. That should not be a problem, because most of that information is well known to the entrepreneur, but often there is a lack of formal communication. In the past, all this information was collected by the bank credit supervisor through an interview, while now the rating process requires to provide the documentation supporting that information. In other words, firms are required to supplement the annual report with the business plan, production plans, employment plans, company's organization chart, etc...

Figure 1. The rating process



That improvement in the firm's disclosure first of all concerns the financial statement. Most of SME draw up the financial statement only for tax purposes, but they refrain from providing managerial information. As the financial statement is the first tool to run a management control system, and as bank require more detailed information, Basel 2 is an opportunity to make an effort to improve the quality of the financial statement. By improving the quality of their financial disclosure, firms can get better credit terms and so they can reduce the cost of loan capital. On the other hand, improving the quality of disclosure, firms can take advantage of the reported information for managerial purposes, increasing their efficiency.

Information required for the bank internal rating

Traditionally the evaluation for bank financing have as a starting point the financial statement analysis. The results of such information are supplemented by additional qualitative analysis that the analyst, on the basis of his/her experience includes in the folder containing the proposal for the issuance of the financing.

The supplementary information can be drawn from public reports such as the material published by research centers, data released by the specialized press, or classified information entrusted to experts (market research, for instance)

The supplementary information has become increasingly relevant in order to catch the true reasons of a company's success and to interpret the soundness of the underlying business model. In a rapidly evolving economic scenario, the financial statement is still an instrument that one cannot neglect, but its relative weight is insufficient to define the strategic positioning of the company and to assess the anticipated degree of risk.

The integration of qualitative information to the data supplied by the balance sheet will enable a more accurate judgement on the creditworthiness of the firm.

The banks will have to modify their procedures in order to “formally” capture a series of information for which there is no room in the financial statement and that in the recent past were informally intercepted by the credit supervisor that held the relationship with the company.

Companies, in order to allow banks to use their internal models of rating will need to provide information that for the sake of simplicity we can structure in the following fashion (see also figure 1):

- Public information
- Available classified information
- Unavailable classified information

SME are often very dynamic on the entrepreneurial side, but often lacking in the managerial area. In particular there is a lack of a series of “formal” information procedures which are typical in a company of larger size such as the industrial plan, the auditor’s report, the certification of quality, etc.

It is likely that SMEs today possess all the features required for an evaluation with excellent results according to the Basel 2 rules. But they are still lacking the formal elements required to issue the assessment required for the rating and that in the past was provided by the bank credit supervisor interpreting and filling those information gaps that the entrepreneur unconsciously failed to make explicit.

In order to exploit the opportunities that Basel 2 indirectly makes available to the companies, it is necessary to structure a communication system by organizing the “formal” and “informal” information base of the company thus providing a comprehensive model of business to providers of funds

The communication system for the SME internal rating models

The main source of information is by all means the annual financial statement, even if it has to be borne in mind that in Italy the majority of SME is made up of sole proprietorships or of partnerships, and that only one minority consists of corporations that are required to make the financial statement public through its deposit at the companies registry. So it is important to promote the awareness of “annual reports” and to improve the quality of the data reported. This is justified by the fact that Banks require an annual financial statement in order to carry out the financial analysis supporting the decision over a loan to companies.

Secondly tax authorities require data related to production activity (e.g. consumption of energy), and economic/financial data (e.g. value of inventories), drawn from financial statements and income tax return for the development of their sectoral studies

Finally the rating model must be able to support the information on documents produced by the firm and not on the subjective perceptions of the analyst. For this reason the communication of qualitative information forces the company to structure a report for the bank capable of overcoming the present minimal structure of the financial statement.

Some qualitative information that could be useful for the rating models and to capture the quality of the management can be:

- the company’s organization chart containing the definition of the various functions attributed to the company’s bodies, the training plan for workers and employees, the access to various forms of incentives related to the achievement of the company’s objectives.
- the investment plan on research and development, the availability of the Web site, the degree of utilization of information technology to perceive the firm’s attitude towards innovation
- the quality certification, the availability of a control entity such as an auditor, or the board of auditors, the availability of an ethical code to recognize the administrative accuracy and the management control
- the issuance of catalogues and list prices, the availability of an Internet site, the establishment of a toll free number as proof of the attention paid to customers

Having defined the key issues leading to the value of the company, they will have to be systematically.

Nowadays, the firms' disclosure is far from the model drawn by Basel Accord 2, but firms should be able to seize it as an opportunity. The improvement of disclosure quality resulting from Basel 2 will lead to:

- better credit terms as a result of improved banks rating
- improved financial consultancy service aimed at improving the firm's financial management and its rating provided by banks.

Underground Banking: Legitimate Network or Money Laundering System?

Bojan Đorđević¹

ABSTRACT – *Underground banking, where money is transferred through informal rather than formal banking sectors, is a recognised method by which legitimate remittances from overseas workers are routinely transferred. However, underground banking has also long been regarded as a conduit for money laundering by criminal organisations and arguably by terrorist networks. It is important to achieve a balance between regulating the underground banking sector in an attempt to reduce the flow of illicit funds, and permitting its continued use as a legitimate, alternative remittance system. This paper provides policy makers and others with an interest in underground banking matters with a concise overview of how underground banking systems work, along with the potential associated with such systems for criminal activity and the various regulatory responses that governments have employed to date.*

KEY WORDS: *banking system, Hawala, money laundering, criminal*

Introduction

Underground banking is a generic term used to describe any informal banking arrangements which run parallel to, but generally independent of, the formal banking system. Underground banking systems are also referred to as alternative remittance systems (FATF 1999), informal funds transfer systems (World Bank & IMF 2003) and informal value transfer systems (FinCEN 2003). Particular types of underground banking systems are also used to describe the underground banking process. These include *hawala* (India), *hundi* (Pakistan) and *fei ch'ien* (China) (Passas, 1999). Underground banking takes place in many parts of the world ranging from Hong Kong and Paraguay to Canada and Nepal (Passas, 1999). The combination of the geographic diversity and varied typology of underground banking systems makes them attractive for illegal activities and difficult for regulators to control.

Underground banking predates the formal banking system. Chinese funds transfer systems, for example, were in evidence during the Tang Dynasty (618–907 AD) (Wucker, 2004) and that historical longevity alone makes the continued use of underground banking unsurprising. Underground banking is a rational choice for the transfer of money because it has the same structure and operational characteristics as the formal banking sector without any of its attendant bureaucracy or external regulatory scrutiny (Wilson, 2002).

Hawala banking

Whatever term is used, the basic principle of underground banking remains the same – it involves the transfer of the value of currency without necessarily physically relocating it. A typical *hawala* procedure serves to illustrate the basic process (Figure 1). Value may be transferred to and from both jurisdictions. In either case, the *hawaladars* need to be paid for their services. *Hawaladars* may utilise a range of settlement methods (Secretary of US Department of Treasury, 2002) but those commonly used include under- and over-invoicing (Figures 2 and 3.).

¹ Bojan Đorđević, Faculty of management Zajecar, Megatrend university Belgrade

Figure 1. Hawala process

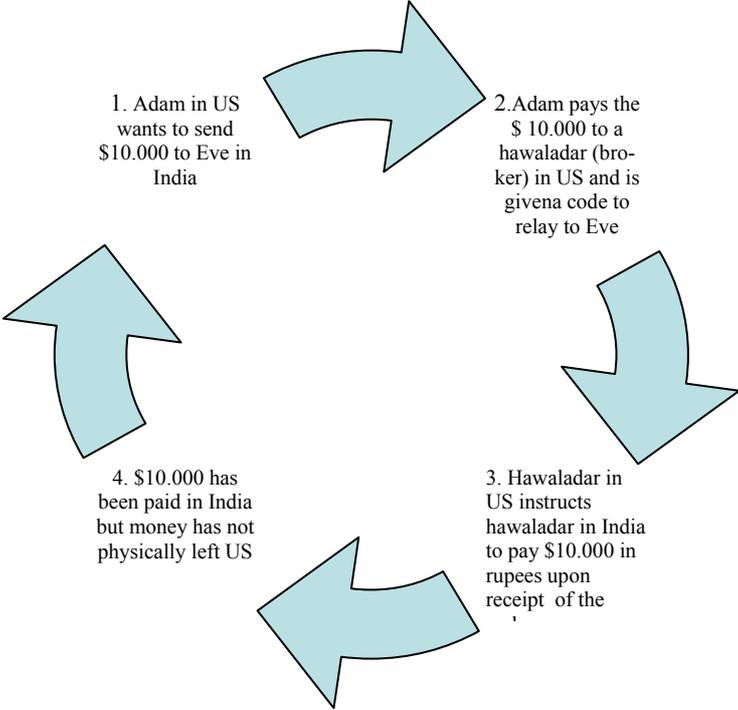


Figure 2. Under – invoicing

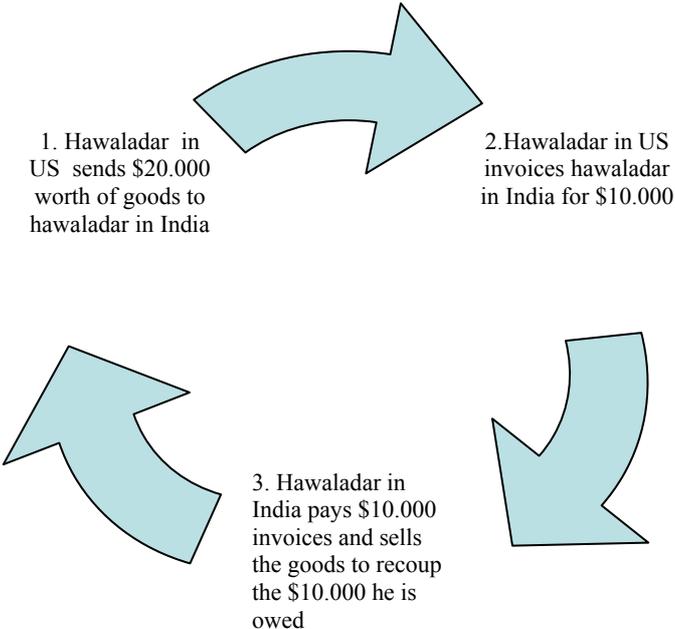
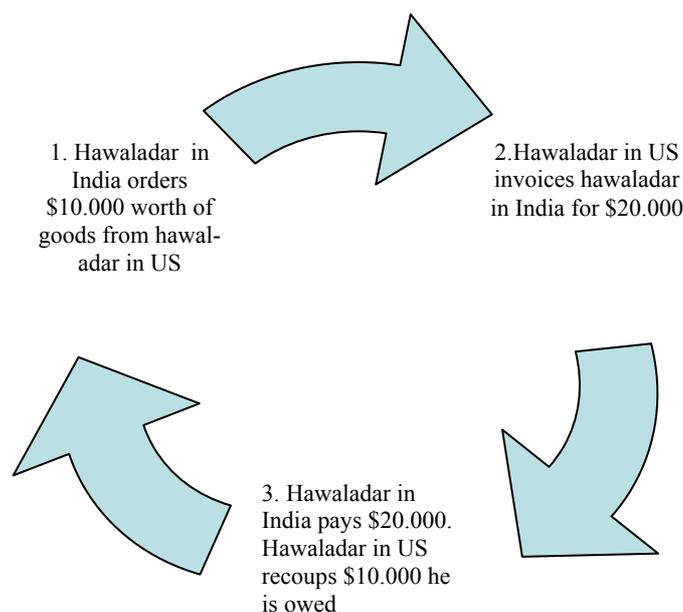


Figure 3. Over-invoicing

Advantages of underground banking

Globalisation has created demand for a cheap and mobile labour force and there is often a cultural expectation that members of that labour force will dispatch a proportion of their earnings to their families in their home countries (Passas, 1999). In 2002, US \$80 billion was remitted through the formal banking sector by workers from developing countries (Sander, 2003), constituting the second largest capital inflow to developing countries behind foreign direct investment (Ratha, 2003). Allowing for unreported and informal remittance flows, the total remittance figure might be in the order of US \$200 billion per annum (Sander, 2003). Although the total level of funds is significant, it usually comprises a large number of small transactions which the formal financial sector does not generally facilitate (Buencamino, Gorbunov, 2002). The economic situation of the workers and their families makes it necessary for earnings to be dispatched rapidly, efficiently and as cheaply as possible

Underground banking transactions in the *hawala* system require no identification from either the remitter or receiver of the funds save for the exchange (via telephone, fax or similar) of a simple password between the remitter and recipient of the funds. This anonymity serves illegal immigrants, who might fear that using a formal financial institution could lead to their discovery by immigration authorities and legal immigrants who, because of language, limited education or illiteracy, may experience difficulties with formal institutions because of language issues, limited education or illiteracy (World Bank & IMF, 2003). Other advantages of underground banking include that its systems are highly accessible, resilient and versatile. They are able to withstand sudden and dramatic economic, political and social upheaval as evidenced by their presence in war ravaged nations such as Afghanistan, Iraq, Kosovo and Somalia (World Bank & IMF, 2003). In addition, transactions are rapid, with authorisation and completion of transfers occurring within minutes or hours by telephone, fax, email or similar. Finally, although the formal banking sector is usually bound by an official or market exchange rate, underground bankers are under no such constraint and, as they often speculate in currency exchange rates, are able to charge far lower fees.

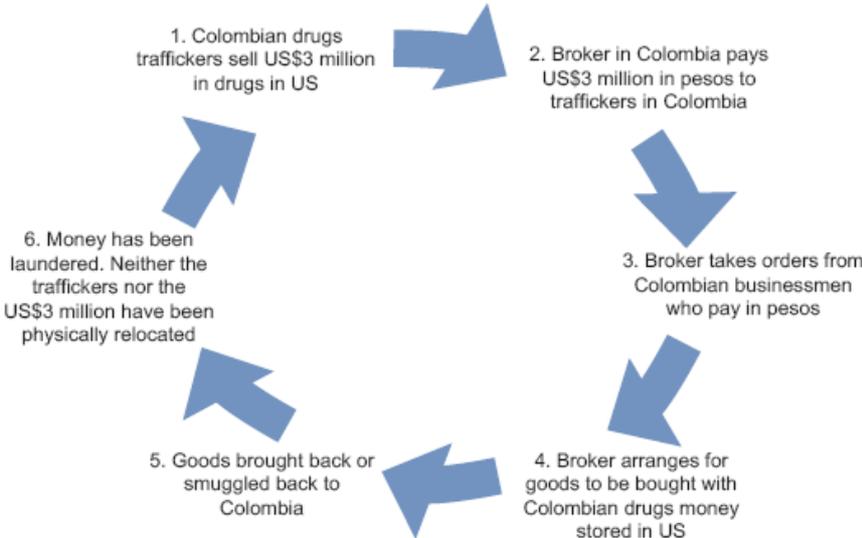
Initial and growing concern

Underground banking systems have been used to facilitate a range of disparate crimes, involving intellectual property, arms and drugs trafficking, tax evasion and the smuggling of illegal immigrants (Passas, 1999). It is, however, the potential for money laundering activity which has heightened the importance of underground banking. Money laundering involves disguising the source of illicit profits and is achieved through a basic process (although money laundering typologies differ in complexity):

- placement – illicit proceeds are placed within the formal banking sector;
- layering – illicit proceeds are redistributed through a series of accounts in small amounts so as to disguise the origin of the funds; and
- integration – the once-illicit proceeds are now licit and are used to purchase property, stocks and bonds so that they can be deposited legally into client bank accounts.

The Financial Action Task Force on Money Laundering (FATF) has long maintained that underground banking systems are important conduits for laundering proceeds of crime (FATF, 1999). It is arguable that the formal banking sector, professional service providers, correspondent banks and off-shore banks continue to serve transnational criminal organisations well enough for underground banking to be largely unnecessary (FATF, 1999; Permanent Subcommittee on Investigations 2001.). Indeed, recognition of the capacity of the formal financial sector to facilitate money laundering has led to an increased focus on what might be termed ‘non-traditional’ business sectors such as real estate, dealers in precious metals/stones, and the gambling industry (Attorney-General’s Department 2004a, 2004b, 2004c). Ironically, heightened scrutiny and increased oversight of the formal sector may increase the propensity for transnational criminals to try laundering their profits via the less regulated underground banking sector. However, it has been argued that if a member of an underground banking network engaged in money laundering, this might impact so negatively upon the network as a whole that it would provoke social and commercial ostracism of the member, which might deter such activity (Ballard, 2003). There has of course been a longstanding underground banking practice in respect of Colombian drugs traffickers through the black market peso exchange (Figure 4).

Figure 4. Black market peso exchange



The terrorist attacks on 11 September 2001 drew formal attention to the possibilities of funds transfer by terrorists through informal banking systems. The bulk of funding for the 9/11 attacks was transferred through the formal banking system via wire transfers and credit cards (Passas, 2003) but the

9/11 Commission's report (2004) maintained that Osama Bin Laden relied generally on established *hawala* networks operating in Pakistan, Dubai and throughout the Middle East. Equally, the US Treasury (Aufhauser, 2003) recently blocked the assets of the al-Baraka network, a global money remitting company being used by Bin Laden to support al Qaeda's activities. The fact that terrorist groups may be using underground banking systems is arguably a sign that the attention being paid to the formal financial system (for example, in terms of customer identification and suspicious transaction reporting) is becoming more effective (Lehmkuhler, 2003). Nevertheless, the US General Accounting Office (2003) has urged US agencies to systematically assess terrorists' use of underground banking systems. Reducing the level of underground banking has become increasingly important. The overriding purpose of anti money laundering activities in general, and anti-terrorist financing strategies in particular, is to increase the level of transparency of the underground banking sector and to bring underground banking within the scope of the current anti-money laundering legislation that applies to the formal sector (Buencamino, Gorbunov, 2002). This might in turn remove the camouflage surrounding illegitimate remittances.

Regulatory problems and solutions

The nature and complexity of underground banking systems varies between and within jurisdictions, and any policy vehicle would need to be aware of this fact (El-Quorchi, 2002; IMF 2005). Underground bankers are still difficult to identify or locate. Even if it were possible to identify them, their transactions are so varied and secretive it would be difficult to regulate them. Although records are kept in order that the *hawaladar* is able to maintain control of his numerous transactions (Ballard, 2003) such records are unlikely to be systematic, will illustrate perhaps only one transmission stage among the several that might occur within an underground banking network, and will be written in idiosyncratic and indecipherable codes. Even if it were possible to regulate them, it would be difficult in many countries to establish the necessary infrastructure to implement such regulation (Maimbo, 2003). In addition, formalising an informal system simply removes its advantages. The net result might be that the whole system is driven yet further underground so as to avoid infiltration (Maimbo, 2003). It has been suggested (Committee on Banking, Housing and Urban Affairs, 2001) that the bulk of underground bankers would be willing to cooperate with regulatory measures. The FATF (2003a), in special recommendation VI, requires that measures be taken to ensure those who transmit money or value are licensed or registered and subject to all of the FATF guidelines that apply to banks and other financial institutions as well as to administrative, civil or criminal sanctions. The FATF (2003 b) also requires jurisdictions to ensure underground banking services are subject to FATF recommendations 4–16 and 21–25, and also to seven other special recommendations on terrorist financing. Essentially, these recommendations require law enforcement agencies to obtain certain information about customers, their transactions, suspicious transactions, the underground banking service's location and the accounts used. The FATF recognises that the increased focus on money laundering within the formal banking and financial sectors may lead to an increased displacement of such activity into the informal underground sector. In order that recommendation VI is instituted, the FATF suggests:

- licensing or registration with a designated competent authority such as a financial intelligence unit or financial sector regulatory body, of persons that provide underground banking;
- carrying out background checks on the operators, owners, directors and shareholders of underground banking systems; identifying underground banking services by examining the full range of utilised media (including newspapers, radio and the internet) to detect advertising and informing operators of their registration and/or licensing obligations;
- liaising with the formal banking and financial sector to identify suggestive underground banking activities (given that many underground bankers may use formal banking accounts as part of their primary businesses);
- making law enforcement agencies aware of the compliance requirements for underground banking services and of the methods by which illegal use of those services is achieved;

- advising businesses which may be operating underground banking services of their licensing or registration and reporting obligations; and
- requiring entities to display their registration / license to customers in the hope that legitimate clients will seek out licensed/registered operators.

General and specific economic solutions

In order to remove underground banking, the economic incentives of systems such as *hawala* need to be removed (Wilson 2002). This might be achieved by providing cheap, fast and efficient outlets for money transfers so there is less economic dependence on *hawala* remittances (Hayaud-Din 2003). Perhaps increased focus needs to be applied to issues such as financial policies, taxation, currency and trade restrictions. The mistrust of banking systems within developing countries and the arguably anti-competitive global presence of formal money service providers (such as Western Union) should perhaps also be addressed (Buencamino & Gorbunov 2002). One of the key determinants of increased underground banking activity is the difference between the official and the black market exchange rates (Buencamino & Gorbunov 2002). Foreign exchange restrictions not only provide incentives for underground banking but also increase capital flight (Schneider 2003) from the developing country. In light of this, China, for example, while maintaining currency controls, also has regard for the black market rate when setting the official rate of exchange. In this way, the disparity between official and non-official rates is reduced and in turn the propensity for using underground banking may decline.

Policies could be drawn up which recognise the financial importance of migrant remittances to the development of the economies of the receiving countries. First, mandatory remittance limits could be introduced in which a proportion of the migrants' earnings would have to be transferred through formal channels. This was attempted in Bangladesh, the Republic of Korea, Pakistan and the Philippines. It was only truly effective in the Republic of Korea because nearly all of their migrant workers overseas were employed by Korean businesses operating in the Middle East. It was therefore relatively easy to persuade the companies to deposit migrant earnings in designated accounts. Secondly, governments might attempt to disrupt the underground banking system. In Pakistan, the government has focused attention upon *hundi* systems with a resulting increase in formal remittances of 64 per cent between January 2001 and January 2002. However, achieving a long term and meaningful shift from informal to formal banking systems requires improving the alternatives to informal banking (Buencamino & Gorbunov 2002). Thirdly, governments might provide incentives rather than creating and enforcing regulations. In Bangladesh, India, Pakistan, Sri Lanka and Vietnam, foreign currency accounts pay above market interest rates. In these countries, as well as Egypt, Poland and Turkey, premium exchange rates are offered for those wishing to convert foreign currency into local currency. The disadvantage of this incentive approach is that foreign currency accounts are really only attractive to professional and higher skilled workers whose earning capacity provides sufficient funds to render the transfer meaningful. The bulk of workers will not fit into this narrow category (Buencamino & Gorbunov 2002). Fourthly, developing nations might liberalise their economies. Arguably, if a government restricts imports and places limits on foreign exchange, underground banking systems will seek to fill the void. For example, if goods are smuggled into a country because of high import tariffs, the money to pay for those goods still has to leave the country, and is likely to do so via informal networks (Buencamino & Gorbunov 2002). In 1995, when the Philippines abolished foreign exchange controls and unified the exchange rate, remittances through formal banking channels quadrupled in that year.

Conversely, in Pakistan in 1998 the government created strict currency controls which included a restriction on withdrawals from foreign currency accounts such that money could only be withdrawn at a government rate of 46 rupees compared to a *hawala* rate of 58 rupees. In consequence, foreign remittances via the formal banking sector fell from US\$150 million to US\$50 million per month (Buencamino & Gorbunov 2002). Fifthly, improving the financial infrastructure of developing countries so as to render underground banking less attractive is likely to reap rewards. A number of companies in Egypt, Jordan, Lebanon and countries in the Persian Gulf have undertaken to deliver money door to

door, thus compensating for their lack of physical presence, which historically has provided succour to the underground bankers. In the US, many banks are working with Latin American countries to allow migrant workers' families the ability to access money from ATMs in their home countries (Buencamino & Gorbunov 2002). Finally, currency transfers might be facilitated by micro-finance institutions (MFIs). These organisations, evolving largely from NGOs, provide credit and other financial services to those of low income. Funds which are currently remitted via informal means deprive the developing economies of much needed capital. MFIs '...are more and more identified as potentially critical for the mobilization and transformation of remittances' (International Labour Office, 2000).

Conclusion

The use of underground banking for transferring legitimate remittances has been overshadowed by its potential use by criminal and terrorist groups. The decision to regulate or licence brokers who operate within the underground banking system must carefully evaluate the practicalities and consequences of doing so. An unregulated system in which illicit funds might be transferred with licit ones is doubtless dangerous. A regulated system driven further underground is more dangerous still. Australia has recognised the existence of remittance dealers as a constituent of cash dealers generally and AUSTRAC has in consequence proactively targeted such people via multilingual advertisement campaigns. Persuading remittance dealers to register and to submit financial transaction reports to AUSTRAC is arguably a sound means by which the impact of those who might elect to launder money or finance terrorist groups could be mitigated. The most pragmatic solution, however, might entail altering the economic conditions which currently render underground banking a viable alternative to the formal banking sector.

References

- Aufhauser, D. (General Counsel, US Treasury Department) 2003. Testimony before the Senate Judiciary Committee, Subcommittee on Terrorism, Technology and Homeland Security 26 June. http://judiciary.senate.gov/testimony.cfm?id=827&wit_id=2354
- Ballard, R.B., 2003. *A background report on the operation of informal value transfer systems (hawala)*, Manchester: University of Manchester Centre for Applied South Asian Studies, <http://www.art.man.ac.uk/CASAS/pdfpapers/hawala.pdf>
- Buencamino L & Gorbunov S 2002. *Informal money transfer systems: opportunities and challenges for development finance*. Discussion paper of the United Nations Department of Economic and Social Affairs (DESA) no 26. <http://www.un.org/esa/esa02dp26.pdf>
- Committee on Banking, Housing and Urban Affairs 2001. Statement of Rahim Bariiek, Bariiek Money Transfer. Hearing before the United States Senate Subcommittee on International Trade and Finance, 107th congress on *hawalas* and underground terrorist financing mechanisms. http://www.senate.gov/~banking/_files/107660.pdf
- El-Quorchi 2002. Hawala. *Finance and development* 39(4) December. <http://www.imf.org/external/pubs/ft/fandd/2002/12/elqorchi.htm>
- Financial Crimes Enforcement Network (FinCEN) 2003. *Informal value transfer systems*. FinCEN Advisory Issue 33. Washington DC: US Department of Treasury. <http://www.fincen.gov/advis33.pdf>
- Financial Action Task Force on Money Laundering (FATF) 1999. *1998–1999 report on money laundering typologies*. Paris: OECD. http://www1.oecd.org/fatf/pdf/TY1999_en.pdf
- Hayaud-Din MA 2003. The hawallah network. culture and economic development in Afghanistan. *International social science review* vol 78. http://www.findarticles.com/p/articles/mi_m0IMR/is_1-2_78/ai_106558980
- International Labour Office 2000. *Making the best of globalisation: migrant worker remittances and micro-finance*. Geneva: ILO. <http://www.ilo.org/public/english/employment/finance/download/remitt.pdf>

- International Monetary Fund (IMF) 2005. *Approaches to a regulatory framework for formal and informal remittance systems: experiences and lessons*. Washington DC: IMF.
<http://imf.org/external/np/pp/eng/2005/021705.pdf>
- Lehmkuhler S 2003. Countering terrorist financing: we need a long-term prioritizing strategy. *Journal of homeland security* April.
<http://www.homelandsecurity.org/journal/articles/displayArticle.asp?article=87>
- Maimbo SM 2003. *The money exchange dealers of Kabul: a study of the hawala system in Afghanistan*. World Bank working paper no 13. Washington DC: The World Bank. http://www-wds.worldbank.org/servlet/WDS_IBank_Servlet?pcont=details&eid=000090341_20031016085357
- Passas N 1999. *Informal value transfer systems and criminal organisations: a study into so-called underground banking networks*. Netherlands: Ministry of Justice.
<http://usinfo.state.gov/eap/img/assets/4756/ivts.pdf>
- 2003. *Hawala and other informal value transfer systems: how to regulate them?* Washington DC: US Department of State. <http://www.usinfo.state.gov/regional/ea/chinaaliens/shawala.htm>
Permanent Subcommittee
- Ratha D 2003. Workers' remittances: an important and stable source of external development finance. In *Global development finance: striving for stability in development finance*. Washington DC: The World Bank
- Sander C 2003. *Migrant remittances to developing countries*. London: Bannock Consulting.
<http://www.bannock.co.uk/PDF/Remittances.pdf>
- Schneider B 2003. *Measuring capital flight: estimates and interpretations*. Working paper 194. London: Overseas Development Institute. http://www.odi.org.uk/publications/working_papers/wp194_maintext.pdf
- US General Accounting Office 2003. *Terrorist financing: US agencies should systematically assess terrorists' use of alternative financing mechanisms*. Washington DC: General Accounting Office.
<http://www.gao.gov/new.items/d04163.pdf>
- Wilson JF 2002. *Hawala and other informal payments systems: an economic perspective*. Washington DC: International Monetary Fund.
www.imf.org/external/np/leg/sem/2002/cdmfl/eng/wilson.pdf
- World Bank & IMF 2003. *Informal funds transfer systems: an analysis of the informal hawala system*. Washington DC: World Bank.
http://www.wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2003/05/03/000094946_03041904002082/Rendered/PDF/multi0page.pdf
- Wucker M 2004. Remittances: the perpetual migration machine. *World policy journal* XXI(2).
<http://www.worldpolicy.org/journal/articles/wpj04-2/Wucker.pdf>

The World Financial Crisis and Effects on Serbian Financial Sector

Đorđe Đukić¹, Mališa Đukić²

ABSTRACT – *The wave of bankruptcy of large mortgage and investment banks in the U.S. and Europe during 2008 is followed by strong state intervention. Some banks that are “too big to fail” have been bailed out by central banks which have pumped in the financial sector hundreds of billions of U.S. dollars. It is all about the deepest world’s financial crisis since 1929-1933, the one caused by the collapse of sub-prime mortgage market in the U.S. The loss of confidence of banks which are not ready to lend on the interbank money market caused new market falls. That is confirmed by drastic jump of interest rates on overnight lending among banks, which implies that the 3-Month and 6-Month LIBOR and EURIBOR, as well as central banks reference interest rates, are of less relevance for banks’ decision making process. Negative repercussions of the crisis on Serbian financial sector are manifested through: significant increase of lending rates, difficulty or impossibility of corporate sector to use cheap cross-border loans, reduction of supply of foreign exchange on that base, drastic drop of securities prices, etc. The first part of the paper points out the effects of financial crisis on behavior of short-term interest rates in the U.S. and Europe. The second part gives an estimation of effects of world financial crisis on interest rates in banking industry in Serbia. Concluding remarks are presented at the end of the paper.*

KEY WORDS: *world, financial crisis, effects, financial sector, Serbia*

Effects of financial crisis on behaviour on short-term interest rates in the U.S. and Europe

The world financial crises that was initiated by the collapse of the U.S. sub-prime mortgage market in August 2007 escalated during the period from September to October 2008 in the form of shocks of similar to shocks intensity of Great Depression from 1929-1933. In the following part, the key events of U.S. financial sector are listed.

First, September 16th 2008, American central bank, the Federal Reserve System (Fed) helps the largest U.S. insurance company, American International Group (AIG) by injecting 85 billion US dollars in exchange for 79,9% of shareholders capital. Such an intervention has never been done before by Fed.

Secondly, beginning of October 2008, U.S. Congress approved a historic \$700 billion financial-rescue package allowing Treasury department to use authority on five fronts:

- purchasing troubled mortgage-backed securities;
- buying mortgages, particularly from regional banks;
- insuring mortgage-backed securities and mortgages, ensuring banks and investors don't lose money if borrowers default;
- purchasing equity in a broad array of financial institutions; and
- helping delinquent borrowers stay in their homes.

This is according to officials with one simple goal - to restore capital flows to the consumers and businesses that form the core of U.S. economy.³

¹ Đorđe Đukić, Faculty of Economics, University of Belgrade

² Mališa Đukić, Belgrade Banking Academ, Belgrade

³ Source: Speech of N. Kashkari in Washington, D.C., before the Institute of International Bankers, Factiva Reuters.

Thirdly, October 10th, 2008 Lehman Brothers, the fifth largest U.S. investment bank that was founded 158 years ago officially went bankrupt, while Merrill Lynch that was founded 94 years ago accepted the offer of Bank of America to be bought for 50 billion USD which is almost a half of Merrill Lynch's 2007 market value.

The effects of the U.S. financial crises quickly spread throughout Europe. However, until beginning of October 2008 it was not estimated that the growth of losses in certain European banks which were exposed to the risk of U.S. mortgage loans market would require state interventions to save the banking sector.

After the black Friday (October 10th 2008), during which the largest fall of one weeks Dow Jones Stoxx Bank Index, EU member states governments adopted urgent measures to support the troubled banking sector in order to avoid panic on the market. However, following such news and after a short recovery, the collapse of banks shares continued – the value of the above mentioned index was cut by one half beginning of November 2008 relative to the beginning of 2008.

As presented in Table 1, the financial support provided by states was huge and varied from providing loan guarantees to capitalisation of banks. After Island announced that it went bankrupt, Ireland changed its banking regulations to guarantee all citizens deposits disregarding the deposited amount. Following Irish reaction, other EU countries adopted similar regulations to avoid panic of depositors.

Table 1. The Support of EU governments to Banking Sector (in billion EUR)

	Debt guarantee (maximum amount covered)	Capital support	Other measures	Currency
Austria	85	15	-	EUR
Belgium	nd	7.7	-	EUR
France	320	41	-	EUR
Germany	400	70	10	EUR
Ireland	300	-	-	EUR
Italy	nd	nd	40	EUR
Luxembourg	nd	2.5	-	EUR
Netherlands	200	4	-	EUR
Portugal	20	-	-	EUR
Spain	100	-	30	EUR
UK	250	37	-	GBP
Total (ex.UK)	>1425	>140		EUR
Total	>1745	>187		EUR

Note: Data for Ireland do not include retail deposits insurance for consistence. Support fro Dexia and Fortis included in estimates for France, Belgium, Luxemburg and Netherlands. Other measures include purchase or swap of bank assets.

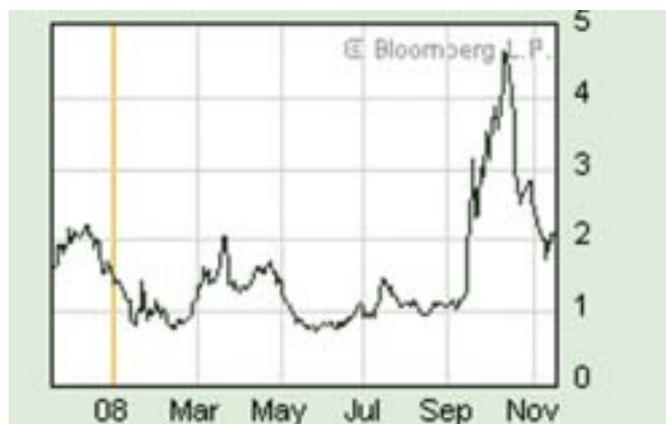
Source: Intesa Sanpaolo, Thomson Reuters, Financial Times, and national sources.

One of the indicators of the depth of the current world financial crises is the unwillingness of banks to lend on inter-bank money market which implies lending with high risk premium due to the credit risk. The “TED Spread”, as a measure of credit risk for inter-bank lending, reached record levels in late September 2008 (Graph 1). A higher spread indicates banks perceive each other as riskier counterparties.

Nevertheless, the Treasury yield movement was a more significant driver of the “TED Spread” than the changes in LIBOR. A three month t-bill yield so close to zero means that people are willing to forego interest just to keep their money (principal) safe for three months--a very high level of risk aversion and indicative of tight lending conditions. Prior to the emergence of subprime mortgage losses last year, the TED spread had generally stayed within a range of 10 and 50 basis points. A rising TED spread often indicated a drop in stock prices as liquidity is withdrawn from the market. U.S. T-Bill yields have tumbled to a low 0.29% as investors seek safe haven investments, while Libor has

pushed higher at 4.82% - creating a record high TED spread of 4.53 percentage points.⁴ That was a clear sign the markets are truly in the midst of the worst financial crisis in history.

Graph 1. TED Spread

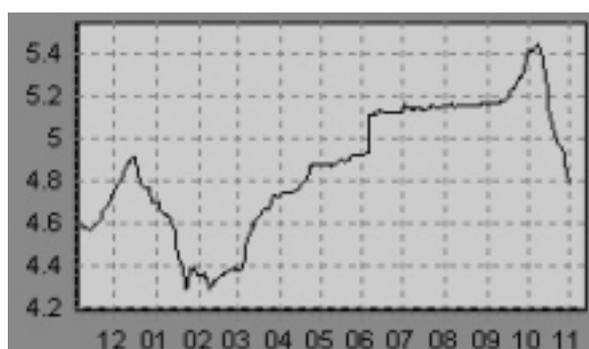


Source: Bloomberg.com

Note: “TED Spread” is the difference between: 1) the three-month U.S. treasury bill rate; and 2) the three-month London Interbank Borrowing Rate (LIBOR), which represents the rate at which banks typically lend to each other. The t-bill is considered “risk-free” because the full faith and credit of the U.S. government is behind it.

On the other hand, the drastic jump of 1month, 3month and 6 month EURIBOR that took place end of September and beginning of October 2008, despite the reduction of ECB interest rate on main refinancing operations presents an indicator of absence of trust on interbank market in Eurozone. The 6 month EURIBOR usually used for the calculation of interest rates on mortgage loans reached its maximum level of more than 5,4% on October 10th despite the 50 basis points reduction of ECB main refinancing rate to 3,75% two days earlier. Only after several EU countries announced that they will provide guarantee on inter-bank loans, 6 month EURIBOR significantly dropped (Graph 2).

Graph 2. 6 month EURIBOR (Previous year, up to November 3, 2008)



Source: www.euribor.org

Effects of world financial crisis on interest rates in banking industry in Serbia

The economic indicators for some emerging European states, including Serbia (Table 2) show the level of external exposure to the financial crisis.

⁴ “Looking at the last 20 years, there was the 87 crash, there was the first Gulf War, the Russian crisis, Enron and a technology bubble, and right now, the TED spread is the highest it’s ever been,” Paul Vaillancourt, director of portfolio strategy for Franklin Templeton Managed Investment Solutions said. “This is unprecedented.” – (source:www.financialpost.com)

Table 2. Macro and Financial Indicators in Selected Emerging Market Countries

Country	Current account balance (% of GDP)	Gross reserves to short-term external debt (ratio)	Net external position vis-a-vis BIS reporting banks (% of GDP)	Growth in credit to the private sector (in percent, year-on-year)	Inflation (in percent)
Bulgaria	-21,9	1,1	-29,0	54,5	14,5
Croatia	-9,0	0,9	-59,7	11,6	8,4
Hungary	-5,5	0,9	-54,1	18,0	6,7
Romania	-14,5	0,9	-36,4	62,0	9,0
Serbia	-16,1	2,8	-15,1	37,0	14,3
Ukraine	-7,6	1,0	-9,5	63,9	26,8

Notes: Projections of the current account balance and GDP for 2008 in dollar terms from the WEO. Short-term debt is measured at remaining maturity. End-2007 estimated by IMF staff. Data on external positions of reporting banks vis-à-vis individual countries and all sectors from the Bistre latest observations ranging from February 2007/08 to June 2007/08 from the IFS. Year-on-year inflation in July 2008 or latest observations.

Source: IMF, "Global Financial Stability Report", Washington, October 2008, pp. 46.

Before the September collapse of Lehman Brothers which sent global markets into a tailspin, central and eastern European currencies were among the strongest foreign-exchange performers in year 2008. Hungary narrowly averted a financial crisis in October 2008 after securing some \$25 billion in financing from the IMF and the EU to shore up its wobbling bank sector. Hungarian Forint fell from its all-time high of 227,70 in mid-July to a record low of 286,15 against the euro at end-October down for more than 25%.

Romania, the only EU member to have a "junk" sovereign credit rating over its ability to service its debt, saw its Leu slide to a record low of 3,986 in early October, down 15 % from a one-year high set two months earlier.

During October 2008, dinar lost more than 10% of its value against the euro. Taking into account the current account ratio as a percentage of GDP, Bulgaria and then Serbia are the countries with the highest exposure to negative effects of world financial crises. However, given the other two indicators, the gross reserves to short-term external debt (ratio) and growth in credit to the private sector, Serbia is among countries which are less exposed to the crises.

Negative repercussions of this crisis on Serbian financial sector are manifested through:

First, jump of lending interest rates. This is a result of a sudden increase of the key policy rate – 2 week repo of National Bank of Serbia (NBS) increased from 15,75% to 17,75% end of October 2008 with an aim to reduce core inflation which was 10,7% in October 2008 as opposed to the targeted inflation rate of 3-6% and to reduce the pressure of further dinar depreciation against euro.

Secondly, impossibility of corporate sector to use cheap cross-border loans.⁵ Following a continuous increase of approved cross-border loans which in total reached the sum 10.770 millions of Euros in September 2008, the effects of the financial crises are manifested through unwillingness of foreign banks to guaranty such loans in October 2008. End of 2008, one may expect the reduction of stock of cross-border loans used by domestic companies due to the fact that some of the companies will have to pay back the due loans by the end of the year.

Thirdly, reduction of supply of foreign currencies due to the abolishment of cross-border loans to domestic companies. Nevertheless, in the period to come, domestic companies which need to pay off the loans will create additional pressure on foreign exchange market, as they will have to purchase foreign currency for loan pay off.

⁵ For more information see: Đukić, Đ. "Dramatičan rast prekograničnih kredita u Srbiji – lice i naličje", *Biznis & Finansije*, *Finansije* top 2007, jun 2008, pp. 20-21.

Forth, drastic drop of securities prices. From the beginning of 2008 to the end of October 2008, BELEX 15 Index on Belgrade Stock Exchange went down by 2.289,35 to 659,88 value which is 71,2% fall in value.⁶

Fifth, future increase of lending rates, as a result of increased competition of banks on the deposits market, followed by the pressure on foreign banks in Serbia from parent bank to expend their credit activities based on domestic deposits. Majority of banks are offering interest rate between 8-9% per annum for one year euro-denominated saving accounts to citizens.

In year 2009, citizens and companies in Serbia will be able to receive loans but with higher interest rates. As presented in Table 3, interest rates on short-term citizens loans in Serbia were extremely high relative to relevant group of countries – Bulgaria, Croatia and Romania. With regard to housing loans, interest rates were a bit higher compared to Croatia, and a lot lower compared to Bulgaria, which implies that the competition among banks were most intensive in this segment of the loan market.⁷

Table 3. Interest rates on citizens' loans in percent

Country	Short-term loans		Housing loans	
	December	September	December	September
	2007	2008	2007	2008
Bulgaria	8,62	9,74	11,20	10,66
Croatia	6,84	8,81	5,12	5,96
Romania	6,30	8,37	7,65	7,69
Serbia	30,25	32,66	6,05	6,26

Note: The last available data for Croatia and Romania refer to August 2008. In case of Bulgaria and Romania, interest rates are applied to new EUR – denominated loans. In Croatia, rates are applied to Croatian kuna loans indexed on foreign currency, while in Serbia, mostly, the interest rate is applied to dinar loans indexed on foreign currency.

Sources: Statistics of central banks.

Concluding remarks

Current financial crisis, the deepest after 1929-1933. one are caused by collapse of sub-prime mortgage market in the U.S. The crises is followed by the loss of confidence in banks which are not ready to lend money on the interbank market fired by new crashes on other markets. That is confirmed by drastic jump of interest rates on overnight lending among banks, which implies that the LIBOR and EURIBOR for longer periods, as well as central banks reference interest rates, are not relevant for bank's decision making process.

Negative repercussions of this crisis on Serbian financial sector are manifested through: jump of lending rates, impossibility of corporate sector to use cheap cross-border loans, reduction of supply of foreign exchange on that base and drastic drop of securities prices. Future increase of lending rates would be a result of the increased competition of banks on the deposits market, followed by the pressure on foreign banks in Serbia from parent bank to expend their credit activities based on domestic deposits. Majority of banks are offering interest rate between 8-9% per annum for one year euro-denominated saving accounts to citizens, which implies that in year 2009, citizens and companies in Serbia will be able to receive loans but with higher interest rates.

⁶ Source: www.belex.co.yu

⁷ For more information see: Đukić, Đ. "Analysis of Effects of Foreign Bank Entry on Credit Interest Rate Behaviour in Serbia", *Panoeconomicus*, No. 4 2007, pp. 429-443.

References

- British Bankers' Association, "Understanding the construction and operation of BBA LIBOR - strengthening for the future", consultative paper, 10 June 2008, www.bba.org.uk
- Đukić, Đ. "Dramatičan rast prekograničnih kredita u Srbiji – lice i naličje", *Biznis & Finansije*, Finansije top 2007, jun 2008, str. 20-21.
- Đukić, Đ. "Analysis of Effects of Foreign Bank Entry on Credit Interest Rate Behaviour in Serbia", *Panoeconomicus*, No. 4 2007, pp. 429-443.
- ECB, "Monthly Bulletin ", November 2008, www.ecb.int
- IMF, *Global Financial Stability Report*, Washington, October 2008, www.imf.org
- Narodna banka Srbije, "Izveštaj o inflaciji", novembar 2008, www.nbs.rs
- The Economist, "Rescuing the banks: We have a plan", 11 October, 2008.

Comparative Analysis of Bank Concentration in Selected South East European Countries

Kesnija Dumičić, Anite Čeh Časni, Irena Čibarić¹

ABSTRACT – This paper analyzes the bank concentration of banking industry in Bosnia and Herzegovina, Croatia, Serbia and Montenegro according to the latest available data on total bank assets. The analysis of concentration of banks' net assets is done using following concentration indices: concentration ratios, Herfindahl-Hirschman index, Theil entropy indeks, Hall-Tideman and Rosenbluht index, Gini coefficient and normalized Gini coefficient, as well as Lorenz curve. According to calculated concentration measures, concentration of banking industry is highest in Croatia, followed by Bosnia and Hercegovina, while in Serbia and Montenegro concentration is moderate.

KEY WORDS: banking industry in B&H, Croatia, Serbia and Montenegro, measures of concentration

Introduction

The term concentration is often used in economy and yet for every researcher it has a different meaning. Generally, it is connected with a market control of certain economic resource or activity. Concentration exists when smaller part of total units controls the bigger part of the total resource. For economists, concentration is a usual measure of market power within industries. Market power denotes the level of control that only one or few companies have over important decisions in certain industry. In other words, market power is the ability of a company to raise the price (above marginal costs) without reducing its own selling.

Competitive structure, measured by the level of concentration², can range from highly fragmented to tightly consolidated industry. In that sense, industries with higher level of concentration consist of a few companies that control bigger amount of total industrial realization (consolidated industries), as opposed to that, industries with no concentration have many relatively small companies with approximately same, smaller share of industrial sales (patchy industries).

Measuring industrial concentration³ could be especially important if a strategic analysis is based on Bain-Masons hypotheses, which is known as a structure-conduct-performance paradigm (SCP). SCP helped in funding structural approach to theory of strategy. It assumes that efficiency of an industry and of a company is in direct relationship with the form of industrial structure. Concentration of an industry stimulates companies to take advantage of trading power, the availability of which depends on structural characteristics of an industry. According to that paradigm, high concentration is connected with high profits, especially if concentration is above certain critical level and when there are significant barriers of entering an industry.

Some studies showed that concentration can have some negative connotations, for example Weiss (1989) showed that commercial banks in terms of high concentration set higher prices for their ser-

¹ Kesnija Dumičić, Anite Čeh Časni, Irena Čibarić, Faculty of economics and business, Zagreb

² Tipurić, D., Kolaković, M., and Dumičić K. (2003), Croatian banking industry concentration changes in 1993-2002, pp. 5, *Proceedings of the Faculty of Economics and Business, Zagreb*; and: Tipurić, D., Kolaković, M., and Dumičić, K. (2002), *Istraživanje promjena u koncentraciji hrvatske bankarske industrije 1993-2000. Ekonomski pregled*, Br. 5-6.

³ Ibid, pp. 6

vices.⁴ However, McConnel and Brue (1996) showed that some factors are in favour of high industrial concentrations.⁵

The aim of this paper is to analyze and compare concentration of banking industry in selected South East European countries⁶, based on the latest available banks' net assets data⁷. Statistical data used in the analysis are provided by national central banks of all the mentioned countries. Industrial concentration can be measured in different ways. In this paper, the following concentration measures are used: concentration ratios, Herfindahl-Hirschman index, Theil entropy index, Hall-Tideman and Rosenbluth index, Gini coefficient and Lorenz curve.

Data description

Based on implications of existing banking industry concentration literature and the availability of data, the empirical analysis in this paper employs banks' net assets data on 30 June 2008. In the case of Croatia, 33 banks were included in calculation of selected measures of concentration according to their net assets data. The analysis for The Federation of Bosnia and Herzegovina included 21 banks and for The Republic of Srpska 10 banks were analyzed. In the case of Montenegro 11 banks entered the calculation, and finally for The Republic of Serbia, 34 banks according to their net assets were analyzed. Data used in analysis were obtained from central banks' official sites for each country. Market concentration measures discussed in this paper are: concentration ratios, Herfindahl-Hirschman index, Theil entropy index, Hall-Tideman and Rosenbluth index, Gini coefficient and Lorenz curve. The presentation and analysis of mentioned measures of concentration were supplemented by numerical examples illustrating their properties when applied empirically.

Literature review

Concentration and competition⁸ are linked to product markets and geographical areas, both in theory and empirical analyses. Banks provide multitude products that do not serve a unique market and defining a relevant market involves making a preliminary decision about potentially relevant structural characteristics, such as concentration and competition (Kottmann, 1974).

The literature on measurement of competition can be divided into two major streams: (1) structural and, (2) non-structural approaches.

(1) The structural approach to the measurement of competition embraces the Structure-Conduct-Performance (SCP) paradigm and the efficiency hypotheses, as well as a number of formal approaches with roots in industrial organization theory. The two former models investigate, respectively, whether a highly concentrated market causes collusive behaviour among the larger banks resulting in superior market performance, and whether it is the efficiency of larger banks that enhances their performance.

(2) Non-structural models for the measurement of competition, namely, the Iwata model (Iwata, 1974), the Bresnahan model and the Panzar-Rosse model (Panzar and Rosse, 1987) were developed in reaction to the theoretical and empirical deficiencies of the structural models. These New Empirical Industrial Organization approaches test competition and the use of market power, and stress the analysis of banks' competitive conduct in the absence of structural measures.

Structural measures of competition may be divided into two major schools of thought: the formal and non-formal approaches. The study of the relationship between market performance and market structure has its roots in the non-formal framework of SCP paradigm. Since its origins, this framework has

⁴ Ibid., pp .8

⁵ McConell, C.R. and Brue, S.L. (1996), *Microeconomics-Principles, Problems and Policies*, McGraw-Hill, Inc., London

⁶ The Federation of Bosnia and Herzegovina, The Republic of Croatia, The Republic of Montenegro, The Republic of Serbia and The Republic of Srpska

⁷ In the moment of conducting the analysis, latest available data was for June 2008.

⁸ Bikker, J.A., Haaf K. (2000), Measures of competition and concentration in the banking industry: a review of the literature, *Research Series Supervision no. 27*, De Nederlandsche Bank, pp. 3.

evolved largely independently of ongoing refinements in formal models of imperfectly competitive markets (Martin, 1993). Yet, large discrepancies between formal and non-formal approaches remain.

The application of SCP to the banking literature has been criticized by various authors, for instance by Gilbert (1984), Reid (1987), Vesala (1995) and Boss(2002). Their criticism is directed at the form of the model rather than at the specification of the variables used. The extensive literature applying the structure-performance paradigm to the banking industry has been summarized by Gilbert (1984) and Molyneux et al. (1996). In this sense it should be noted that most of the studies applying the SCP framework to the banking industry do not take explicit account of the conduct of banks.

The growing body of literature subjecting the choice of profitability measures to formal analysis has been summarized by Martin (1993). Most of these formal studies generalize the Lerner index of monopoly power. They do not stress any single measure of profitability as correct or best, but provide guidance in selecting tests of market power and profitability.

In individual researches thesis of positive correlation between concentration and banks profit showed to be weak and insignificant (Berger, 1995) and the extensive and recent research Demirgüç-Kunt and Levine (2000) did not show that bank concentration is closely connected to the efficiency of banking sector and development of financial system. That is one of the reasons why it is difficult to intercede for concentration or against it.

Another aspect of concentration in banking industry is its impact on stability of banking system, namely occurrence of banking crises. One approach shows that enhanced concentration in banking industry reduces instability, and other approach is exactly the opposite.⁹ In extensive research that involved data on banking system of seventy countries in selected period from 1980 to 1997, Beck, Demirgüç-Kunt and Levine (2004) showed that higher concentration in banking industry is connected to light probability that banking crises would arise. The mentioned authors studied potential implications that might be underneath the relationship between concentration and stability of banking system. The research showed that more concentrated banking systems were connected to the lower possibility of banks breakdown and at the same time, regulatory politics that stimulated higher competition between banks also led to higher stability. So, according to authors, concentration should not be connected with competition on the market. Moreover, the results showed that more concentrated banking systems are characterised by more developed banks that also support positive relationship between concentration and stability.

Finally, it should be mentioned that concentration in banking industry may affect the economic growth which is mainly connected with the economic development of individual country. According to Šonje (1999), development of financial system is positively correlated with the economic growth, and in that sense the characteristics of financial sector are extremely important. Empirical research of Deidda and Fattouh (2002) showed that concentration in banking industry is negatively correlated with economic growth in poor countries that have lower income, but there is no such effect on concentration in developed countries.

Concentration measures of banking industry in the chosen countries in the SEE region¹⁰

Theoretical background

Concentration measures are used to measure distribution of total or some other aggregate measure among the units in the set. ¹¹ The importance of concentration ratios arises from their ability to capture structural features of a market. Concentration ratios are therefore often used in structural models ex-

⁹ Beck, T., Demirgüç-Kunt, A. and Levine, R. (2004), *Bank concentration and fragility: Impact and Mechanic*, NBER Working Paper Series, Vol. w11500

¹⁰ The Federation of Bosnia and Herzegovina, The Republic of Croatia, The Republic of Montenegro, The Republic of Srpska.

¹¹ Šošić, I. (2006), *Primijenjena statistika*, Školska knjiga, Zagreb, pp. 124.

plaining competitive performance in the banking industry as the result of market structure. It should be noted, however, that a measure of concentration does not warrant conclusions about the competitive performance in a particular market. Even in a highly concentrated market, competitive behavior between the leading banks is still possible.¹² This chapter presents six concentration indices and the Lorenz curve as a graphical representation of concentration.

Concentration ratio

One of the most commonly used concentration measures is r units (in this case banks) concentration ratio due to its simplicity. It is calculated by summing r of N banks' assets values in the set of all banks, and then dividing that sum by the sum of N banks' assets values. Values are ranked by size from the largest to the smallest. Concentration ratio of the r^{th} order is given by the expression¹³:

$$(1) \quad C_r = \frac{\sum_{i=1}^r x_i}{\sum_{i=1}^N x_i}, \quad C_r = \frac{1}{N} \sum_{i=1}^r \frac{x_i}{\bar{x}}, \quad \frac{1}{N} \leq C_r \leq 1,$$

where N represents number of banks, and x_i single values of the property for which concentration is measured (in this case banks' assets). There is no rule for the determination of the order value of r , so that the number of units included in the concentration index is a rather arbitrary decision. The index would be $1/N$ for an infinite number of equally sized units, it equals unity if the all the units included in the calculation of the concentration ratio make up the entire industry.

The Herfindahl-Hirschman Index

The Herfindahl-Hirschman Index (*HHI*) is the most often used summary measure of concentration and it serves as a starting point for the evaluation of other concentration indices. In the United States, the *HHI* plays a significant role in the enforcement process of antitrust laws in banking. The merger of two banks will be approved without further examination if post-merger market *HHI* does not exceed 0.18, and the increase of the index from the pre-merger situation is less than 0.02.¹⁴ *HHI* is the sum of the squares of proportions which represent market shares and is given by the equation (2), as follows:

$$(2) \quad H = \sum_{i=1}^N p_i^2 = \frac{\sum_{i=1}^N x_i^2}{\left(\sum_{i=1}^N x_i\right)^2}, \quad \frac{1}{N} \leq H \leq 1.$$

Herfindahl-Hirschman index ranges between $1/N$ (which is the reciprocal value of number of banks and means that all the banks in the market have equal assets) and 1 (in the case of monopoly). Herfindahl-Hirschman index emphasizes the importance of larger banks by assigning a greater weight to them than to smaller banks.

The Hall-Tideman Index and the Rosenbluth Index

Hall-Tideman (*HTI*) and Rosenbluth index (*RI*) both stress the importance of absolute number of units (in this case banks). The importance of including absolute number of banks arises from the fact that number of banks in banking industry can explain barriers to entry. It is assumed that market entry is easy if there is a large number of banks and vice versa. *HTI* is given by the equation (3).

$$(3) \quad HTI = 1 / \left(2 \sum_{i=1}^n ip_i - 1 \right); i = 1, \dots, n.$$

¹² Bikker, J. A., and Haaf, K., op.cit., pp. 3.

¹³ Šošić, I., op.cit., pp. 124.

¹⁴ Rhoades, S. A. (1993), The Herfindhal-Hirschman index, *Federal Reserve Bulletin* 79, pp. 188.

The largest banks has the weight $i = 1$, while to the smallest bank is assigned the weight $i = n$. RI is given by the equation (4), as follows:

$$(4) \quad RI = 1 / \left(2 \sum_{i=1}^n j p_i - 1 \right); j = n, \dots, 1$$

The main difference between RI and HTI results from ranking, so the weight $j = 1$ is assigned to the smallest bank, while weight $j = n$ is assigned to the largest bank¹⁵. The value of RI and HTI ranges from 0 to 1, where value 0 represents infinite number of banks of the same assets' size, and value 1 represents monopoly.

The Entropy index

The Entropy index has its theoretical foundations in information theory and is given by the equation (5)¹⁶.

$$(5) \quad E = \sum_{i=1}^N p_i \log_2 \frac{1}{p_i}.$$

The entropy index ranges between 0 for monopoly and $\log_2 N$, which represents the lowest concentration. Hence, the value of the E is inversely related to the degree of concentration. While HHI gives almost no weight to banks with very small proportion of total assets, the Entropy index gives relatively higher weight to those banks¹⁷.

The Lorenz curve and the Gini coefficient

Lorenz curve is used for graphical representation of equality of distribution. Lorenz curve is drawn from the origin to the point (1, 1) and the coordinates of points in between are given by ($F_x(x_i)$, $F_T(T_i)$). The values of variable X for which concentration is measured are ranked by size, from the lowest to the highest value. Coordinates of the points between (0, 0) and (1, 1) are calculated using the expression (6) for x -coordinates and expression (7) for y -coordinates, where N represents the number of banks. The abscissa would be given by (7):

$$(7) \quad F_x(x_i) = \frac{i}{N}, \quad i = 1, 2, \dots, N$$

and the ordinate would be given by (8):

$$(8) \quad F_T(T_i) = \frac{\sum_{j=1}^i x_j}{\sum_{i=1}^N x_i} \quad i = 1, 2, \dots, N$$

Lorenz curve is constructed below the perfect equality line which is given by expression (9).

$$(9) \quad F_x(x_i) = F_T(T_i)$$

¹⁵ Ljubaj, I., op. cit., pp. 6.

¹⁶ Martić, Lj. (1986), *Mjere nejednakosti i siromaštva*, Birotehnika, Zagreb, pp. 58.

¹⁷ Ljubaj, I., op. cit., pp. 9.

Lorenz curve is concave from above: as we move to the right, banks have successively higher assets value, so the cumulative assets grow faster¹⁸.

The Gini coefficient is a numerical representation of the degree of inequality and is related to Lorenz curve.¹⁹ The higher extent to which Lorenz curve deviates from perfect equality line indicates higher inequality of distribution, i.e. concentration of economic good (in this case assets) to smaller number of units (in this case banks).²⁰ Gini coefficient represents the ratio of the area between perfect equality line and Lorenz curve and the area of the triangle (0, 0), (1, 0), (1, 1). Gini coefficient ranges from 0, for perfectly equal distribution, to 1, for the situation in which all the quantity of economic good (in this case assets) would be concentrated to one unit (in this case bank). Equation (10) is used for the calculation of Gini coefficient in the case of ungrouped data, where N represents number of units (banks) and x_i represents single values of the property for which concentration is measured (bank assets).

$$(10) \quad G = \frac{2 \sum_{i=1}^N i * x_i - (N+1) \sum_{i=1}^N x_i}{N \sum_{i=1}^N x_i},$$

Standardized Gini coefficient is given by equation (11).

$$(11) \quad G^* = G \frac{N}{N-1}.$$

Calculation and analysis of concentration of banks' assets in the chosen countries of the SEE region

Comparison of concentration ratios in the chosen countries of the SEE region

Countries presented in Table 1. are sorted by number of banks. It can be noted that, with the increase of number of banks in the country, calculated concentration ratios decrease. For example, in The Republic of Srpska, where number of banks is lowest, five biggest banks hold 87,53% of the banking sector assets, while in The Republic of Serbia, where number of banks is highest, five biggest banks hold 46,17% of the banking sector assets.

Table 1. Concentration ratios $C_2, C_3, C_4, C_5, C_{10}$ ²¹ and number of banks for five countries of the SEE region, 30 June 2008

Country	C_2	C_3	C_4	C_5	C_{10}	Number of banks
The Republic of Srpska	0,55213	0,70634	0,80660	0,87528	*	10
The Republic of Montenegro	0,50200	0,64518	0,78182	0,84251	**	11
The Federation of Bosnia and Herzegovina	0,50311	0,66869	0,73590	0,78792	0,92271	21
The Republic of Croatia	0,41240	0,53331	0,64613	0,71927	0,91842	33
The Republic of Serbia	0,23058	0,32523	0,40036	0,46174	0,68765	34

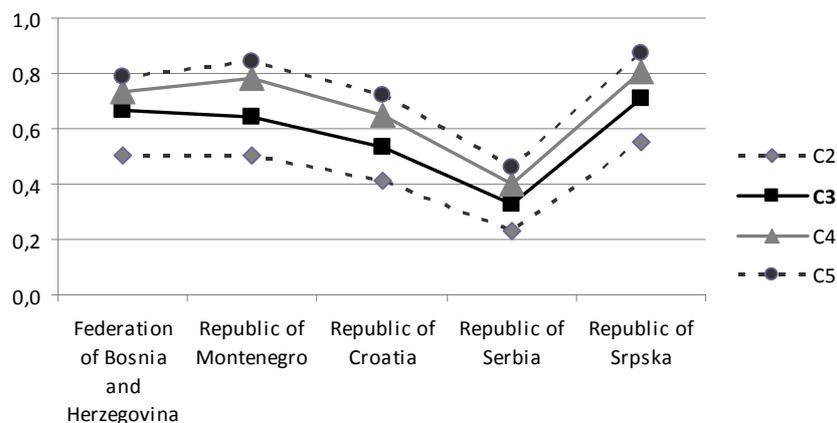
¹⁸ Barrow, M. (1996), *Statistics for Economics, Accounting and Business Studies*, Longman, pp. 74.

¹⁹ Gogala, Z. (2001), *Osnove statistike*, Sinergija, Zagreb

²⁰ Bradley, T. (2007), *Essential Statistics for Economics, Business and Management*, John Wiley & Sons, pp.53.

²¹ C_{10} was not calculated for The Republic of Montenegro and The Republic of Srpska due to the fact that number of banks in Montenegro was 11, and in The Republic of Srpska 10.

Figure 1. Concentration ratios C_2 , C_3 , C_4 and C_5 in five countries of the SEE region, 30 June 2008



According to Figure 1., C_2 , C_3 , C_4 and C_5 show the same results, i.e. lead to the same conclusions. Concentration is highest in The Republic of Srpska, followed by The Republic of Montenegro, The Federation of Bosnia and Herzegovina and The Republic of Croatia, while the lowest concentration was shown for The Republic of Serbia.

Comparison of Herfindahl-Hirschman indices in the chosen countries of the SEE region

Figure 2. Herfindahl-Hirschman indices in five countries of the SEE region, 30 June 2008

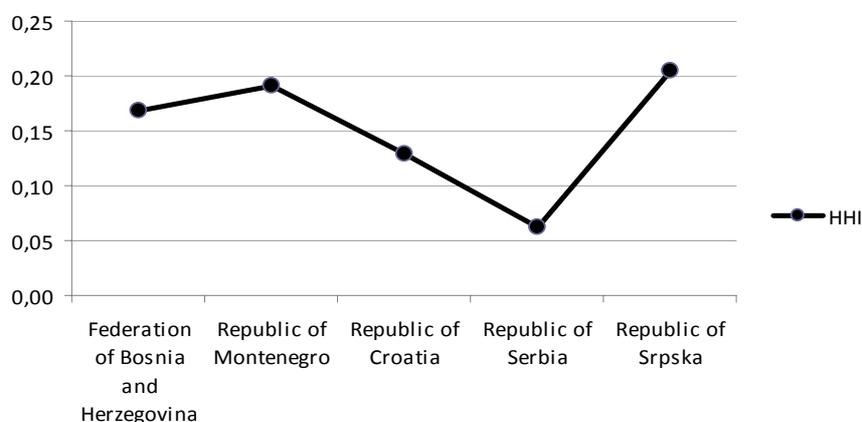


Figure 2., which presents results for Herfindahl-Hirschman indices, supports results obtained in the previous section, where concentration ratios were calculated. Although concentration ratios and HHI generally can not directly be compared since they are based on different starting point²², both results lead to the same conclusions. With the increase in number of banks HHI decreases, what is expected, because market power of biggest banks decreases.

Comparison of Hall-Tideman and Rosenbluth indices in the chosen countries of the SEE region

Hall-Tideman and Rosenbluth indices in the chosen countries of the SEE region are shown in Figure 3.

²² Šošić, I., op.cit. pp. 126

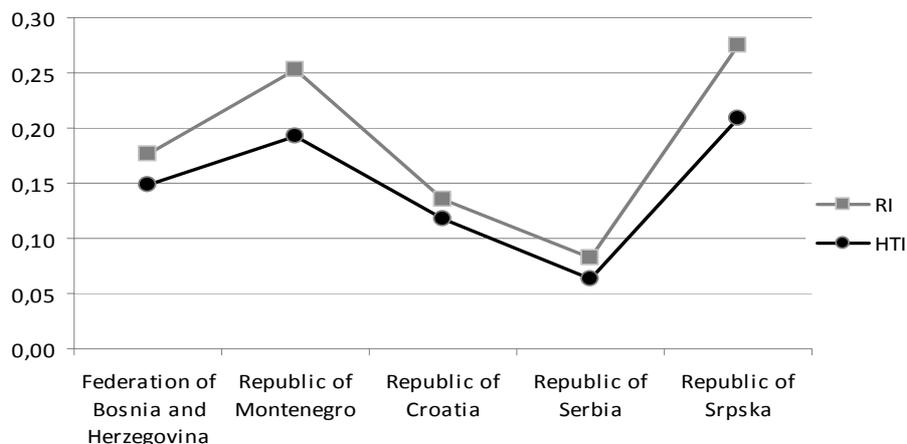
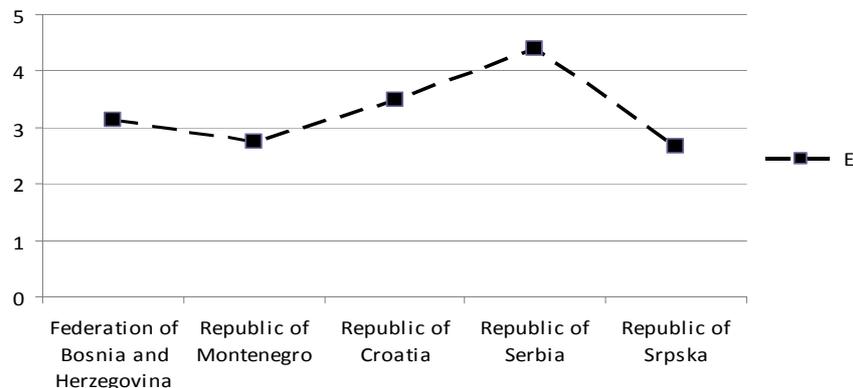
Figure 3. Hall-Tideman and Rosenbluth indices in five countries of the SEE region, 30 June 2008

Figure 3. also supports previously obtained results, i.e. concentration is highest in The Republic of Srpska, followed by The Republic of Montenegro, The Federation of Bosnia and Herzegovina and The Republic of Croatia, while the lowest concentration was shown for The Republic of Serbia.

Comparison of Theil entropy indices in the chosen countries of the SEE region, 30 June 2008

Figure 4. Theil entropy indices in five countries of the SEE region, 30 June 2008

Since the value of Theil Entropy index is inversely related to the degree of concentration, it can be concluded that Figure 4. supports results obtained from previous sections, i.e. concentration is highest in The Republic of Srpska, followed by The Republic of Montenegro, The Federation of Bosnia and Herzegovina and The Republic of Croatia, while the lowest concentration was shown for The Republic of Serbia.

Comparison of Lorenz curves and Gini coefficients in the chosen countries of the SEE region

Analysis is done using standardized Gini coefficients due to differences in number of banks among countries and concentration is graphically represented by Lorenz curves. Normalized Gini coefficients and Lorenz curves provide different results than the one obtained using concentration ratios, HHI, HTI, RI and Theil Entropy index. The highest concentration of banks' assets is shown for Croatia ($G^*=0,76$); followed by The Federation of Bosnia and Herzegovina ($G^*=0,71$); The Republic of Srpska and The Republic of Montenegro ($G^*=0,58$ in both cases); and The Republic of Serbia ($G^*=0,55$).

Lorenz curve (see Figure 5.) in Croatia shows that 83% of total bank assets are held by approximately 20% biggest banks. Furthermore, approximately 30% biggest banks hold 91% of total bank assets, while approximately 50% biggest banks hold 95% of total bank assets. Lorenz curve for The Federation of Bosnia and Herzegovina shows slightly lower concentration. Approximately 20% biggest banks hold 73% of total bank assets; approximately 30% biggest banks hold 83% of total bank assets; while approximately 50% biggest banks hold 93% of total bank assets. Lorenz curves for The Republic of Montenegro, The Republic of Serbia and The Republic of Srpska coincide and show lower concentration of banking sector. In those countries approximately 20% biggest banks hold 50% of total bank assets; approximately 30% biggest banks hold 70% of total bank assets; while approximately 50% biggest banks hold 90% of total bank assets.

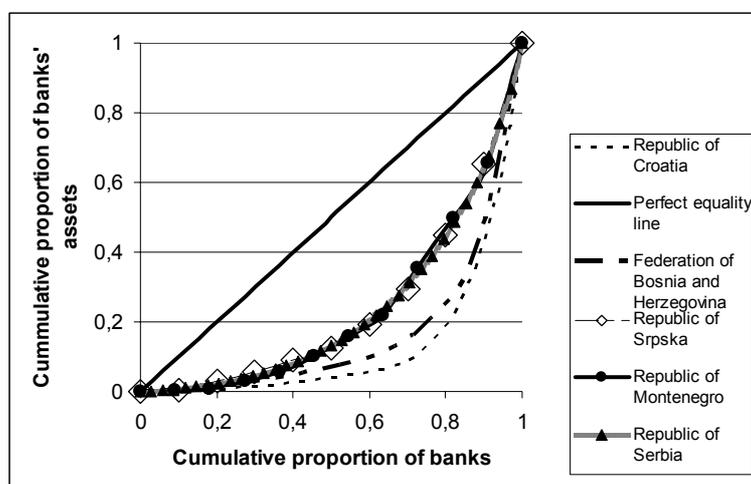
It is important to note that Gini coefficient is calculated using different starting point and procedure than previously calculated measures of concentration. Moreover, different ranking of countries might arise due to differences in number of banks among countries.

Concerning The Republic of Croatia and The Federation of Bosnia and Herzegovina, concentration ratios C_2 , C_3 , C_4 , C_5 and C_{10} , Herfindahl-Hirschman index, Theil Entropy index, Hall-Tideman and Rosenbluth concentration index show relatively lower concentration than Gini coefficient and Lorenz curve. However, the equality of distribution is not that intense as it seems if we take into account that number of banks in Croatia is 33, and in The Federation of Bosnia and Herzegovina 21. The number of banks causes concentration to appear lower than it really is. This statement is approved by Gini coefficient and Lorenz curve.

If we refer to The Republic of Montenegro and The Republic of Srpska, concentration ratios C_2 , C_3 , C_4 , C_5 and C_{10} , Herfindahl-Hirschman index, Theil Entropy index, Hall-Tideman and Rosenbluth concentration index show relatively higher concentration than Gini coefficient and Lorenz curve. The concentration itself would not be that high if we might take into consideration the fact that the number of banks in Montenegro is 11, and in The Republic of Srpska 10. Relatively small number of banks has bigger impact on high values of the mentioned concentration indices than the concentration of assets itself, since it makes concentration appear higher than in reality. This statement is also approved by Gini coefficient and Lorenz curve.

Regarding The Republic of Serbia, concentration ratios C_2 , C_3 , C_4 , C_5 and C_{10} , Herfindahl-Hirschman index, Theil Entropy index, Hall-Tideman and Rosenbluth concentration index, as well as Gini coefficient and Lorenz curve show that concentration of banking sector is among the lowest in the region. Regardless of the fact that number of banks in Serbia is 34 and that it causes concentration to seem lower than it is, Gini coefficient and Lorenz curve also support the statement that concentration of Serbian banking sector is among the lowest in the region.

Figure 5. Lorenz curves in five countries of the SEE region, 30 June 2008



Lorenz curve of bank assets' concentration (see Figure 5.) in Croatia shows that 83% of total bank assets are held by approximately 20% biggest banks. Furthermore, approximately 30% biggest banks hold 91% of total bank assets, while approximately 50% biggest banks hold 95% of total bank assets. Lorenz curve for The Federation of Bosnia and Herzegovina shows slightly lower concentration. Approximately 20% biggest banks hold 73% of total bank assets; approximately 30% biggest banks hold 83% of total bank assets; while approximately 50% biggest banks hold 93% of total bank assets. Lorenz curves for The Republic of Montenegro, The Republic of Serbia and The Republic of Srpska coincide and show lower concentration of banking sector. In those countries approximately 20% biggest banks hold 50% of total bank assets; approximately 30% biggest banks hold 70% of total bank assets; while approximately 50% biggest banks hold 90% of total bank assets.

Conclusion

This paper analyzes banks' assets concentration in selected South East European countries, based on the data for 30 July 2008. The restrictions of this research are due calculation and interpretation of selected statistical measures of concentration in region, whereas the level of market competition is not covered because of complexity of a research and the imposed volume to paper.

The basic objective of this paper is to compare concentration in banking industry of selected countries in the region by computing the statistical measures of concentration without relating concentration to stability, economic growth or competition.

By observing concentration ratios C_2 , C_3 , C_4 , C_5 and C_{10} , Herfindahl-Hirschman index, Theil Entropy index, Hall-Tideman and Rosenbluth concentration index in chosen group of SEE countries, the first conclusion that can be driven is that bank concentration is highest in The Republic of Srpska, followed by The Republic of Montenegro, The Federation of Bosnia and Herzegovina and The Republic of Croatia, while the lowest concentration was shown for The Republic of Serbia. On the other hand, analysis conducted using Gini coefficient and Lorenz curve has shown different ranking of observed countries according to concentration. Highest concentration of banks' assets is shown for The Republic of Croatia; it is slightly lower for The Federation of Bosnia and Herzegovina, followed by The Republic of Srpska and The Republic of Montenegro ($G^*=0,58$ in both cases); and finally The Republic of Serbia ($G^*=0,55$).

More profound analysis of the mentioned difference between these two groups of concentration measures shows that the main cause for different rankings is in different number of banks among countries. In countries where number of banks is high, namely The Republic of Serbia, The Republic of Croatia and The Federation of Bosnia and Herzegovina, concentration ratios C_2 , C_3 , C_4 , C_5 and C_{10} , Herfindahl-Hirschman index, Theil Entropy index, Hall-Tideman and Rosenbluth concentration index underestimate real concentration. However, Gini coefficient and Lorenz curve for Republic of Serbia show that this underestimation is not as intense as for The Republic of Croatia and The Federation of Bosnia and Herzegovina. On the other hand, mentioned measures are overestimated for countries where number of banks is relatively lower, namely The Republic of Srpska and The Republic of Montenegro. Therefore, the conclusion can be drawn that Gini coefficient and Lorenz curve provide more easily comparable results, taking into consideration the number of banks in the observed countries.

References

- Barrow, M. (1996), *Statistics for Economics, Accounting and Business Studies*, Longman.
- Beck, T., Demirgüç-Kunt, A. and Levine, R. (2004), *Bank concentration and fragility: Impact and Mechanic*, NBER Working Paper Series, Vol. w11500.
- Bikker, J.A., Haaf K. (2000), *Measures of competition and concentration in the banking industry: a review of the literature*, Research Series Supervision no. 27, De Nederlandsche Bank.
- Bradley, T. (2007), *Essential Statistics for Economics, Business and Management*, John Wiley & Sons.

- Gogala, Z. (2001), *Osnove statistike*, Sinergija, Zagreb.
- Ljubaj, I. (2005), *Indeksi koncentracije bankarskog sektora u Hrvatskoj*, CNB.
- Martić, Lj. (1986), *Mjere nejednakosti i siromaštva*, Birotehnika, Zagreb.
- McConnell, C.R. and Brue, S.L. (1996), *Microeconomics-Principles, Problems and Policies*, McGraw-Hill, Inc., London.
- Rhoades, S. A. (1993), *The Herfindhal-Hirschman index*, Federal Reserve Bulletin 79, pp. 188.
- Šošić, I. (2006), *Primijenjena statistika*, Školska knjiga, Zagreb.
- Tipurić, D., Kolaković, M., and Dumičić K. (2003), *Croatian banking industry concentration changes in 1993-2002*, Proceedings of the Faculty of Economics and Business Zagreb.
- Tipurić, D., Kolaković, M., Dumičić, K. (2002). *Istraživanje promjena u koncentraciji hrvatske bankarske industrije 1993-2000*. *Ekonomski pregled*, Br. 5-6, str. 470-494.

Interdependence of Development of Financial Markets and Efficiency of Monetary-Credit Instrumentarium

Milenko Dželetović, Slobodan Rakić, Andrea Andrejević¹

ABSTRACT – *In the modern conditions of economic operation there is a high degree of interdependence of monetary system, the central bank and the development of financial market. Namely, the decision about how many, and which instruments of monetary regulations ought to be used greatly depends on the development and the specificity of the financial market. In the conditions of one developed financial structure, the interbank market can successfully bring into accordance the needs for liquidity of some financial institutions. This is why in such a financial encirclement it is possible to put into effect the efficient monetary policy with some instruments of monetary regulation (or with only one), since the monetary authorities can rely on the developed financial market, which will trustworthily transfer the effect of their actions through the economic system. Contrary to this, in cases where the economic systems are undeveloped, for the successful conduct of economic policy it is necessary that this policy uses much richer instruments. In such encirclement the central bank has to take over a certain number of functions, which in the developed financial systems, the financial institutions themselves will carry out.*

KEY WORDS: *central bank, financial markets, monetary-credit policy, financial system*

Monetary flow management

It is typical that from the 70's i.e. from abandonment of Breton-Woods monetary system the interest for the treating of problems related to provision of adequate instrumentarium for the purpose of establishment of monetary stability and sovereignty is increased. In the modern vision monetary sovereignty implies "sovereign right of the country to regulate all questions related to issuance of money and management of monetary policy by the central bank in the function of achieving of projected goals of economic policy".² Abandonment of automatism of validity of gold standard in the aspect of mechanisms of monetary regulations, not only within economy but also external finances, has lead to assuming of responsibility of the government for maintaining of monetary stability and system of international payment relationships, i.e. of external liquidity of the economy. The government, through central bank, takes the responsibility for regulation of monetary mass and basic goods-cash flows within economy.

Central banks of developed countries are oriented to broader concept of monetary policy and to market mechanisms of the realization of programmed or requested quantity of money and loans in circulation. At the same time, in developing countries central banks use the concept of monetary policy and in realization they are mainly oriented to lending and withdrawal of loans of commercial banks.

By development of monetary systems central banks distinguish themselves from other banks and have the monopoly for the issuance function, i.e. for issuance of money. Position and place of central bank in every economy is specific and in direct correlation with the development of financial, political and economic circumstances. However, typical for all central banks in all banking systems and in all economies is their central position (monetary authority) in the monetary-credit system and dominant

¹ Milenko Dželetović, Slobodan Rakić, Andrea Andrejević, Faculty of Business Economy, Educons University, Belgrade

² Đorđe Đukić, "Monetary Sovereignty", Modern Administration, Belgrade, 1994, p. 854-855.

effect and responsibility for economic activity and financial movements in the country. From such role performed by central banks basic functions of the central bank are derived, as follows:³

- Regulation of circulation of money and emission of loans, in accordance with the request of liquidity and monetary stability in the country,
- Maintaining the liquidity in international payment operations and concern for the balance of payments,
- Preservation of internal and international value of money,
- Preservation of liquidity of credit system in the country and, related to that, supervision of banks for the purpose of maintaining of monetary stability,
- Performance of various financial transactions for the country.

However, in the monetary theory and policy two basic functions of the central bank are mentioned. First, *central bank is competent for management of monetary policy*, i.e. control of money supply, with an aim to ensure a low inflation rate without creating a high unemployment rate. It is typical that today in the developed market economies in the hierarchy of goals of monetary policy stability of prices, economic growth, full employment, balanced payment balance – primacy is given to the stability of prices. By this the importance of stability of national currency for balanced economic movements is valued. Thesis of the monetarists (M. Friedman, A. Maltzer, K. Brunner and others) that the low and stable rate of monetary growth in a long term is a presumption for achieving stability of prices is valued in practice in a large number of developed countries.

However, it would be wrong to conclude that the monetary stability implies only the stability of prices. Complex understanding of monetary stability implies the stability of prices with achievement of considerable stability of foreign currency exchange rates and undisturbed trading in the financial markets in such a manner that the market participants with high level of certainty can plan what will happen in the near future.

Second basic function of the central bank is the *function of “lender of last resort or “last resort of banks”*. This is about ensuring the liquidity of macroeconomic system. In a financial system with a lot of financial mediators a potential danger for occurrence of financial panics and jeopardizing of financial stability of a country is constantly present. In these situations central bank appears as the savior which is able and willing to approve loans to commercial banks and in that manner prevents bankruptcy. Explanation for ability of the central bank to approve loans in the time of deep crisis is in its ability to create reserves.

In certain developed market economies there is a two-level insurance from chain bankruptcy of large number of banks. In the first instance it represents a certain type of public corporation for deposit insurance which guarantees savings deposits of citizens up to a certain amount. For example, in the USA – Federal Deposit Insurance Corporation - FDIC insures deposits of citizens up to 100,000 dollars in the USA and 20,000 Euros in the European Union. If for any reason there is a disturbance of normal functioning of corporation, in the second instance the central bank, in this case System of Federal Reserves – FED, is always ready to save such corporation acting as an “lender in the final instance”.⁴⁾

In the modern conditions of business operations the central bank has six basic instruments of realization of monetary policy and control of credit potential of the economy at its disposal:

- Rediscount loans to banks
- Open market operations
- Required reserve rate
- Special deposits of banks at the central bank
- Minimal interest rate
- Directive measures

³ Aleksandar Živković, Žarko Ristić, Slobodan Komazec and Dušan Zdravković, “Financial and Stock Markets”, Faculty of economics, Niš, 1998, p. 523.

⁴ Đorđe Đukić, “Central bank and financial system”, Litopapir, Čačak, 2001, p. 12.

Due to mentioned instruments the Central bank as the supreme monetary and banking authority has a high level of operative qualification and business autonomy. Operative qualification implies efficient mechanisms of regulation, control and correcting of balances and flows, not only on the monetary but also on broader economic-financial plan. And business autonomy implies the ability of independent decision making by the central bank in relation to corresponding government bodies. Only clear balance between rights and obligations presents a good precondition for functioning of flexible and complex monetary system which could affect the key economic, financial and monetary flows in a mobilizing and regulative manner.⁵

Financial markets and establishment of monetary stability

Theory of investments, savings and monetary theory are based on standpoint that there is no automatic balance in forming of monetary accumulation (savings) and real investments, in the time of forming, as well as per bearers and place of forming. There is no *ex ante* balance in the money market either. Balance between total sources of funds and total use of funds is illustrated by the following equation:⁶

$$D+DFP = C + I + DFPL \quad (1)$$

Equation is the result of basic relations between savings, investments, consumption and financial transfers, through which initial imbalances between real aggregates are closed. Herewith that the sum of aggregate income (D) and inflow of financial resources (FF) makes up total sources of financing of current consumption (C), investments (I) and increase of financial assets (FPL). From the aspect of balance sheet there is always a balance between the source and use of resources, while in fact financial market contributes to the balancing of funds.

From the stated we can conclude that the basic function of existence and functioning of financial markets is allocation of financial assets, i.e. connection of participants in the market which have surpluses of financial assets with participants which lack financial assets. Otherwise, if the economic subjects with financial surpluses would be the same ones acquiring the capital, economic flows would function efficiently even without existence of financial markets.

So, financial market enables undisturbed circulation of financial assets between different economy branches and sectors. It practically means that the financial market needs to enable undisturbed performance and increase of efficiency of economic activities, as well as increase of standard of living.

Level and quality of financial market are determined by total economic and financial situation of the national economy. Functions performed by financial market give it importance of segment of economy system, equal with the product market and production factor market.⁷⁾

Basically, financial markets perform at least three economic functions:⁸

- First function refers to mutual effect of participants in the market by which the trading price of the financial instrument is determined, i.e. it defines the required yield. Amount of the required yield determines the motivation of corporations to acquire financial assets through financial markets because it affects the allocation of funds between financial assets,
- Second function of financial markets is provision of mechanism which enables the investors to sell the financial assets. In other words, financial market offers liquidity as attractive characteristic when the circumstances make or motivate the investor to sell securities. Without liquidity, the owner would be forced to hold the debt i.e. equity instrument until maturity, or to sell it under unfavorable circumstances and

⁵ Aleksandar Živković, "Goals and strategies of monetary politics", Economics annals, Faculty of Economics, Belgrade, December 2003, p. 222

⁶ Aleksandar Živković, Žarko Ristić, Slobodan Komazec and Dušan Zdravković, "Financial and stock markets", Faculty of Economics, Niš, 1998, p. 237

⁷ Peter S. Rose, "Money and Capital Markets", Homewood, 1989, p. 9

⁸ Frank J Fabozzi, Franco Modigliani and Michael G. Ferri "Foundations of Financial Market and Institutions", Prentice Hall, Englewood Cliffs, 1994, p. 11

- Third function is about the affect of the financial markets on the decrease of research and information costs. Research costs represent certain cost which the participant in trading of securities may have during the sale or purchase of certain financial instrument. This type of costs refers to the time spent for finding a buyer, i.e. seller.

Besides the mentioned, particularly interesting transfer function of financial market is performed as primary market, i.e. market in which creation of financial instruments is performed. Organization of primary market involves activities of classic financial mediators (banks), institutional investors, but also a direct relation between issuers – sellers of securities (debtors) and buyers (creditors) may be established. In this case it is about disintermediation, which by market development and improvement of its efficiency gains importance and stimulates the development of new market elements, procedures and instruments.⁹

From the mentioned functions of the financial market we can see that its role and importance is in establishment of balance between source of financial resources and their utilization, and by that maintaining of stable monetary system is very important. That way in economy literature we can find various approaches related to number of instruments of monetary regulation which are necessary for conduct of efficient monetary policy. Decision on how many and which instruments of monetary regulation need to be used, in great extent depends on the development and specificity of financial (market) system of the national economy. Well developed financial system, with developed financial market enables balanced and relatively fast transfer of actions of bearers of monetary policy through the channels of that system. Because of that in such financial environment it is possible to conduct efficient monetary policy with several (or only one) instruments of monetary regulation, because monetary authorities may rely on developed financial market which shall reliably transfer the effect of their actions through the economic system. Contrary to that, in conditions where the financial systems are underdeveloped, for successful management of monetary policy it is necessary that such policy has a lot richer instrumentarium.¹⁰

Therefore, in the conduct of monetary policy, monetary authorities deal with a question of choice between two strategic approaches of monetary control: the first one is direct control and the other is indirect control. In general, as the financial market is less developed in a given country, tendency of the central bank to take direct monetary control – direct limitation of lending activity of banks, limitation of active and passive interest rates is higher, and vice versa. In developed market economies, in which the money market is characterized by high level of liquidity and trading of wide spectrum of short-term securities, monetary control becomes highlighted. Indirect control puts a central bank in a position to choose between two alternatives as follows: management of short-term interest rates or management of monetary base, i.e. high-powered money. From the moment of establishment of EEC, central banks of member countries in the operative sense have used both approaches. However, in the second half of 90's in all countries of the EU main emphasis was on management of short-term interest rates.

We can see, that in modern conditions of business operations choice between two strategic approaches to monetary control, direct and indirect control actually depends from development of financial market. In general, as the financial market is less developed in a given country, tendency of the central bank to take direct monetary control – direct limitation of lending activity of banks, limitation of active and passive interest rates is higher, and vice versa.

In developed market economies, in which the money market is characterized by high level of liquidity and trading of wide spectrum of short-term securities, monetary control (in combination with some direct measures) becomes highlighted. However, it has been shown that direct instruments of monetary regulation in market economies weaken the efficiency of functioning of financial system, obstruct the process of optimal allocation of financial and real resources and have an inhibitory effect to the development of regular financial market.

⁹ Branko Vasiljević, "The Basics of Financial Markets", Zavet, Belgrade, 2002, p. 12

¹⁰ Aleksandar Živković, Gradimir Kožetinac, "Monetary Economy", Faculty of Economics, Belgrade, 2003, p. 481.

It is typical that today in developed market economies in the hierarchy of goals of monetary policy – stability of prices, economic growth, full employment, balanced payment balance – primacy is given to the stability of prices. By this importance of stability of national currency for balanced economic movements is valued. Thesis of the monetarists (M. Friedman, A. Maltzer, K. Brunner and others) that the low and stable rate of monetary growth in a long term is a presumption for achieving stability of prices is valued in practice in a large number of developed countries.

However, it would be wrong to conclude that the monetary stability implies only the stability of prices. Complex understanding of monetary stability implies the stability of prices with achievement of considerable stability of foreign currency exchange rates and undisturbed trading in the financial markets in such a manner that the market participants with high level of certainty can plan what will happen in the near future.

Money market, as a segment of financial market, enables the whole banking system (central bank and commercial banks) to affect the supply and demand – total and per sectors. By that monetary policy and central bank may ensure dynamic and stable economic growth with maintaining of stability of money and liquidity of economy. By regulating the supply and demand for money, as well as the price of money (interest), central bank basically regulates the economic conjecture. Money market enables the banks to perform permanent transformation of short-term monetary funds to investment funds (long-term facilities), and that means that additional banking capital is created (besides savings), by which direct connection of money market and capital market is established.¹¹

In fact, in developed market economies money market, with a rich assortment of market material, represents a basic and most efficient mechanism of conduct of monetary policy by the central bank. Thanks to money market immediate changes of basic monetary aggregates are possible, so that the central bank is able, by following the events in the real sector to undertake adequate measures for the purpose of balancing of aggregate supply and demand i.e. maintenance of stability of national economy.

Basically, Central bank in the money market has a double role. From the macroeconomic aspect, in the function of effect on the quantity of money and monetary flows, it regulates activity and potential of money market and by measures of its monetary regulation it determines its behavior. From the micro aspect, Central bank in contacts with banks and specialized professional mediators and treasury, affects the security of the market and liquidity of financial instruments traded in the money market. Everywhere in the world money market is developed with full supervision, influence and support of the central bank, through discount and lombard policy, as well as through complex mechanism of operations of the opened market. By its supervision and general monitoring in relation to the market subjects, central bank with the competence of legal country basic factor which sustains the security and trust of the participants in the market in institutions and mechanisms of money market.

In the basis of changeable approach in the area of monetary regulation of developing countries there is an effort to, firstly increase the efficiency of monetary policy in the aspect of realization of macroeconomic stabilization goals and, secondly, to ease and set more elastically the management of interest rate policy in one financial environment in which a process of deregulation is started, with an aim to increase the mobilization of domestic accumulation (savings) and to improve the efficiency of investments.

The more the financial market is developed the more instruments at disposal the central bank has, and by that it easier ensures the stability of monetary system and efficient functioning of monetary flows which synergistically contribute to the stability of complete macroeconomic environment. How much it is easier to control the financial flows in developed countries, thanks to developed financial market, is best shown in the case of crash of stock markets from 1987. Namely on 19 October 1987, on “black Monday”, there was a great stock market crash on the New York stock exchange when in only 6.5 hours value of stocks dropped for over 500 billion dollars. Thanks to sophisticated technological means, with which the stock markets are equipped, unfavorable information have spread by the speed of impulse and created global mistrust. As the markets opened, due to different time zones, they were

¹¹ Aleksandar Živković, Gradimir Kožetinac, *op cit*, p. 518

blown away. In only 24 hours the crisis seriously shook all industrially developed countries. Proportions of the crisis reminded many financial experts to the Great economic crisis in 1929. However, thanks to coordinated measures of monetary authorities of developed countries the consequences were not even closely devastating as the ones from the thirties. Monetary authorities of the affected countries immediately reacted by expansion monetary policy with an aim of avoiding the recession which thanks to developed financial structure and wide spectrum of financial instruments in great extent was successful. So that Dow Jones Industrial index (*Dow Jones Industrial Average*) which follows the changes in prices of shares of 30 leading industrial companies in the USA already in 1988 recorded first signs of recovery in order to fully recover in 1989 and 1990 and recorded the largest growth in history of stock markets and financial markets in the following decade.

Establishment of European Monetary Union and introduction of Euro which represents the biggest change of monetary infrastructure in the history of mankind is an evident example that the higher level of development and integration of financial markets increases economic and monetary efficiency. Thanks to introduction of single currency transaction costs are decreased. This decrease is especially important for TNC which performs largest portion of its business operation outside of EMU. Although these costs may be marginal in comparison to the GDP, their decrease shall have multiplicative effects, since they are not insignificant for many export oriented small enterprises. Especially small and medium enterprises shall have significant benefits. Increased economic basis for Euro and elimination of transactional costs in relation to multiple European foreign currency exchange rates shall probably contribute to gradual growth of utilization of new European currency as the unit of calculation in the denomination of trading trends, with special growth of transactions between Euro zone and developing countries.

By decrease of currency risk between EMU members the need for hedging is lost. Funds required for hedging may be used more effectively. With elimination of currency risk between countries which joined EMU in the third phase, the existing freedom of movement of capital gained a new dimension. Estimates of economists are that elimination of currency risk and costs of conversion shall result in savings of 0.5 percent of the total profit.

At the same time, single European currency in comparison to the national currencies has a lot wider maneuvering space for evasion of devaluation. This in significant extent has contributed to increase of security in the aspect of movement of interest rates. In the money markets there was a full convergence of interest rates in the whole EMU area. In case of short-term interest rates unique indicators such as EONIA (Euro Overnight Index Average) and EURIBOR (Euro Interbank Offer Rate) have been fully accepted. Interbank market in EMU has divided in two segments: large banks have taken over cross-border transactions, and small banks transactions in their own countries.¹²

Functioning of EMU has significantly affected the activity of financial mediators as well. The concentration is increased between them because comparison of prices has been eased and the cost of currency conversion has been decreased. Creation of broader and liquid securities has caused an increase of their issuance by the company (securitization). Financial mediators have reacted to these changes by changing the structure of their business from credit to investment banking, i.e. from charging of incomes by interest to charging of services and commissions. EMU has also actualized improvement of infrastructure of financial markets. Clearing and settlement system in EMU are still consisted from around 30 different systems, and the connection of financial stock markets requires more and more a unique, pan-European system of clearing and settlement.¹³

It is interesting that the increased integration of financial markets in EU does not mean decreased influence of external factors at the same time. Namely, EU is still sensitive to changes in real financial sector of USA. According to the estimate of the IMF shock of aggregate demand in the USA in the amount of -1% GDP growth causes decrease of growth rate of domestic product in EMU for -0.1% . If the shock of aggregate demand in the USA is joined by stock value at the stock markets then the decrease of growth rate of GDP for -1% in the USA causes the same in EMU for -0.4% . If shock in

¹² Oskar Kovač: "International Finance", Faculty of Economics – Belgrade, CID, 2003, p. 412.

¹³ Ibidem, p. 413 – 414.

foreign currency markets is added to these shocks in the USA, then the decrease of growth rate of GDP in the USA for -1% causes its decrease in EMU for -0.7% .¹⁴

From the aspect of global financial markets, establishment of monetary union has led to changes in the sense of strengthening of financial markets of its member countries. However, with regard that the EU by regulating "its market" has used unique international standards and that it is deeply involved in the processes of institutionalization of world economy, these changes shall only additionally give dynamics to the trends which characterize the start of new millennium.

Conclusion

Based on mentioned we conclude that in market economies mutual conditionality of monetary policy and level of development of financial sector is exceptionally emphasized. Instruments of monetary regulation by which central bank ensures stability of monetary system largely are determined by the level of development of financial market. Higher level of development of financial markets enables the monetary measures to act a lot faster and simpler to the total economic activity i.e. to make monetary policy significantly more efficient. Establishment of European Monetary Union is an evident example that the higher level of development and integration of financial markets increases economic and monetary efficiency. The more the financial market is developed the more alternatives are at disposal to the monetary authorities, and by that they easier ensure the stability of monetary system and efficient functioning of monetary flows which synergistically contribute to the stability of complete macroeconomic environment.

References

- Aleksandar Živković, "Goals and strategies of monetary politics", Economics Annals, Faculty of Economics, Belgrade, December 2003.
- Aleksandar Živković, Gradimir Kožetinac, "Monetary Economy", Faculty of Economics, Belgrade, 2003.
- Aleksandar Živković, Žarko Ristić, Slobodan Komazec i Dušan Zdravković, "Financial and Stock Markets", Faculty of Economics, Niš, 1998.
- Branko Vasiljević, "The Basics of Financial Markets", Zavet, Belgrade., 2002.
- Đorđe Đukić, "Central Bank and Financial System", Litopapir, Čačak, 2001.
- Đorđe Đukić, "Monetary Sovereignty", Modern Administration, Belgrade, 1994.
- Frank J. Fabozzi, Franco Modigliani and Michael G. Ferri, "Foundations of Financial Market and Institutions", Prentice Hall, Englewood Cliffs NY, 1994.
- IMF, "Monetary and Exchange Rate Policies of the Euro Area", IMF Country Report No.01/60, 2001.
- Oskar Kovač, "International finance", Faculty of economics – Belgrade, CID, 2003.
- Peter S. Rose, "Money and Capital Markets, Homewood, 1989.

¹⁴ IMF, "Monetary and Exchange Rate Policies of the Euro Area", IMF Country Report No.01/60, 2001, p. 9

Private Equity Funds as Possible Source of Capital for SMEs in Transitional Economies – Case of Serbia¹

Dejan Erić, Saša Stefanović², Aleksandra Bradić-Martinović³

ABSTRACT – Analyzing current problems which a lot of entrepreneurs and small and medium enterprise managers encounter in Serbia, as well as in some neighboring countries in the region of Central and South-Eastern Europe, it has become obvious that limited approach to quality long-term sources of financing is the most worrying one. As small and medium enterprises, according to many parameters, represent the most dominant sector in terms of its share in GDP, total production, employment and creation of values, in this paper we have tried to look into the role that private equity funds (PEF) may have in their financing. Analyzing alternative sources of financing SMEs on the one hand and basic principles of the function of private equity funds on the other, we have tried to identify the most important advantages and disadvantages of this source of financing in order to draw conclusion in terms of possible impact that PEF may have on the development of a certain number of SMEs.

KEY WORDS: small and medium enterprises (SMEs), private equity funds, venture capital, financial sources

Introduction

In many countries in transition sector of small and medium enterprises represent, according to many parameters, the dominant sector of economy. Data that is going to be presented in this paper should be considered utterly conditionally, since it has been changing very fast as well as the very SMEs sector. However, we believe that it shows their significance. For example, if we consider a few countries from the region of Central and Eastern Europe, which are our neighbours, the following characteristics can be identified:⁴

- In Romania – number of private SMEs amount 99.7% of total SMEs, their share of economy vary from 2.8% in agriculture, 13.6% in industry up to 77.4% in the services, 56.6% of all employees working in SME sector, etc.
- In Bulgaria – SMEs represent 99.3% of all enterprises, 78.2 of total employees working in SMEs, private SMEs generate 72.7% of the total private sector turnover, etc.
- In Albania – SME sector contribution to GDP is 64%, to employment 60%, etc.

The similar situation can be found in Hungary and Croatia as well as other neighbouring countries. The importance of small and medium enterprises in Serbia has increased as well. There is an increasing number of SMEs, their share in GDP has grown (over 40%), in employment (over 55%), gross

¹ This paper is a part of researching project no. 159004, financed by the Ministry of Science and Technological Development of Republic of Serbia, named: “The Integration of Serbian Economy into the EU - Planning and Financing of Regional and Rural Development and Enterprise Development Policy” and a part of a survey within a research project called “Integration of Financial Services Sector of the Balkan Countries into European Financial System.” as part of interstate programme of cooperation of „Pavle Savić” between the Institute of Economic Sciences from Belgrade and the University of Nice - Sophia Antipolis. We express special thanks to Nikola Stefanović, PhD, from SEAF fund who unselfishly helped us get insight into the activities of private equity funds in Serbia.

² Dejan Erić, Saša Stefanović, Institute of Economic Sciences, Belgrade

³ Aleksandra Bradić-Martinović, Belgrade Banking Academy, Belgrade

⁴ Group of Authors (2008), *Strategies for the Development of Entrepreneurship and the SME Sector in the Black Sea Economic Cooperation Region*, Konrad Adenauer Stiftung, Ankara, pp. 38, 61, 89.

value added (over 54%), total profit (over 50%), etc. Evidently it is a very vital sector, which contributes greatly to the most important macroeconomic parameters and the total growth and development of the country.

Due to comparatively undeveloped financial systems which are mainly bank-orientated the majority of entrepreneurs and owners and managers of SMEs has a few conventional methods of crediting on their disposal. Most often these are bank loans which represent relatively unavailable and expensive source of financing. This source is relatively unavailable having in mind credit worthiness and rating of many SMEs especially in the early stages of development. On the other hand, this is a relatively expensive source of financing, especially under the conditions of the global financial crisis which has impact in many countries in transition, with the trend of increasing interest rates. For example, in Serbia, in the second part of the year 2008 interest rates for bank loans in the sector of SMEs were over 12% per annum for loans made in EUR, while for loans made in RSD the interest rate is much higher and totals over 25% per annum.

This paper consists of three major parts. Further we would point out the most important results of a small qualitative analysis based on the example of some ten companies from Serbia where we identified the urgent need for additional finances on the one hand, as well as serious interest for accepting private equity capital as a potential source of financing, on the other. After that, in Part 2 we have tried to emphasize the basic principles of functioning of venture capital firms (VCF) and private equity funds (PEF) so as to identify under which conditions and to which type of SMEs these types of institution could present important sources of financing. Finally, in a conclusion, we would analyze advantages and disadvantages of this source of financing in the sector of SMEs, expressing our opinion that VCF and PEF may present an important source of financing for some types of SMEs, in certain sectors under certain conditions. These attitudes become more important under conditions of global financial crisis that spread over the world during the course of 2007 and 2008. Finally, there is an appendix with a review of PEF which have worked in Serbia in mid-2008.

Research and findings

Institute of Economic Sciences expert team carried out a number of different projects for a certain number of small and medium enterprises in Serbia in the course of 2007 and the first 6 months of 2008. Projects varied by their nature, starting from market research, organizational transformations, strategic analysis and strategy formulation, restructuring, up to value assessment and due diligence. Some of these companies are quite well-known in Serbia, as well as in the region. We will mention some names: Galeb Group from the town of Šabac, Progetti from Vladimirci, Zimpa from Ub, Telefonija from Belgrade, Anavi from Belgrade, as well as several enterprises that were undergoing privatization process.⁵

The reviewed enterprises are quite homogenous by their composition. They belong to different economic branches, ranging from telecommunications, production of steel products, shoes, coffee, up to trade and services. In addition, they vary in size, from those relatively small employing only some 15 people, up to those that candidate to join a group of the big ones or even be listed in A List of the Belgrade Stock Exchange.⁶ Frequent contacts with owners and managers brought us to a conclusion that doubtlessly one of the biggest and most serious issues is – a limited approach to good quality long-term sources of financial resources.

Similar situation is to be found in other countries of the CEE region. Even though some countries are now part of the European Union (EU), structure of the problem has not significantly changed.⁷

⁵ For more information on the listed companies see the following websites: www.galeb.com, www.eastwest.it, www.zimpa.co.yu, www.telefonija.rs and www.anavi.co.rs.

⁶ Such as e.g. Telefonija, stock company, Belgrade.

⁷ Look for more details in: Erić, D. (2006), "Access to Financing SMEs", *Erenet profile*, No. 2, Vol. 1, Budapest, <http://www.erenet.org/publications/profile2.pdf>

Analyzing alternative sources of financing in Serbia, as a possible solution to this topical issue referring SMEs sector, we have noticed the following sources:⁸

- Bank loans – Having completed the analysis, we have concluded that, under current circumstances, bank loans are not favourable source of financing SMEs, due to the fact that, depending on the agreement with a bank, effective interest rate is 12% on average per annum for loans granted in Euro currency, with no exchange rate risk. Interest rate for RSD currency loans, including the risk of this kind, is much higher, over 25% on average per annum.
- Securities as debt instruments – Having analyzed financing payability via corporate bonds or e.g. commercial papers in the light of current capital expenses, we have concluded that, no matter how one defines denomination (nominal value – either in RSD or in Euro), investor's required rate of return would have to be quite high, i.e. this is also an expensive source of financing for SMEs. We have learned this by studying what has been going on in the Serbian financial market, in which at this moment, and indexed in EUR, minimal required rate of return is over 6.6% (which was an average annual required rate of return for the Republic of Serbia bonds denominated in EUR currency), i.e. in RSD – 15.75% (which was NBS's reference rate in mid-2008). Every second stock would have to include danger money, which makes debt instrument issue less attractive to the issuer. Besides, costs of issuing should also be added and calculated, which makes this source even dearer.
- Issue of shares – Having examined possibility of financing by the means of issuance of shares, we have concluded that equity capital would be a very expensive source of financing for the time being. It is true that a stock company does not have to pay dividend since this is not a legal liability. Nonetheless, stockholders in this case expect stocks market price will go up, since they would be able to effect capital gain by selling stocks, as an element of their return. The problem is, however, related to expectations of potential investors, who want to see attractive required rates of return in order to invest in a stock. Issue of stocks is also connected with significantly high issuance costs, as well as with uncertain success of the issuance, due to political and economic situation in the country and ongoing worldwide financial crisis, which has also been affecting Serbia for a while now.⁹

Considering relatively limited, unavailable or expensive sources of financing, we have refocused our analysis on venture capital and private equity funds as potential sources of capital for SMEs sector.

Conceptual foundation of private equity funds

It often comes to confusion in terminology between the terms such as venture capital (VC) and private equity capital. According to certain beliefs VC has five main characteristics:¹⁰

- A VC is financial intermediary, meaning that it takes the investors capital and invests it directly in portfolio companies.
- A VC invests only in private companies.
- A VC takes on active role in monitoring and helping the companies in its portfolio.
- A VCs primary goal is to maximize its financial return
- A VC invests to fund the internal growth of companies.

Simply, venture capital firms (VCF) and private equity funds (PEF) provide private equity capital by private investors (or the venture capitalists) to the SMEs, especially in early stages of development (seed phase). It is very important to emphasize that they do not invest their own capital, but rather

⁸ Look for more details, e.g.: Institute of Economic Sciences (2008), *Company "Progetti" - Vladimirci Financial and Operating Improvement Strategy*, Belgrade; Institute of Economic Sciences (2007), *Proposal for New Organization of "Telefonija" Business System & Strategy Adjustment to New Business Environment*, Belgrade; Institute of Economic Sciences (2007), *Development Strategy of Enterprise "ZIMPA" Ub within "Galeb Group"*, Belgrade.

⁹ This viewpoint has been grounded on fluctuation of prices data at the Belgrade Stock Exchange. See: www.belex.co.rs

¹⁰ Metrick, A. (2007), *Venture Capital and Finance of Innovation*, John Wiley & Sons, New York, pp. 3.

raise bulk of funds from other institutions and individuals. As for the difference, there is another type of organization which also provides funding for SMEs in their early stages of development, known as business angel, or simply angel investor. These are not intermediary organizations such as VCF or PEF, but companies which invest their own money as angels.

When financing through VC or PEF is concerned, it is a method of financing which is not based on credit sources, i.e. there is no debtor-creditor relation between the investor and the company that is being invested into. That is a proprietary relation, i.e. equity financing which has its implications on the character of general and financial management of companies.¹¹ It is believed that, apart from the role of investing, VC and PEF have two additional roles of monitoring and exiting¹².

Most often private equity investors remain minority owners. The company may stay as a limited liability company or joint stock company. It does not go public. Its shares are not publicly traded on an organized market but it is possible to make necessary preparations for going public later. Thus, however, some authors think that private equity markets have helped reinvent the market for corporate control, particularly in the US.¹³

Private equity investor does not have to be involved in everyday operations management of the company which has been invested into. It is a passive type of investor. However, it is more often that a private equity investor actively participates not only in strategic but in operations management as well in order to help business performances and gain the most important mutually defined targets in terms of return rates that have been defined in advance. Regardless of their involvement in management, VC or PEF have monitoring function which is first of all directed towards control of realization of financial performances of the target.

Peculiarity of PEF businesses lies in their required rates of return, which are said to be considerably high. In many cases in developed countries they vary from over 20 per cent and more of internal rate of return (IRR). In less developed countries and countries in transition they are even higher and vary from 30-35% IRR. One of the reasons for so high internal rates of return is a high level of risk that VCF and PEF encounter in conditions of relatively non-developed economic, and particularly, financial systems of these countries.

Within financial analysis, and particularly during the process of due diligence VCF and PEF identify as targets those companies which operate in dynamic economic areas with increasing demand and high potential for internal growth. This reduces possibilities for investing in many SMEs. Since investing through VC and PEF is very complex, the issue of valuation is crucial for the whole process of investment decision making. Apart from the analysis of the return rates, the important issues are connected with the analysis of value drivers, among which the question of the cost of capitals is the most sensitive one. Unfortunately, the scope of this paper does not allow us to go deeply into many aspects of financial analysis.

It is very important to point out that PEFs deal almost exclusively with sophisticated, 'professional' investors. These investors are able to understand and accept the risks and returns of investing in the asset class. According to the European Private Equity and Venture Capital Association (EVCA) that fact is largely reflected in the type and level of regulation across Europe. In addition, although there is no harmonized framework for private equity at the European Union level, a number of EU legislative measures in place indirectly affect the industry, such as MiFID, UCITS, the Pension Funds Directive, and the Capital Requirements Directive.

Time horizon for investment can be different. These are usually mid-term investors. In some, very exceptional cases, time horizon may vary from a couple of months (rarely, only in case of very specu-

¹¹ Willis, J. R. and D. A. Clark (2005), "An Introduction to Mezzanine Finance and Private Equity", *Journal of Applied Corporate Finance*, Vol. 2, Issue 2, pp. 77.

¹² Metrick, A. (2007), pp. 9

¹³ Wruck, K. H. (2008), "Private Equity, Corporate Governance, and the Reinvention of the Market for Corporate Control", *Journal of Applied Corporate Finance*, Vol. 20, Issue 3, pp. 9

lative investors or major changes on the market) to 2-3 years. However, it more often happens that they stay within a company for 3 or even up to 10 years. Most often they stay 3-5 years.

Exit strategies can be very different. They involve several alternatives:

1. Selling back holdings to original owner or company founders – which are a rare case and are not simple at all, as they usually, have not enough means. It has to be taken into consideration that during the years the company value increases greatly.
2. Selling to some of the strategic investors – who have strategic interest in company's business.
3. Selling to some of the financial investors – who estimate that a company may grow more and that it is possible to make preparations for initial public offer (IPO) and going public.
4. Selling through IPO – at the stock exchange, to a great number of individual investors.

Although they first appeared in the US after the World War II (the first formal PEF was established in 1946. – American Research and Development – ARD)¹⁴ VC and PEF have spread through out the world soon. The number of investors, as well as the number of funds, has grown year in year out. Particularly dynamic growth was in the late 70s and early 80s as well as during the year 2000. In 2000 there was the record growth of PE investments in the US of about 120 billion USD. During the following years that growth has somewhat decreased, but it still remained considerably high varying from 40 to 50 billion dollars per year.

In Europe, investments by European PEF and VCF amounted to € 73.8 bn in 2007, and approximately 5,200 European companies received private equity investments. About 85% of these companies have fewer than 500 employees. Studies show that between 2000 and 2004 European private equity and venture capital financed companies created 1 million new jobs, which translates to a compound annual growth rate of 5.4% per year (eight times the EU 25 total employment rate of 0.7%). Between 1997 and 2004, the average employment growth in buyout-financed companies was 2.4%, compared to 30.5% for venture-backed companies.¹⁵ Using the same sources of information - EVCA we can find additional facts: "Between 2000 and 2004, European private equity and venture capital-financed companies created over 1 million new jobs. About 630,000 jobs originated from venture investments, whereas buyouts gave rise to 420,000 jobs. The employment grew by an average rate of 5.4% annually over this same period, compared to a 0.7% growth rate of the total employment in the EU25".¹⁶

For example, only in the second quarter of 2008 from the total of 17,6 billion euros new European investment, VC makes 5,6 billion which represents growth of 2,4 billion euros if compared to the first quarter of 2008 or even 2,9 bn in comparison to the fourth quarter of the year 2008.¹⁷

The most important feature of VCF and PEF business is that they can be found in countries in transition. In the appendix to this paper we present a review of some private equity funds that are active on the Serbian market.

Conclusions

Studying the nature of PEF's business as an alternative source of financing available to SMEs sector in countries in transition, we would try to draw appropriate conclusions. We may divide all findings into two large groups – advantages and disadvantages.

Advantages are the following:

- Relatively simple and available source of capital, without any limitations
- There is no fear of bankruptcy

¹⁴ Lerner, J., F. Hardyman and A. Leamon, (2005), *Venture Capital and Private Equity – A Casebook*, 3rd edition, John Wiley & Sons, New York, pp. 2

¹⁵ www.evca.eu/publicandregulatoryaffairs/default.aspx?id=86

¹⁶ www.evca.eu/knowledgecenter/default.aspx?id=618

¹⁷ www.evca.eu/knowledgecenter/latestdata.aspx?id=500

- Improvement of solvency and financial parameters, bringing about more efficient usage of loan-related sources
- Continuity in business, no inevitable loss of control as with a classic equity financing
- Focus of management on business activities, growth and development, and not on resolving the issue of "how to reach capital"
- Possible expert assistance and consulting by the private equity investor
- Acceptance of innovations, entrepreneur way of thinking and new organizational culture
- Raising level of responsibly for business performances.

Some disadvantages may refer to the following:

- High required rate of return – may discourage SMEs' management
- Harder to find good quality investment opportunities – a high IRR causes a high discount rate used with capital budgeting method, which narrows number of acceptable investment projects
- Fear from control-loss and conflicts among founders (former owners) and managers or new owners, which may result in an agency issue.

This short analysis explains that private equity funds in countries in transition may bring more good than bad things. Majority of surveyed managers from Serbian enterprises has a very positive opinion about them as potential investors. However, one needs to be cautious. This primarily refers to exaggerated expectations of the SMEs themselves. Financial analysis process and the overall due diligence is often time-consuming, selection of potential candidates in PEF by investment analysts requires application of rigorous criteria, as well as signing a deal, which implies a great number of administrative and legal issues. All the abovementioned notes may have an impact on objective obstacles to conclusion of agreement.

PEF's role in financing SMEs has to be reviewed in the light of their interests in maximal values. Consequently, not all SMEs hold the same position, which is directly caused by economic area they deal with, as well as by the demand and the market circumstances. This form of financing may be more favourable for areas with significant internal growth potential, as well as a serious risk for using others, let's call them classic financing models.

In the countries in transition, including Serbia as well, VCF and PEF may be interested in the SMEs which favourably unite at least three groups of factors, such as:

- Economic – big potential market, big opportunities for the increase of sale and profit, high rates of investors returns, developed financial system and financial markets, developed infrastructure, primary as well as in the sector of services. Availability of the factors of input of the appropriate quality, stable economy with stable monetary system and tax incentives, quality management teams, hidden internal sources of growth, etc.
- Social – quality and well-trained human resources, stable political situation with democratic political system, attractive climate for research, interesting research results and scientific discoveries, intensive cooperation between universities and economy, social acceptance of failures, etc. This group can also include developed entrepreneurial spirit which greatly depends on the consciousness of people, their creativity, initiative and mindedness.
- Legal – corporate and tax laws that encourage entrepreneurial activities, simple procedures for opening business, easy access to stock exchanges, liberalized investment guidelines for institutional investors, etc.

References

- Acharya, V. V., J. Franks and H. Servaes (2007), "Private Equity: Boom and Bust?", *Journal of Applied Corporate Finance*, Vol. 19, Issue 4, pp. 44-53
- Erić, D. (2006), "Access to Financing SMEs", *Erenet profile*, No. 2, Vol. 1, Budapest, <http://www.erenet.org/publications/profile2.pdf>
- Fenn, G. W., N. Liang and S. Prowse (1997), "The Private Equity Market: An Overview", *Financial Markets, Institutions & Instruments*, Volume 6, No. 4, July, New York University Solomon Center, Blackwell Publishers, Maiden, MA and Oxford, UK.
- Group of Authors (2008), *Strategies for the Development of Entrepreneurship and the SME Sector in the Black Sea Economic Cooperation Region*, Konrad Adenauer Stiftung, Ankara.
- Institute of Economic Sciences (2008), *Company "Progetti" - Vladimirci Financial and Operating Improvement Strategy*, Belgrade.
- Institute of Economic Sciences (2007), *Proposal for New Organization of "Telefonija" Business System & Strategy Adjustment to New Business Environment*, Belgrade.
- Institute of Economic Sciences (2007), *Development Strategy of Enterprise "ZIMPA" Ub within "Galeb Group"*, Belgrade.
- Kaplan, S. N. and A. Schoar (2005), "Private Equity Performance: Returns, Persistence and Capital Flows", *Journal of Finance*, 60/4, pp. 1791-1824
- Lerner, J., F. Hardyman and A. Leamon, (2005), *Venture Capital and Private Equity – A Casebook*, 3rd edition, John Wiley & Sons, New York
- Metrick, A. (2007), *Venture Capital and Finance of Innovation*, John Wiley & Sons, New York.
- Willis, J. R. and D. A. Clark (2005), "An Introduction to Mezzanine Finance and Private Equity", *Journal of Applied Corporate Finance*, Vol. 2, Issue 2, pp. 77-86
- Wruck, K. H. (2008), "Private Equity, Corporate Governance, and the Reinvention of the Market for Corporate Control", *Journal of Applied Corporate Finance*, Vol. 20, Issue 3, pp. 8-21
- www.evca.eu
- www.belex.co.rs

Appendix - Private equity funds operating in Serbia – mid of 2008.

In the mid 2008 the following private equity funds were active in the Republic of Serbia:

Name	Characteristics and investments in Serbia
<i>SEAF South Balkan Fund B.V.</i>	<p>Basic principles: Minority stakes, range of investment - €0.3-2 million per investment, targets industries in food, media, services, IT, Internet technology sectors, etc.</p> <p>Investments in Serbia: IT distribution, Supermarket chains</p>
<i>Copernicus Adriatic</i>	<p>Basic principles: Minority stakes, range - €1-3 million per investment, currently fundraising for a new fund, targets industries in food, media, services, IT, Internet technology sectors.</p> <p>Investments in Serbia: parcel delivery firm (start-up) and private security services company (already exited)</p>
<i>Poteza Adriatic Fund</i>	<p>€66.5m AUM (Assets Under Management), covers South-Eastern Europe (SEE) region, majority or sign. minority stakes, industries: agriculture, construction, consumer (retail), financial services, manufacturing, other services.</p> <p>Investment in Serbia: cattle food producer (May 2005)</p> <p>In August 2007, Poteza Group has founded mutual investment fund “Fokus Premium” that invests in the shares listed on the regional stock markets, with the primary focus on Serbia</p> <p>Mainly privatization-oriented.</p>
<i>Salford</i>	<p>Acquired several state-owned dairy firms and three food companies through privatization; currently in the process of consolidation; probable exit in the next two years</p> <p>Mainly privatization-oriented.</p>
<i>Midland</i>	<p>Acquired major state-owned meat producer in 2003 and sold it to Ashmore Investment fund in November 2006; holds stakes in a restaurant chain and in port of city of Pančevo</p>
<i>KD Group</i>	<p>Private equity fund, established recently, €31m AUM, made no investments so far, targets € 3-5 million deals, covers SEE region</p>
<p><i>The others – with not clear strategy and short-term horizon - MidEuropa Partners, FPP Balkan Limited, Finartis Private Equity, etc.</i></p>	

The Main Feature of B&H Financial Structure and Integration in EU Financial System

Mila Gadžić, Igor Živko¹

ABSTRACT – *Preconditions of the economic growth of the small, open economy are stable and strong currency, favorable business environment and financial stability. Level of financial market development is one of the key presumption of economic growth, in this article the authors will analyze the financial market in Bosnia and Herzegovina and suggest the possible path of its improvement. The sovereign rating of the country is B2 with stable outlook. During past years, Bosnia and Herzegovina has achieved and maintained the stability of the local currency with the consistent implementation of the monetary policy through the Currency Board. In this paper the authors discuss about financial system transformation in Bosnia and Herzegovina, they presents the current level of financial market development, define determinants and limitations for its faster development. On the base of scientific analyze, they give recommendations for further improvement of financial market that should be in function of economic development, better competitiveness position of B&H economy and its integration into EU financial system.*

KEY WORDS: *financial system, financial structures, transition, integration*

Introduction

Financial system of Bosnia and Herzegovina is “bank dominated”, which means that banks (credit institution) is dominated financial institutions in the financial system. Banks have major role in financial intermediation process. However, in last few years there is increasing role of financial markets and other non-banking financial institutions in the intermediation process between savers and investors. Bosnia and Herzegovina financial sector include: banks, investment funds, leasing companies and micro-credit organisations. Table 1 presents share of assets financial institutions in total assets of financial sector in period 2005-2007. Share of banking assets in total assets of financial system reached 80% at the end of 2007 (table 1). Rising share of banking sector reflects the increasing size and development of this sector within financial system. Financial intermediation increased in 2007 for 33.4% in relation to situation on the end 2006.

Table 1. Share financial institution assets in total assets of Bosnia and Herzegovina financial system (in %)

	2005	2006	2007
Banks	77,30	79,6	79,9
Non-banking financial sector	22,70	20,4	20,1
Leasing	4,5	5,6	5,8
Insurance companies	4,0	3,7	3,3
Investments funds	12,1	8,5	7,2
Micro-credit organizations	2,1	2,6	3,9
Total assets financial sector	100,00	100,00	100,00

Source: Central Bank of Bosnia and Herzegovina, Financial Stability Report 2007, Sarajevo, 2008. pp. 21

¹ Mila Gadžić, Igor Živko, Faculty of Economics University of Mostar

In few last years in banks dominate financial system of Bosnia and Herzegovina sector of micro-credit organisations proceeding intensive development. This non-banking financial institution offer products and services to small enterprises and clients with low income. According to research which has been providing in world and Bosnia and Herzegovina this sector has positive impact on economic development.

Banking sector in Bosnia and Herzegovina

Banking sector in Bosnia and Herzegovina shows positive trends in financial intermediation. Share of banking assets in GDP reached 90.3% at the end of 2007. Rising share of banking sector reflects the increasing size and development of this sector within the economy. Banking sector of Bosnia and Herzegovina, as many other banking sector in transition countries, pass through phase of rehabilitation, recapitalisation, privatisation, consolidation, increasing concentration on banking markets and competition. European Union (EU) accession and entry in the euro area will be additional actuator of these changes. Already most of the transition countries have high share of EU ownership in the banking sector. There were 32 active banks in Bosnia and Herzegovina at the end of 2007. Changes in number of banks and ownership during the period 2003-2007 are shown in table 2.

Table 2. Number of banks in banking sector of Bosnia and Herzegovina in period 2003-2007

	2003	2004	2005	2006	2007
Number of banks	37	33	33	32	32
Private-owned banks	30	27	27	29	29
State-owned banks	7	6	6	3	3

Source: CBBH, Annual report CBBH, different years

For Bosnia and Herzegovina banking sector was also characteristic period of privatisation of state-owned banks and consequently rapid consolidation. The entrance of foreign banks on the market improved the soundness of financial system. In 2007, 83 percent of total capital in banking sector was foreign-owned. All ten banks in Republika Srpska in B&H (RS) are privately-owned. In entity Federation Bosnia and Herzegovina (FBiH) 78% of banks was in private ownership (table 3.). Banks in foreign capital ownership had share in total assets of banking sectors 93%. More than 50% foreign capital in B&H comes from Austrian banks.

Table 3: Basic indicators of banking sector Bosnia and Herzegovina (in %)

Indicators	2003	2004	2005	2006	2007
Banking intermediation	48.2	58.7	69.3	76.8	93.8
Foreign capital in total capital	66.4	69.6	67.0	73.0	83.0
ROAA	0.7	0.7	0.7	0.9	0.9
ROAE	6.4	5.8	6.4	8.5	8.9
CR3	40.1	56.6	46.3	43.5	40.8
CR5	51.2	61.7	59.3	59.3	56.7
HHI	655	808	919	926	890

Source: Banking Agency Federation of Bosnia and Herzegovina, 2007: 11; Banking Agency Republika Srpska, 2007: 3

If we know that intermediation of complete financial sector in 2007 was 117% of GDP than is obviously how banking sector dominate in financial system of Bosnia and Herzegovina. According to data from table 3 we can conclude how banking sector in B&H record:

- increasing foreign capital in ownership structure of banks
- high profitability measured with ROAA and ROAE
- reasonable concentration of assets (concentration ratio – share three and five the biggest banks in banking sector assets), while in loans sector increasing to boarder of high concentrate market.

Total banking sector asset in Bosnia and Herzegovina amounted 9.9 billion euros at the end 2007 what present increasing for 32.8% in comparison with previous year (CBBH, 2007: 67). In the structure of banks assets dominate credits and in structure of liabilities deposits. Such a structure shows that banks in Bosnia and Herzegovina are still “credit-deposit” financial institutions, without developed investment function (table 4).

Total loans amounted 6.2 billions euro at the end of 2007, while total deposits reached 6.2 billions euro. In the structure of deposits dominate short-term deposit (61% of total deposits). However, they developed some new activities (e.g. leasing, custody, bankassurance).

Table 4. Structure of consolidated balance sheet of banks in Bosnia and Herzegovina in 2006

Assets		Liabilities	
Cash and cash equivalent	36%	Deposits	75%
Loans	58%	Loans and other borrowings	11%
Fixed assets	3%	Other liabilities	3%
Other assets	2%	Total liabilities	89%
		Capital	11%
Total assets	100%	Total liabilities and capital	100%

Source: Central bank Bosnia and Herzegovina, Banking sector operation in Bosnia and Herzegovina in first six months of 2007. <http://www.cbbh.ba>

Capital adequacy in 2007 reached 17.1% and is decreasing for 0.54 percent points. Minimum capital adequacy ratio is 12%. Total capital in banks at the end 2007 amounted 1.19 billions euros and present increasing for 26.5% in comprising with 2006.

Analysing structure of banking market (consolidation, concentration, domination of foreign capital, competition) and macroeconomic situation, role of central bank, surplus, liquidity we identified internal and external factor in bank risk environment. Having in mind this changes, it is important to analyse and monitor banking sector characteristic and identify which elements can have impact on stability and safety of financial sector. Globalization and EU integration process is connected with number of structural changes. Consolidation of banks, increased competition, and internalization of financial activities and establishment of financial group or conglomerates had impact on financial sector development in transition countries.

Non-banking sector in Bosnia and Herzegovina

In Bosnia and Herzegovina few resent years we record development other sub-sector of financial system. In first place we talk about financial markets, investment funds, and leasing, insurance and micro-credit organizations.

Financial markets in Bosnia and Herzegovina according to trading volume and market capitalization, number of participants is weak and undevelopment capital markets. Problems in it's development is insufficient offer of financial instruments, existing entities boarders, illiquidity and weak economic situation in B&H. Total market capitalization in Bosnia and Herzegovina in 2007 increasing looking on previous years. Market capitalization on Sarajevo Stock Exchange (SASE) increased for 36.07%, while on Banja Luka Stock Exchange (BLSE) increased for 3.87% (table 4).

Table 4. Market capitalization in Bosnia and Herzegovina (in euros)

Sarajevo Stock Exchange Inc.				
market capitalization (in millions euro)				
2003	2004	2005	2006	2007
389,8	1.919,2	3.309,3	5.831,2	7.934,2
number of trade instruments (in thousands)				
25.740	38.647	64.554	50.084	70.773
number of transactions (in thousands)				
37	61	116	58	159
Banja Luka Stock Exchange Inc.				
market capitalization (in millions euro)				
2003	2004	2005	2006	2007
445,8	818,9	1.470	4.056	4.279
number of trade instruments (in thousands)				
-	348.093	360.153	734.785	702.488
number of transactions (in thousands)				
-	86	191	183	191

Sources: Central Bank Bosnia and Herzegovina, Annual Report 2007, Sarajevo, 2008, pp. 78.

In 2007 come to transformation privatization investment funds in investment funds and opening possibilities for creating common equity funds. Future of investment fund is determinate with process of pension fund reform. In 2007 in B&H operate 34 brokers' houses. Begin 2008 two entities capital markets subscribe agreement about regional cooperation with capital markets in other countries of ex-Yugoslavia.

In 2007 in B&H operate 26 insurance companies. In same year they collected 201 million euro premium, what present increasing about 11.5% in previous year. Total assets of insurance sector in 2007 were 400 millions euro with increasing 17%, total revenue 204 millions with increasing 7.7% in comparison with previous year. Life insurance offered 10 insurance companies. In 2007 life insurance record higher rate of growth about 35.4% but share of it in structure of insurance premium in B&H is still low 13.6%. In insurance premium structure the biggest share had premium about motor vehicle insurance. Profitability in sector of insurance were higher that in banking sector.²

Leasing is still in phase of development in B&H but is obviously how leasing in few last years presents significant instrument of financing. In B&H don't existed legal framework for leasing operation for complete territory of B&H.³ B&H have 10 leasing companies. In 2007 they negotiate 7.031 leasing contracts, and realized total value of leasing about 388 millions euro, it's 62% more comprised with previous year.

On credit market significant role has microcredit organizations. Microcredit organizations supply with microcredit legal entities which can't satisfy criteria for getting bank's credit. On the end 2007 in B&H were 24 licensed microcredit organizations. Assets in these institutions were 485 millions euro. The major part of outstanding loans was retail credits.

Integration Bosnia and Herzegovina financial system in EU financial system

Impact European integration process on financial system potential candidate and candidate countries can be looking through:

² In 2007 insurance sector realized ROA 2.47% and ROE 10,06

³ In Republic of Srpska in 2007 first time is prescribe Low of Leasing while in Federation of Bosnia and Herzegovina that form of low don't exist (Low of Leasing is in process of preparing)

- current situation in European financial integration (bank vs. market financing, efficiency of EU banks, insolvency regime, financial innovation, corporate governance and control/ownership structure of financial intermediaries)⁴
- financial system structure in Europe⁵
- financial linkages between the euro area/ European Union, United State, and Japan (financial and banking crises).

It is important to analyse factors that drive the process of financial integration and design financial system structure. These driving factors include competitive market forces, co-operative initiatives between market participants and policy action by policy authorities. Market forces and degree of financial integration and policies have impacts on managing market imperfections. Process of financial integration request removing obstacles in political and economy framework to financial integration:

- legal differences between candidate countries and EU
- regulation approaches
- countries-specific industry standards
- corporate governance system.

In process of integration financial systems candidate countries must special have on mind: the geographical scope of banking and lending relationship, degree and implications of bank competition, determinants of bank mergers, implication of bank consolidation, international portfolio choices of institutional investors/determinants of international portfolio flows, assets process and volatility linkages across countries and their changes/contagion and crisis linkages, liquidity in secondary markets and consolidation of stock exchanges, restructuring of settlement infrastructures,

Bosnia and Herzegovina bank dominated financial systems with next characteristics: first, there are deep comparative disadvantage in provision of financial services caused by the heritage of central planning and the specific role of banks in previous socialist systems; second banking systems are mostly foreign-owned. In addition, liberalisation, deregulation, development of the new technology, establishment of European Economic and Monetary Union and other changes have caused increased pressures within the global financial service industry. Under the pressure of these changes, banks, insurance companies, investment companies and pension funds are trying to find a way to survive on the market by moving into each other business area. All analysed countries are under process of "inward Europeanisation".

Harmonisation of monetary policy and operational framework with the same in Eurosystem, harmonisation of financial sector regulation with the EU "acquis communautaire" will additionally stimulate changes in the financial system. Internalization of financial activities and establishment of financial group or conglomerates had impact on financial sector development.

Bosnia and Herzegovina is faced with serious challenges of improving financial supervision system in the way that it will be most efficient for supervision of financial institution on the domestic market, but also to divide responsibilities for internationally active banks.

Domination of foreign capital and process of creating financial conglomerates influenced the process of supervision. It raises the need to develop consolidated supervision, improve cooperation and communication between banking supervisors in different countries. Right for supervision and all obligations has country in which bank have address "home country" and not the country in which bank have their branches - "host country". Therefore, it is necessary to improve skills of staff, way of communication and cooperation with European banks' supervisors and reform institutional and legal framework to improvement home-host supervision system. In bank dominate financial system failure to provide these services or breakdown in their efficient provision can be costly to both ultimate source (house-

⁴ Financial integration and financial linkages between different geographical entities, cross-country or cross-regional linkages with in EU and linkages EU and other countries. Financial linkage are defined by relationships between prices and by relationship between quantities across the relevant geographical entities, mainly countries.

⁵ Structure of financial system EU analyses in terms of the importants of different ways of financial intermediation and different sources of funding

hold) and users (firms) of saving. Already most of the transition countries have high share of EU ownership in the banking sector.

Central bank of Bosnia and Herzegovina must with entities banking agency work on involving in prudential regulation standards – procedures and methodologies for identification, measurement and protection from market risk (interest rate risk, foreign exchange risk, commodity risk, risk of delivered etc.) according to standards involved in EU Directives.

National authorities in these countries must further improve financial supervision process, which includes development of three functions:

- microprudential supervision oriented on protection of solvency of individual institution rather than all financial system
- macroprudential supervision with purpose to limit financial system distress that can damage the real economy, and
- business supervision which involves monitoring potential conflicts between financial institution and their clients.

Improving risk environment in which operate financial system in Bosnia and Herzegovina request activities on followed fields:

- developing money market in Bosnia and Herzegovina in order to better manage liquidity risk
- integration of supervision in financial system
- developing consolidated supervision – international banking group “home-host” supervision
- managing banks’ credit activities and credit risk
- creating solution for inflation risk.

Conclusion

Financial system of Bosnia and Herzegovina has experienced changes in recent years. Financial system offer new services to their clients and expand across the country. Still today, financial system sectors in transition countries are fast developing and transforming from instable to stable, strong and highly competitive system. EU accession and entry in the euro area will be additional actuator of these changes. Process of transition opens new possibilities for the financial system development, but also presents additional challenge for the financial sector regulators and supervisors.

Process of financial integration request removing obstacles in political and economy framework to financial integration:

- legal differences between countries and EU
- regulation approaches
- countries-specific industry standards
- corporate governance system.

Process of integration financial system Bosnia and Herzegovina national authorities must have on mind: element of banking market structure, geographical scope of banking and sources of foreign capital, assets process and volatility linkages across countries and their changes/contagion and crisis linkages, liquidity in secondary markets and consolidation of stock exchanges, restructuring of settlement infrastructures and etc.

References

- Central Bank of Bosnia and Herzegovina, Financial Stability Report 2007, Sarajevo, 2008, pp. 19-29
- CBBH, Annual report CBBH, different years
- Central Bank Bosnia and Herzegovina, Annual Report 2007, Sarajevo, 2008, pp. 68*
- Central bank Bosnia and Herzegovina, Banking sector operation in Bosnia and Herzegovina in first six months of 2007, Sarajevo, 2008, pp. 1-7
- ECB, ECB-CFS Research in Network on “Capital markets and Financial Integration in Europe” – a road map, pp. 4-7
- Gadžić, M., Slijepčević, S., Živko, I.: Challenge for Bank Supervision in South-Eastern European Countries, An Enterprise Odyssey: Tourism - Governance and Entrepreneurship, Faculty of Economics and Business Zagreb, Croatia, June 2008, pp.10
- ECB, Financial integration in Europe, March 2007, pp. 37
- Matthäus-Maier, I., Pischke, J. D.: EU Accession Financial Sector Opportunities and Challenges, for Southeast Europe, KfW, 2005

La crise, l'Europe et les Balkans

Jean-Paul Guichard¹

ABSTRACT – *La crise actuelle, qui est mondiale et qui est extrêmement profonde et grave, devrait être l'occasion d'un renouvellement de la réflexion sur les instances de la gouvernance économique mondiale en même temps que sur la définition des zones de solidarité économiques et politiques. On rappellera dans un premier temps que l'Europe n'est pas très unie dans un monde qui, on le verra, fonctionne sur le mode du mercantilisme, ce qui le rend particulièrement dangereux et instable. La crise actuelle, dont les origines ont près de 10 ans d'âge, se manifeste de façon multiforme : crise boursière de la « nouvelle économie » et des valeurs technologiques en 2001/2003, crise immobilière, bancaire, financière actuellement déterminant une récession dans la plupart des pays. A l'origine de tout cela, un déséquilibre persistant des échanges commerciaux internationaux qu'il faudra corriger. Cela suppose un rapprochement rapide et fort entre toutes les nations européennes, notamment la Russie ; cela suppose aussi que les Etats-Unis acceptent de s'intégrer dans une stratégie commune euro-atlantique de défense commerciale face au dumping de change des nations asiatiques. Dans une telle perspective, les pays des Balkans, qui sont des pays européens, seront nécessairement solidaires de l'Union européenne.*

KEY WORDS: *L'Europe, Les Balkans, La Guerre, La Crise*

Une Europe inachevée et divisée

Face à la crise mondiale, l'Europe apparaît en cette fin d'année 2008 comme un ensemble à la fois inachevé et divisé.

Un ensemble inachevé tout d'abord.

Il y a déjà un siècle et demi, Victor Hugo déclarait au Congrès de la Paix de Paris, en 1849 : « Un jour viendra où vous France, vous Russie, vous Italie, vous Angleterre, vous Allemagne, vous toutes nations du continent, sans perdre vos qualités distinctes et votre glorieuse individualité, vous vous fondrez étroitement dans une unité supérieure, et vous constituerez la fraternité européenne (...). Un jour viendra où l'on verra ces deux groupes immenses ; les Etats-Unis d'Amérique, les Etats-Unis d'Europe, placés en face l'un de l'autre, se tendant la main par-dessus les mers, échangeant leurs produits, leur commerce, leur industrie, leurs arts, leurs génies (...)»²

Vision prophétique ; par l'énumération qu'il faisait, il inscrivait bien la Russie au nombre des nations « européenne »³ en même temps qu'il appelait déjà à une solidarité entre l'Europe et l'Amérique, entre l'Europe et son prolongement outre Atlantique.

Cette conception de Victor Hugo est fondée sur l'idée que les différents peuples qui composent l'Europe ont un sentiment commun d'appartenance à un même ensemble, se représentent eux-mêmes comme des peuples « européens ». Et cette représentation-là n'a rien à voir avec la géographie⁴ ; elle renvoie à l'histoire, aux héritages culturels et religieux qui sont communs à ces différents peuples.

¹ Jean-Paul Guichard, Université de Nice - Sophia Antipolis

² Victor Hugo, discours inaugural du congrès de la paix, Paris 21 août 1849.

³ Cette question est importante face à ceux, particulièrement en Angleterre ou aux Etats-Unis, qui considèrent que la Russie « ce n'est pas l'Europe » mais qui considèrent aussi, paradoxalement, que la Turquie doit rentrer dans l'Union Européenne.

⁴ L'Europe comme continent, n'existe pas ; l'Oural n'est qu'une frontière symbolique dans le continent euro-asiatique ; une frontière « inventée » en 1815, au Congrès de Vienne !

Cette unité culturelle ne suffit pas toutefois à fonder une unité politique. Il y a lieu de distinguer l'ensemble des peuples d'Europe, d'une part, et l'Union Européenne qui n'en est qu'une partie d'autre part.

L'Union Européenne est divisée en ce qui concerne son « mode de gouvernance » mais aussi en ce qui concerne d'autres questions qui touchent, d'une manière ou d'une autre, à son identité : l'éventuelle entrée de la Turquie, la question du Kosovo, les relations avec la Russie, les questions militaires.

L'existence de ces divisions signale qu'il n'est peut-être pas opportun, dans la perspective de l'unification de l'ensemble des nations européennes, de continuer sur le mode des élargissements successifs tel qu'il a été pratiqué, de façon hâtive, ces dernières années. Peut-être vaudrait-il mieux entamer un dialogue constructif avec l'ensemble constitué par les « trois Russies ».⁵

Encore faudrait-il avoir l'espoir de pouvoir mettre à jour, puis de mettre en œuvre, un grand projet commun ainsi qu'une stratégie pour le servir. La crise actuelle, dont la gravité est extrême, pourrait peut-être faciliter les choses tant il est vrai que la menace commune puisse constituer un ciment. Il y a bien une menace.

Un monde mercantiliste et dangereux

Depuis quatre à cinq siècles, la dynamique économique mondiale, au moins pour ce qui concerne les nations qui effectuent des échanges commerciaux, répond à un schéma « mercantiliste » dans lequel la recherche de la richesse est indissociable de la recherche (par l'Etat) de la puissance. Dans ce schéma, la nation qui réussit à dominer le commerce mondial tire de cette situation des avantages : profits plus élevés pour ses entrepreneurs, impôts plus élevés pour l'Etat.

Pour exercer une telle domination, il faut une marine de guerre importante pour protéger les convois commerciaux et, par conséquent, il est nécessaire de pouvoir disposer de bases militaires un peu partout dans le monde, en des endroits stratégiques ; le concours de l'Etat est donc indispensable. Mais il n'y a pas que cela ; cette domination commerciale doit prendre aussi appui sur un développement manufacturier/industriel : pour échanger, il faut pouvoir disposer de marchandises à échanger ; enfin, c'est là le grand dogme mercantiliste, il faut avoir une balance commerciale excédentaire. A l'époque des auteurs qualifiés de « mercantilistes », les excédents commerciaux permettaient de faire rentrer de l'or, ce qui était nécessaire à la croissance de la masse de monnaie en circulation, donc à la croissance des affaires.

Il y eut un mercantilisme espagnol fondé sur le pillage et les apports d'or et d'argent, sans base industrielle : après avoir été une Puissance dominante, l'Espagne perdit les Pays-Bas et tomba en décadence.

Le cas de Venise illustre bien la liaison entre l'Etat, avec sa marine de guerre et ses relais militaires (Raguse, Kotor, etc...), et le commerce ; celui-ci, en l'occurrence, est basé sur un développement manufacturier ayant pour cadre le Nord de l'Italie et l'Europe du Nord.

Au 17^{ème} siècle, la Hollande, puissance commerciale de premier plan, luttera sur mer contre l'Angleterre ; la victoire finale de cette dernière signifiera, entre autres conséquences, un changement de nom : « Neuw-Amsterdam » deviendra « New-York »⁶ ! Durant près de deux siècles, il y aura entre l'Angleterre et la France une lutte pour la domination mondiale. Le traité de Paris, en 1763, marquera un avantage décisif pour l'Angleterre qui aura désormais le champ libre au Canada et aux Indes ; il y aura toutefois encore une contestation de cette puissance anglaise : au temps de l'aide victorieuse à la Révolution américaine, et durant la période des guerres de la Révolution (de 1789) puis de Napoléon. Ces dernières ont pour cadre une période où l'Angleterre domine les mers (cf Trafalgar, 1805) et le commerce mondial au profit de son industrie qui est bien plus développée que celles du continent eu-

⁵ La « Grande Russie », c'est-à-dire l'actuelle fédération de Russie, la « Petite Russie », c'est-à-dire l'Ukraine, et la « Russie blanche », la Biélorussie.

⁶ A cette époque, un livre remarquable théoriserait la pratique mercantiliste ; il s'agit de « l'arithmétique politique » (1671) de William Petty.

ropéen. Dans de telles conditions, la liberté du commerce est équivalente à la liberté d'un renard dans un poulailler....Le « système continental » de Napoléon et son complément, le « blocus continental », constitue une sorte de « marché commun » concernant la France, l'Italie du Nord, les Pays-Bas, l'Allemagne du sud organisée en Confédération du Rhin. Sur le plan économique, c'était la libéralisation des échanges à l'intérieur (élément favorable à la croissance économique) et la protection vis-à-vis de l'extérieur ; ce système eut un certain succès comme le remarque Friedrich List⁷. La « Paix de Tilssit », entre Napoléon et Alexandre, en 1807, va constituer un véritable cauchemar pour l'Angleterre : une Europe continentale unifiée eut été alors en mesure de rivaliser avec le commerce et les industries britanniques....

1815 marque le début d'une période d'un siècle de domination britannique sur les échanges mondiaux, sans pour autant effacer cette angoisse de l'éventualité d'une unification du continent européen ou euro-asiatique.

Ainsi, en 1905, un universitaire anglais, John Mackinder, publie un article au retentissement considérable : « Le pivot géographique de l'histoire » ; dans la représentation qui est la sienne, l'Eurasie constitue le continent le plus important ; il divise cela en deux parties : le « hartland », la partie Nord et Centrale qui est hors de toute atteinte, et « l'anneau intérieur » constitué par les périphéries ouest, sud et Est de ce continent (Europe de l'Ouest et méditerranéenne, Turquie et Moyen Orient, Inde, Sud-Est et Est de l'Asie) ; enfin le reste du monde est appelé le « système insulaire » (îles britanniques, Japon, Australie, Afrique, Amériques). Si le « grand continent », l'Eurasie, est unifié, par exemple par l'Alliance de la Russie et de l'ensemble de l'Europe continentale de l'ouest (configuration du type « Tilssit »), alors les « peuples de la mer » (entendons par là, essentiellement la Grande Bretagne et les Etats-Unis) sont en grand danger.....Ce genre de représentation a guidé, peu ou prou, la pratique politique Britannique⁸, puis celle des américains, que ce soit au temps de la guerre froide ou depuis !

L'idée de la nécessaire protection des industries naissantes face à une puissance dominante sera théorisée vers 1840 par un auteur allemand, Friedrich List ; en quelque sorte la « leçon de Napoléon » ne sera pas perdue pour tous ! La Prusse, à cette époque-là va réaliser avec patience et esprit de suite, une sorte de « marché commun » des états allemands, le Zollverein ; cette construction trouvera à l'issue d'une guerre victorieuse contre la France une traduction politique : la proclamation de l'Empire Allemand, au château de Versailles en 1871 ! Plus tard, c'est seulement lorsque l'Empereur Guillaume, qui s'est séparé de Bismark, affirme sa volonté de construire un empire colonial et, surtout, de doter son pays d'une flotte de guerre « à nulle autre seconde » alors même que l'industrie allemande, au début du 20^{ème} siècle, dépasse nettement sa rivale anglaise dans de nombreux secteurs, que la Monarchie Anglaise éprouvera le besoin de se rapprocher de la France (entente cordiale en 1905) puis ensuite de l'alliée de celle-ci, la Russie.

La première guerre mondiale met bien aux prises des puissances « impérialistes » ; toutefois, contrairement à l'idée de Lénine, l'impérialisme ne constitue nullement un « stade », fut-il « suprême », du capitalisme : c'est une tendance inhérente à celui-ci, dès le « début » en quelque sorte ! Une telle tendance ne peut conduire, en l'absence d'instances mondiales de régulation, qu'à des affrontements dangereux, parfois à des guerres.

La domination commerciale, qui suppose aussi une certaine domination politique et militaire, nécessite pour se reproduire, des excédents commerciaux ; ceux-ci, et la domination qu'ils autorisent, constituent alors une menace pour les nations dominées, un facteur de déstabilisation des relations internationales.

A la veille de la première guerre mondiale, le commerce extérieur anglais a cessé d'être excédentaire ; il ne s'équilibre plus que grâce aux relations avec l'Empire, étant déficitaire dans son commerce avec les pays européens, Allemagne en tête. Il s'agissait là d'un premier indice très net annonçant la fin de

⁷ Friedrich List, « Système national d'économie politique », 1841.

⁸ A cet égard, comment ne pas souligner que la Grande-Bretagne des années 1950, avec sa nostalgie impériale, a vécu péniblement les débuts de la construction « européenne » ; lors de la conférence de Messine (1956), prélude au traité de Rome de 1957 qui va fortement associer les six pays fondateurs (France, Allemagne, Italie, Belgique, Pays-Bas et Luxembourg), le délégué anglais « claqué la porte » en déclarant l'hostilité de son pays à ce qui est en train d'être préparé !

la domination économique anglaise. La période comprise entre les deux guerres mondiales reste indécise sur le plan de la domination : les Etats-Unis sont désormais une puissance de premier plan mais la Grande Bretagne joue encore un rôle important, grâce à son immense empire ; cela est illustré par le fait que la livre et le dollar sont les deux monnaies de référence.

Toutefois, dans le monde mercantiliste qui est celui des relations économiques internationales, dans le contexte de la dépression des années 1930, l'Allemagne nazie va inventer une stratégie, très agressive ; cette stratégie va consister en la mise en place d'une économie de guerre grâce à des emprunts extérieurs massifs, notamment français, de plus en plus importants ; cela lui permit de rétablir le plein emploi sans pour autant pouvoir créer les conditions économiques qui eussent permis à l'Allemagne d'honorer ses dettes par la suite et en restant fortement déficitaire sur le plan des échanges extérieurs. La guerre était donc préparée et sa réalisation (victorieuse dans un premier temps) était indispensable de telle sorte qu'il n'y ait pas à rembourser les dettes qui avaient été contractées : c'est ce qui fut fait, un cataclysme mondial!⁹

On le voit, la répétition chronique de déficits commerciaux de plus en plus importants pour un pays donné ne peut conduire celui-ci, en l'absence d'une restauration de relations équilibrées qu'à deux types de conséquences: soit l'acceptation de transferts massifs de propriété (une sorte de « colonisation » par le capital étranger), soit la fuite en avant dans une politique extérieure de plus en plus agressive et militariste.

Tel semble être le dilemme pour les Etats-Unis d'aujourd'hui. La puissance dominante depuis la fin des années 40, à l'économie florissante, au commerce extérieur excédentaire, a vu sa situation se détériorer rapidement. Le tournant se situe au début des années 70 : en même temps que le dollar cesse d'avoir une convertibilité fixe en or, le commerce extérieur des Etats-Unis devient déficitaire. Le Japon et l'Europe sont, à nouveau, des acteurs économiques de poids. A partir de la fin du siècle, il apparaît de plus en plus clairement que la Chine peut avoir vocation à assumer la domination mondiale que les Etats-Unis sont en train de perdre.¹⁰

Ce qui peut faire douter d'un tel changement de leadership est la technologie : dans de nombreux domaines, les grandes entreprises américaines sont encore des leaders mondiaux ; mais pour combien de temps encore ? Comment ne pas souligner la montée en puissance du Japon et de l'Europe dans ce domaine, et très bientôt de la Chine ? Comment ne pas voir aussi que les « contrats du siècle », très avantageux à court terme, comportent des transferts de technologie très importants : qu'il suffise de rappeler ici les cas de Westinghouse dans le nucléaire et d'Airbus dans l'aéronautique.

Mais pourquoi donc la plus grande puissance économique du monde connaît-elle des déficits commerciaux de plus en plus gigantesques ? Comment interpréter la crise mondiale dont cette puissance est le point de départ ?

Une crise mondiale à base de déséquilibre de change

Le monde est en crise, et cela commence à l'automne 2000. En effet, de cette date à la fin de l'été 2003, on observe un premier craquement dans la machine économique mondiale : une crise boursière dont l'origine est la bulle des valeurs « technologiques » ; nombreux étaient les économistes qui, à cette époque, faisaient de beaux discours sur « la nouvelle économie »...et ses miracles !

Le ralentissement économiques ne fut pas trop grave, la croissance reprit, la bourse aussi ! De 2003 à 2007, les bourses repartirent à la hausse, et le monde occidental crut que tout irait bien...les craquements allaient reprendre en 2007 (en Angleterre, aux Etats-Unis) et concerner cette fois-ci le secteur des crédits immobiliers et celui de l'immobilier. En 2008, c'est un séisme de grande ampleur qui se-

⁹ Voir sur ce point le livre remarquable du grand historien allemand Götz Aly, « Hitlers Volksstaat », S. Fisher Verlag, 2005.

¹⁰ Certains analystes pensent que, désormais, nous sommes dans un monde « multi-polaire » et que ceci empêcherait l'un des pôles de devenir dominant. Nous ne partageons pas cette façon de voir : nous croyons au contraire que, comme par le passé, il y aura toujours une tendance à ce qu'un pôle devienne dominant. Une bonne raison pour la mise en place d'instances de régulation adéquates.

coue l'ensemble des économies du monde ; il frappe au cœur même du système économique : les banques, les assurances, la finance. Une crise systémique dont les effets n'ont pas fini de se faire sentir et qui met désormais le monde occidental en récession alors même que certains pays apparaissent déjà comme très durement touchés.¹¹

Les phases d'euphorie boursière qu'on a pu observer récemment, qu'il s'agisse de l'épisode des valeurs « technologiques » ou qu'il s'agisse de celui de l'immobilier, résultent l'une et l'autre d'une conjoncture mondiale marquée par un déséquilibre profond et durable du change, notamment entre les Etats-Unis et l'Asie. Si les pays occidentaux ont, depuis près de 10 ans, des performances économiques assez médiocres, c'est qu'ils sont dans une large mesure déstabilisés par le taux de change que leur dicte la Chine et, à la suite de celle-ci, les autres pays asiatiques. Il y a là un véritable « dumping de change » dont les effets furent et sont encore dévastateurs pour les économies occidentales qui, dans leur ensemble, connaissent un déficit extérieur colossal. Comment cela est-il possible ?

Pour maintenir le yuan à un niveau très bas, et pouvoir ainsi continuer à réaliser des excédents commerciaux considérables, la Chine achète des dollars et des euros qui sont alors placés en treasuries, en bunds, etc. De la sorte les rendements obligataires peuvent être très bas dans les pays occidentaux. Le problème, c'est que des taux d'intérêt très bas alors que les investissements productifs ne sont plus rentables (du fait de la perte de compétitivité liée au taux de change) conduit à des comportements spéculatifs de plus en plus irresponsables : bulle « internet », bulle immobilière, bulle des « innovations financières », etc.

De bons esprits ne manquent pas pour conseiller de réformer les systèmes bancaires, de rendre plus fiables les agences de rating, etc... De telles réformes sont sans doute nécessaires et leur réalisation pourra être utile. Elles seront pourtant décevantes si on ne s'attaque pas à la racine du mal : le dumping de change des pays asiatiques dont le leader est désormais la Chine. Mais comment des pays fragilisés pourraient-ils imposer une forte appréciation de la monnaie chinoise ?

Quelle réponse à la crise et quelle place pour les Balkans?

Il ne s'agit pas de stigmatiser ici quelque pays que ce soit. Il a été souligné le danger que représentent des échanges commerciaux fortement et durablement déséquilibrés. Une stratégie économique mercantiliste est mise en œuvre depuis une dizaine d'années par la Chine ; cette stratégie représente un danger pour les vieux pays industrialisés qui sont, du fait même de cette stratégie, en cours de désindustrialisation. Pour échapper au piège de la pratique mercantiliste, il faut évidemment une régulation à l'échelle mondiale. Celle-ci peut-elle être le fait de l'organisation mondiale du commerce ? Certainement pas ! Il ne faut pas oublier que l'entrée de la Chine dans l'OMC, arrangée par le Président Clinton, s'est faite sans que soit évoquée, d'une manière ou d'une autre, la question du taux de change de la Chine dont la monnaie était déjà très fortement sous-évaluée. L'OMC qui ignore délibérément l'existence du dumping de change est une organisation complètement disqualifiée : le mieux qu'auraient à faire les pays qui en font partie serait de quitter ce club inutile et néfaste.

L'Europe, dans les circonstances actuelles, apparaît comme bien faible, parce que divisée. D'une part, l'ensemble des pays de l'Union Européenne ne parlent pas tous d'une même voix, d'autre part l'Union Européenne n'est pas toute l'Europe et elle a trop souvent des divergences avec la Russie. Plus que jamais, il est pourtant nécessaire que l'Europe, toute l'Europe, s'unisse autour d'une stratégie économique et politique commune.

Mais comment donc arriver à cette unité ?

La première condition est la restauration du « couple » franco-allemand ; il fut pendant longtemps le « moteur » de l'Europe : il est indispensable de le reconstituer de telle sorte que l'Allemagne et la France disent désormais la même chose. Comme le remarque Emmanuel TODD¹², « il suffirait de convaincre les dirigeants allemands pour faire virer le continent, sans le Royaume-Uni, vers le protectionnisme » ;

¹¹ L'Islande bien sur, mais aussi la Corée, l'Argentine ; peut-être aussi la Russie, d'autres encore.

¹² Emmanuel TODD, « Après la démocratie », Gallimard, 2008, page 254.

le virage dont il est question ici concernerait, certes, la zone « euro » mais pourrait aller bien au-delà. Si on le leur proposait, les Russes seraient très probablement preneur d'une stratégie dans laquelle ils pourraient avoir un rôle important : une stratégie protectionniste, la seule qui, dans les circonstances présentes, puisse être mobilisatrice, face au dumping de change asiatique et à ses conséquences.

Si l'Europe continentale, y compris la Russie, est unie autour d'une stratégie économique et politique commune, il sera alors probablement possible de convaincre la Grande Bretagne et les Etats-Unis de participer, sur une base égalitaire, à un grand partenariat Euro-Atlantique.

Un tel partenariat s'exprimerait par la mise en place d'un grand « marché commun » comportant la libre circulation des marchandises au niveau de l'ensemble des nations participantes et une défense commerciale commune vis-à-vis de l'extérieur. Les droits de douane qui seraient mis en place pourraient évidemment, par la suite, être diminués ou supprimés dès lors que les pays asiatiques adopteraient des taux de change permettant d'équilibrer les échanges commerciaux.

Dans la perspective de ce grand partenariat, quelle pourrait être la place des pays Balkaniques qui ne font pas encore partie de l'Union Européenne ?

Plusieurs remarques peuvent être faites.

D'une part ils ont des liens extrêmement forts avec l'Europe, qu'il s'agisse d'échanges commerciaux ou de populations qui ont émigré mais qui conservent de multiples liens avec leurs pays d'origine respectifs ; d'autre part le « dumping de change » qui a été signalé précédemment concerne tout aussi bien les pays de la rive sud que ceux de la rive nord de la méditerranée : en quelque sorte, les uns et les autres sont « dans le même bateau » !

Ce n'est pas tout ; ils risquent de subir la crise actuelle plus durement que les pays de l'Union Européenne. Ils sont en effet actuellement dans un processus de rattrapage dans lequel les investissements étrangers, principalement européens, sont extrêmement importants ; l'apport de capitaux étrangers rend compte d'une très grande partie de la croissance d'un pays comme la Serbie. Or, les difficultés rencontrées par les entreprises, en Europe de l'Ouest, vont conduire celles-ci à différer une bonne partie de leurs investissements à l'étranger, notamment dans les pays Balkaniques. Si les pays de l'Union Européenne ont, en 2009, des taux de croissance de l'ordre de -0,5% ou -1%, il est probable que, pour les pays des Balkans, cela sera plutôt des taux de -2% à -3%. Plus que jamais ces pays ont un intérêt vital à ce que l'économie de l'Union Européenne aille bien ; ils seront donc solidaires de l'Europe si celle-ci décide de se ressaisir et de se protéger.

La stratégie esquissée ici de défense commerciale pour un ensemble très vaste, en dehors de l'OMC, sera-t-elle ressentie comme nécessaire par les différents pays concernés ? pour qu'il en soit ainsi, il faudrait que finisse par s'imposer l'idée que la cause profonde de la crise réside dans les déséquilibres de change avec le monde asiatique ; les modalités par lesquelles ont été titrisées des créances immobilières, les modalités de fonctionnement des systèmes bancaires de par le monde, ne constituent que des causes « déclenchantes ». Cette idée là, malheureusement, est bien loin d'être partagée par les responsables économiques des différents pays du monde. Ceux-ci semblent, plus que jamais, attachés aux dogmes libéraux et aux vertus, en tout temps et en tous lieux, du libre-échange ! perseverare diabolium....

Mais pourquoi donc persistent-ils dans l'erreur ?

Effects of Capital Account Liberalization on Interest Rates in Croatia

Tomislav Herceg, Fran Galetić¹

ABSTRACT – In this paper authors investigated Croatian financial market analyzing different types of interest rates in Croatia and how they were affected by the changes in the level of capital account liberalization. Using a level of foreign direct investment as a proxy measure of degree of liberalization, the authors using time series analysis tried to prove whether there is a significant relation between the two. The results show that a certain relation exists, but before making any significant conclusions, it is necessary to be cautious about a probable omitted variable bias. Hence the aim of this paper was more to show the direction and existence of this relation than to produce a concrete and exact amount of that effect, which might be misleading in this case.

KEY WORDS: capital account liberalization, measuring, econometric analysis, Croatia

Introduction

Capital mobility depends on the constraints brought by the Central bank or the Government. These controls have several aims, but mostly their intention is to protect domestic capital market from foreign competition and economic disturbances. The impact of loosening or tying up the capital controls were investigated by many authors. Most authors were investigating the level of capital account liberalization and its impact on macroeconomic variables. Here we want to show how a degree of capital mobility affects the interest rate for bank loans to companies and how controls on capital flow change an interest rate on households' deposits. It is especially interesting because the loans for companies directly affect microeconomic surrounding, which is poorly investigated in the literature.

Our hypothesis is that the liberalization of Croatian capital account caused the interest rate margins to fall, as well as the interest rates on deposits. We base this hypothesis on the fact that open capital market introduced cheaper foreign capital. The lack of controls makes it cheaper to transform bank loans abroad to domestic lending and it causes a decrease in the margin. On the other hand, cheaper capital abroad forces the interest rates on deposits down since banks do not want to pay more for domestic money.

Capital account and balance of payments

Current account is a part of a national balance of payment. IMF defines each of the three parts of the balance of payments:

- The current account consists of the goods and services account, the primary income account and the secondary income account.
- The financial account records transactions that involve financial assets and liabilities and that take place between residents and non-residents.
- The capital account shows capital transfers receivable and payable between the country and the rest of the world as well as the acquisition and disposal of non-produced non-financial assets.

Economists usually use the term "capital account" to refer to what is now called the financial account and remaining capital account in the IMF manual and in the System of National Accounts. The use of

¹ Tomislav Herceg, Fran Galetić, Faculty of economics and business, Zagreb

the term capital account in the IMF manual is designed to be consistent with the System of National Accounts, which distinguishes between capital transactions and financial transactions.²

The usual way of analyzing balance of payments is by dividing it into capital account and current account. The negative balance in the capital account is equal to the positive balance in the current account and vice versa. The capital account shows both the capital transfers receivable and payable between residents and non-residents and the acquisition and disposal of non-produced non-financial assets between residents and non-residents.³ Adding portfolio investment (long-run and short-run) and transactions of official reserves to the direct investment we get the capital account. Capital account consists of capital part and financial part. Capital part shows the Diaspora transfers and the regional funds obtained from supranational organizations. Financial part consists of investment and other depositing.

Capital account liberalization

Capital account liberalization is a phenomenon investigated by many contemporary economists. It is a name of the process of moving capital controls and enabling the capital to flow free over the borders. The level of the capital account liberalization varies across the countries. Observing this variance economists try to find out how different degrees of capital mobility freedom affect economy. However, this process appeared to be quite challenging, since during the last 20 years, in which this phenomenon started to be intriguing, brought the experts to the completely opposite conclusions. Eichengreen (2003) summarizes it up and says that the capital account liberalization is one of the least understood subjects of contemporary economics. There are many reasons for it, but here we name few.

Economists who investigated the problem of capital account liberalization mostly tried to find its impact on growth. These analyses were mostly made on large cross-section analysis including many countries during several decades. Alesina, Milesi & Feretti (1994) find no relation between levels of capital account liberalization. Refining their research in Milesi & Feretti (1995) it was concluded that greater levels of liberalization lead to slower growth.

Quinn (1997) made a revolutionary step in investigating a degree of capital account liberalization. The author was convinced the problem of conflicting results lies in a false capital mobility indicator. Instead of using proxy variables, used as regressor for the previous analysis, he introduced new, pure measure. Proxy variables such as the level of FDI (foreign direct investment) do not depend on the level of liberalization only. That contains other effects too. Quinn took IMF's Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER) and quantified the qualitative data on the regulation of different capital markets. The indicator ranged from 0-4 (with a 0.5 increment). However, it suffers from certain level of subjectivity, but still most future analysis use this or some close variant of the indicator for their regressions.

In the 1998, when Asian crisis struck, incautious capital account liberalization have brought crisis among the countries which did not hedge against the risk of crisis. The infamous crisis, however, opened the eyes of experts and Bordo & Eichengreen (1998) concluded the country should liberalize its capital flows if it brings positive effects on the economy. Bailliu (2000) made a crucial discovery finding that developed financial sector protects the country against the crises, while underdeveloped ones "import" it with the overly liberalized capital flow. Hence the future authors started to investigate and give useful suggestions for the countries with underdeveloped financial markets.

Lipschitz, Lane & Mourmouras (2002) were investigating underdeveloped financial markets, but with a stress on transitional countries, which makes this study especially interesting for Croatia. It is considered as the theoretical base for further research of capital account liberalization effects in transitional countries. Authors give five conclusions which should be taken into account if liberalizing an underdeveloped financial market:

² International monetary fund "Balance of Payments Manual", Chapter 13

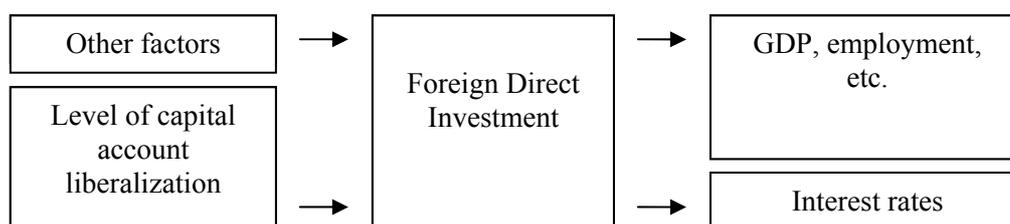
³ International monetary fund "Balance of Payments Manual", Chapter 13, Part 13.1.

- in addition to sound economic management, policy transparency and data dissemination are crucial;
- the open capital account reduces the independence of action for monetary policy, and fiscal policy becomes the main tool for stabilization policy;
- right sequencing of capital account liberalization is important, and long-term capital movements should be liberalized before short-term transactions;
- a strong regulatory and supervisory framework has to be set up before the capital account is fully liberalized, and special attention has to be paid to avoid excessive corporate foreign exchange exposure;
- although the choice of exchange rate regime cannot eliminate the problem of persistent capital flows, in most circumstances, a floating regime will make the country less vulnerable than a pegged regime, as more exchange rate variance is a disincentive to large foreign exchange exposure.

Capital account liberalization indicator

In this analysis we did not follow the Quinn's accomplishments and remained with the proxy variable choice. Although Quinn's indicator is recommended, for the sake of this analysis, which intends to give a short view on this matter, we chose the FDI level as a regressor. The reason for it is a short time series. For the same reason we did not put any other variables in regression, risking the omitted variable bias, but saving the scarce degrees of freedom. The reason for picking up the level of FDI in Croatia is that it largely depends on the capital flow constraints. The following diagram illustrates the channel of influence.

Figure 1. Choosing FDI as a proxy measure of capital account liberalization



The interpretation is as follows: FDI is affected mostly by the level of capital account liberalization. Other factors, which we hope are insignificant, deteriorate the quality of the level of FDI as a regressor. Hence it would be suggested to pull IV (Instrumental variable) regression since it is obvious that regressor (FDI) is abundant in disturbance term. On other hand, FDI affects not only the interest rates, but many other areas of economy as well. What we presume is that these other effects are complementary. This assumption indirectly states the omitted variable bias is to be ignored.

Effect of capital account liberalization on interest rates for loans

The bank offers loans at certain interest rate r . It takes loans on the international loans market at e.g. LIBOR (London Interbank Offer Rate). The difference between the two is the bank's margin. It has to cover up the additional operating costs and the profits of the bank. When a central bank increases the level of reserve requirements, it increases the cost of the capital and the spread has to increase (this action is frequently used by Croatian national bank (HNB) as a mean of capital control). Since capital controls do not affect LIBOR, we subtracted it from the bank's offer rate (here we observe long term kuna loans to companies). We now estimate the model:

$$NETT_t = aSU_t + c + u_t$$

where NETT = long term corporate kuna offer rate – LIBOR, and where SU is to sum of all FDI in a year (in 000 of €). The series we observed is from 1994-2007 (annual data). Pulling OLS (Ordinary Least Squares) regression we get the results in Table 1. The residuals' test warns us of a slight autocorrelation, but it is small enough to be ignored for the time being (Figure 2). This is the estimated model:

$$NETT_t = -1.98 \times 10^{-6} SU_t + 10.33406$$

Testing for the significance of the whole model is made using F test:

F test:

$$H_0 : b_1 = b_2 = 0$$

$$H_1 : \exists b_i \neq 0, i = 1, 2$$

P value indicates that at least one of the parameters is significant with probability greater than 95% (98.88%). R^2 is low because bank margin is explained not only with the capital account liberalization, but with some other factors as well. F test gives us the confidence that we made a well specified model. After F test one has to make t test in order to check significance of each regression coefficient separately:

t test:

$$H_0 : b_1 = 0$$

$$H_1 : b_1 \neq 0$$

Instead of finding table values one can use p values and conclude that H_0 can be rejected with probability greater than 95% (98.99%)

t test:

$$H_0 : b_2 = 0$$

$$H_1 : b_2 \neq 0$$

In the same way we conclude that H_0 can be rejected with probability greater than 99.5% (99.99%).

Now can make the following conclusion: An increase in the FDI level by € 1000 is related with a 0.0000198 percentage point decrease in a bank margin, since the liberalized market leads to a cheaper lending process.

Table 1. Bank margin estimation output

Dependent Variable: NETT

Method: Least Squares

Sample: 1 14

Included observations: 14

Variable	Coefficient	Std. Error	t-Statistic	Prob.
SU	-1.98E-06	6.49E-07	-3.047782	0.0101
C	10.33406	1.017541	10.15591	0.0000
R-squared	0.436328	Mean dependent var		7.854488
Adjusted R-squared	0.389355	S.D. dependent var		2.926282
S.E. of regression	2.286707	Akaike info criterion		4.623666
Sum squared resid	62.74835	Schwarz criterion		4.714960
Log likelihood	-30.36566	F-statistic		9.288977
Durbin-Watson stat	1.849770	Prob(F-statistic)		0.010126

Figure 2. Correlogram of residuals for bank margin estimation

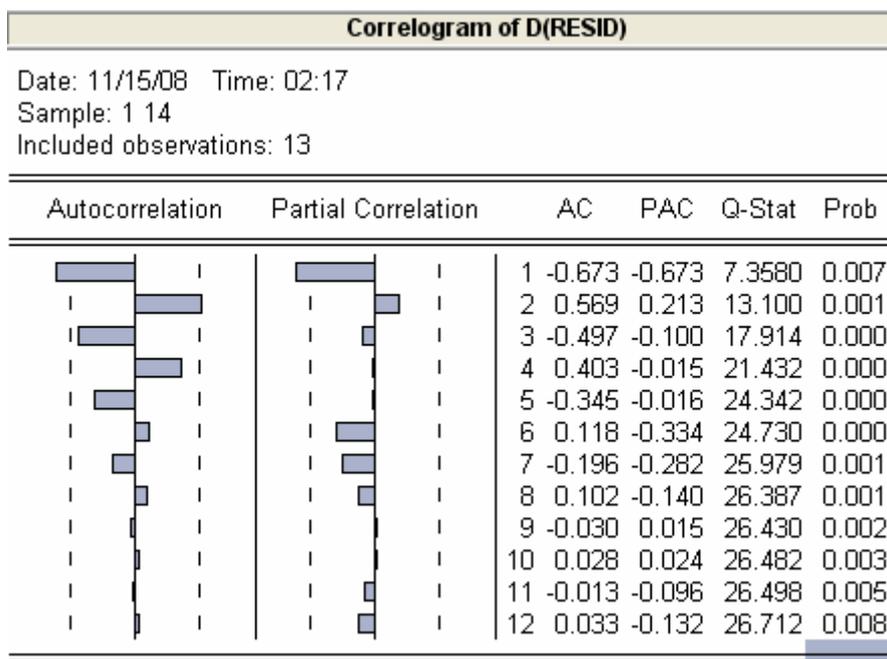
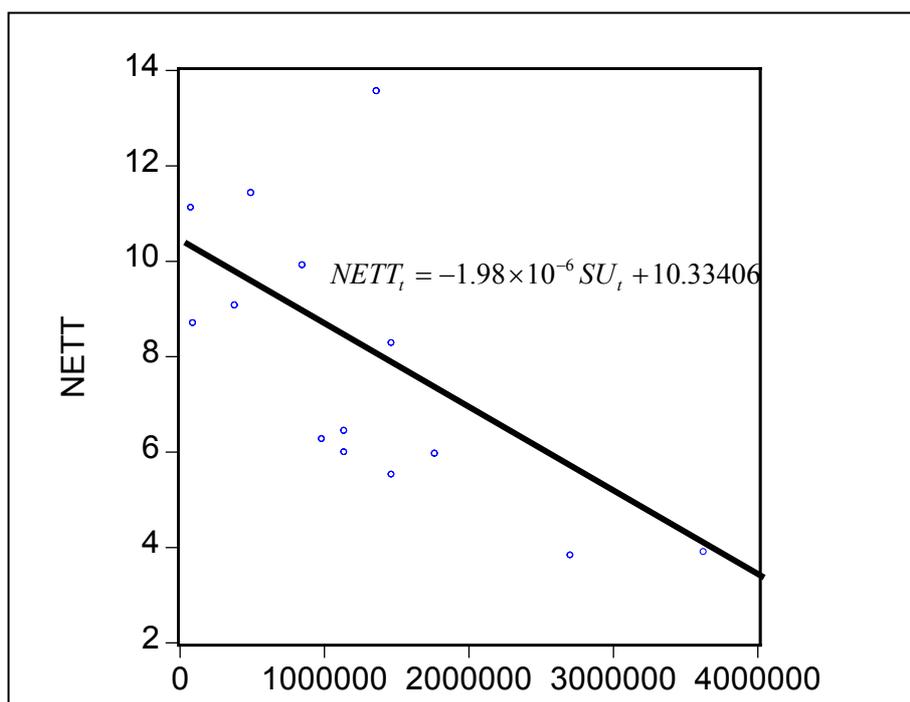


Figure 3. Scatter diagram with a regression line

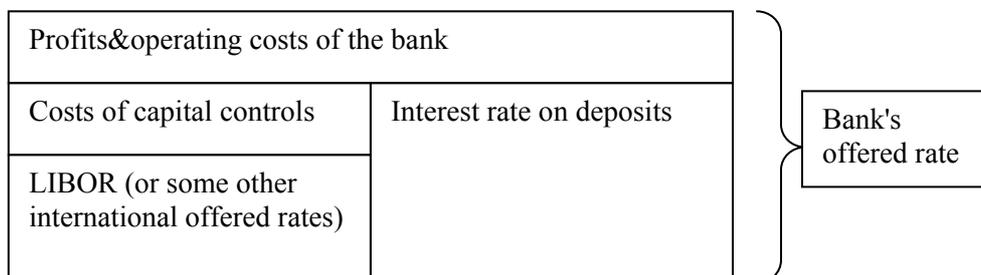


Effect of capital account liberalization on a FX denominated kuna interest rates on deposits

A bank makes its profit by selling the money at a greater price than they buy it. Bank can buy money in two ways: by borrowing it from abroad, or by accumulating deposits. At the same time Central bank may impose constraints which increase the costs of borrowing abroad. Hence the international offer

rate has to be smaller than the domestic interest rate on deposits by the amount of these costs. This is illustrated on Figure 4.

Figure 4. Composition of the bank's offer rate



Now we want to show how the interest rate on deposits is affected by the capital controls and by LIBOR. The model is as follows:

$$OD_t = b_1 LIB_t + b_2 SU_t + b_3 + u_t$$

where LIB is LIBOR (London Interbank Offered Rate), and where SU is to sum of all FDI in a year (in 000 of €). The series we observed is from 1994-2007 (annual data). Pulling OLS (Ordinary Least Squares) regression we get the results in Table 2. The residuals' test shows us there is no autocorrelation (Figure, but it is small enough to be ignored for the time being (Figure 2). This is the estimated model:

$$OD_t = 1.290513LIB_t + -1.93 \times 10^{-6} SU_t + 6.904014 + u_t$$

Testing whether a model is well specified as a whole (F test):

$$H_0 : b_1 = b_2 = b_3 = 0$$

$$H_1 : \exists b_i \neq 0, i = 1,2,3$$

Table 2. Deposit interest rate estimation output

Dependent Variable: OD

Method: Least Squares

Sample: 1 14

Included observations: 14

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LIB	1.290513	0.559844	2.305131	0.0417
SU	-1.93E-06	6.08E-07	-3.171613	0.0089
C	6.904014	1.444001	4.781170	0.0006
R-squared	0.606274	Mean dependent var		6.827143
Adjusted R-squared	0.534687	S.D. dependent var		3.125556
S.E. of regression	2.132062	Akaike info criterion		4.539465
Sum squared resid	50.00255	Schwarz criterion		4.676406
Log likelihood	-28.77626	F-statistic		8.469098
Durbin-Watson stat	1.933204	Prob(F-statistic)		0.005937

P value indicates that at least one of the parameters is significant with probability greater than 95% (99.40%). R^2 is low, but greater than in the previous regression because bank's offered rate depends on bank's profits and operating costs which were not included in the first one. Again we will go for the F test only and say the model is well specified. Parameter tests have to be made as well:

t test:

$$H_0 : b_1 = 0$$

$$H_1 : b_1 \neq 0$$

We fail to reject the H_0 with probability of 95.83%

t test:

$$H_0 : b_2 = 0$$

$$H_1 : b_2 \neq 0$$

We fail to reject the H_0 with probability of 99.11%

t test:

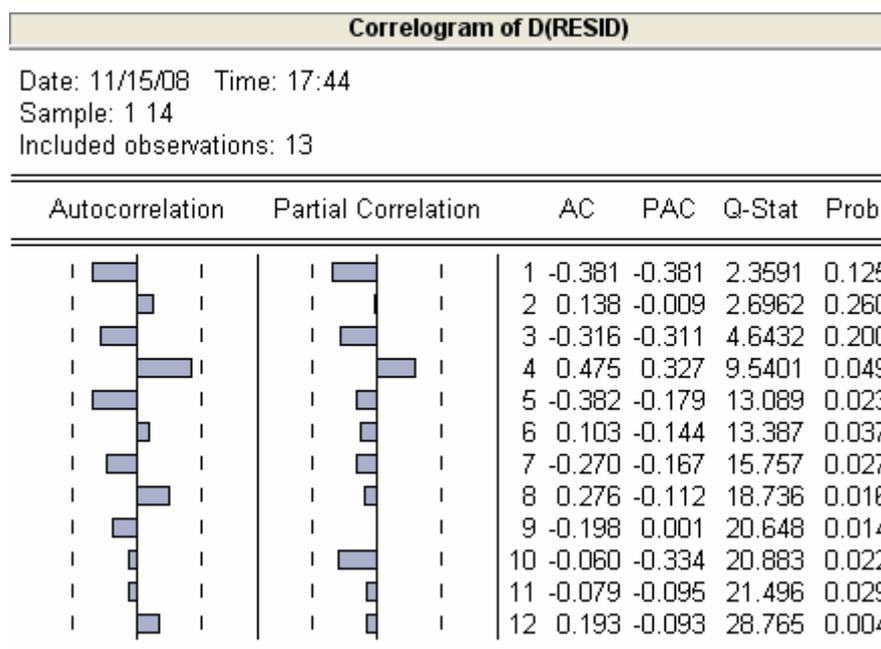
$$H_0 : b_2 = 0$$

$$H_1 : b_2 \neq 0$$

We fail to reject the H_0 with probability of 99.94%

The results of the tests as well as the obtained parameters suggest the following: An increase in the FDI level by € 1000 increases interest rates on deposits by 0,00000193 percentage points keeping other variables constant. An increase in the LIBOR by 1 percentage point will cause the increase in interest rates on deposits by 1.29 percentage points. It is now very interesting to see how LIBOR parameter is relatively close to 1 (theoretically it should be 1). It is also interesting how FDI parameter remains almost the same in both regressions. It suggests that the capital controls affect both bank's offer rate and the interest rate on deposits in the same way, as it theoretically should be (see Figure 4).

Figure 5. Correlogram of residuals for interest rates on deposits



Conclusion

This paper wanted to show how a degree of the capital account liberalization affects the bank's offered rate (FX denominated kuna loans to companies). The reason for making this model was to show how capital controls affect entrepreneurial environment. This microeconomic aspect is something new in this field since majority of the liberalization analysis base on macroeconomic variables. Taking FDI as a proxy variable we conclude that greater levels of controls are related to higher interest rates. Government should take it into account when putting capital controls since it dissuades companies from investing.

On the other side, we show how the level of capital account liberalization and LIBOR affect the interest rates on domestic savings. We conclude that the increase in LIBOR increases deposit interest rate at almost 1 by 1 relation, which complies with the theory. It is also interesting that the impact of capital controls is almost the same for both the lending interest rates and deposit interest rates, which is also a desired result. One can now simply conclude that by moving capital controls it lowers the interest rates on savings, which is not preferred by the savings holders.

References

- Alesina, A., Grilli, V., Milesi Ferretti, G.M. (1994) "The Political Economy of Capital Controls" in Leiderman, L., Razin, A. (Eds.) "Capital Mobility: The Impact on Consumption, Investment and Growth", 289-328. Cambridge: Cambridge University Press.
- Bailliu, J.N. (2000) "Private Capital Flows, Financial Development, and Economic Growth in Developing Countries", Bank of Canada Working Paper no. 2000-15 (August)
- Blanchard, O. (1997) "Macroeconomics", Prentice Hall, Inc.
- Bordo, M., Eichengreen, B. (1998) "Implications of the Great Depression for the Evolution of the International Monetary System": Bordo, M., Goldin, C., White, E. (eds.) "The Great Depression and the American Economy in the Twentieth Century", 403-454. Chicago: University of Chicago Press
- Eichengreen, B. (2003) "Capital Flows and Crises", Cambridge. Massachusetts, USA: The MIT Press
- Grilli, V., Milesi Ferretti, G.M., (1995) "Economic Effects and Structural Determinants of Capital Controls", IMF Staff Papers 42: 517-551
- International monetary fund "Balance of Payments Manual", Chapters 2&13
- Leko, V. (1998) "Rječnik bankarstva", Masmedia, Zagreb
- Lipschitz, L., Lane, T., Mourmouras, A., (2002) "Capital Flows to Transition Economies: Master or Servant?", IMF Working Paper 02/11, Washington
- Quinn, Dennis P. (1997) "The Correlates of Changes in International Financial Regulation" American Science Review 91: 531-551

Deficiencies of Regional Securities Supervisors' Operational Independence with Particular Focus on the Serbian Securities Commission

Tatjana Jovanić¹

ABSTRACT – Modern financial regulation is becoming more and more of a technical nature and as such requires more powerful regulatory powers. Centralisation of the function of regulation and supervision has influenced strengthening of the regulatory agencies' institutional capacities and urged for a more explicit determination of their main goals, independence and accountability. The main focus of the Paper is the operational independence of regional securities supervisors in the following countries: Serbia, Montenegro, Macedonia, Bosnia and Herzegovina, Albania and Croatia. The operational independence is reviewed in light of its main components: regulatory, institutional, budgetary and supervisory independence. Operational independence of regional securities supervisors is endangered not only by their weak procedural powers in the supervisory process, but also by their limited regulatory functions, and usually the lack of legislative initiative. Regional comparison with particular focus on the status, existing competences and procedural powers of the Serbian Securities Commission reveal that that most of the main IOSCO principles are not adequately supported in legal system and supervisory practice. This calls for the necessary redefinition of powers of the Securities Commission, but as well as the establishment of its accountability for the attainment of the main goals attributable to financial regulators. The new legal framework should enable the Commission to develop an effective regulatory strategy, while on the other side, making it accountable for the attainment of the set goals and principles.

KEY WORDS: financial regulation, capital market supervision, operational independence, accountability

Introduction

Modern financial regulation is becoming more and more of a technical nature and as such requires more powerful regulatory and supervisory powers, which are main components of the operational independence of financial regulators. Paper is focused on these powers, goals of financial regulation and institutional guarantees of good governance underlying the operational independence. Regional comparison encompassed Serbia, Montenegro, Bosnia and Herzegovina, Macedonia and Croatia, with a particular reference to the Serbian Securities Commission.

Operational independence of the majority of regional securities supervisors is thwarted not only by their weak procedural powers in the supervisory process, but also by their limited regulatory functions, and usually the lack of legislative initiative. In some countries, especially Serbia, there is a misbalance in the powers of banking regulators on one side, and securities regulators on the other side.

Regional comparison has shown that that some of the main IOSCO principles are not adequately supported in compared legislation and supervisory practices. This calls for the necessary redefinition of powers of the Serbian Securities Commission, but as well as the establishment of its accountability for the attainment of the main goals attributable to financial regulators.

¹ Tatjana Jovanić, University of Belgrade, Faculty of Law

Institutional architecture of financial supervision

Regulatory structure implies the manner and criteria for the distribution of powers and responsibilities for the conduct of supervision between different regulatory bodies. The first step is the choice between institutional and functional criterion (*Carmichael i dr; 2004*). The first criterion assumes the establishment of regulatory bodies for each separate type of financial institutions (banks, insurance companies, capital market intermediaries). The structure based on the institutional criteria, with different regulatory agencies for various groups of financial institutions, dominated until the beginning of the XXI Century. This is the actual state of art in all respective regional structures, regardless of the fact that some institutions, such as the Serbian National Bank or the Croatian Financial Services Supervisory Agency supervise various financial institutions and markets.

Functional criterion implies the main objectives of the regulation, and is focused on the exact market failure to which the regulation is directed. To illustrate non-exhaustively, it could be related to risks in the business of financial institutions, protection of investors from market manipulation), information asymmetry etc.

In comparative financial systems the central bank is evidently loosing its competences as a regulatory agency in the sphere of banking, and particularly in relation to the prudential supervision of the other financial institutions. However, in many countries it is the central bank who has the key role in monitoring of financial stability and closely cooperates with regulators in charge of the control of financial institutions. In relation to this, arguments pro and contra separation of functions of the conduct of monetary policy and regulation of financial sector should be considered. However, it has been suggested that unstable transition economies should not deprive the central bank of its regulatory powers, particularly in the domain of prudential control of banks (*Goodhart i Schoenmaker 1998, s. 133-212*).

Centralisation of regulatory and supervisory function became global trend, which particularly benefited from liberalisation of financial sector, actually the disappearance of the frontiers between typically banking and non-banking activities, as well as the emergence of multifunctional financial groups. The tendency to integrate supervision of the financial sector and the introduction of regulatory agencies performing integrated supervision of the financial sector marked end of the previous and the beginning of the current decade. Although first examples of integrated supervision date back to Scandinavian countries in the mid 1980s, integrated supervision has become a global trend after the establishment of the UK Financial Services Authority, which served as a model to many countries.

Therefore, arguments pro and contra the establishment of a unified regulatory agency for financial services should be considered (*Mwenda 2006, Briault 1999, Abrams i Taylor 2000*). The main arguments in favour of the establishment of a unified regulatory body are the following: the establishment of integrated supervision within the single regulatory agency decreases information costs of regulation, simplifies the communication between financial institutions (particularly complex groups) and the regulator, creates the effects of the economy of scope, makes regulatory process more flexible and makes one independent agency responsible for the control and functioning of the financial sector (centralisation of responsibility). The basic argument against creation of a single regulatory agency, in shortest, may be deduced to the following remark: as a single regulatory body for financial sector, integrated regulatory agency is an institutional monopolist.

Among countries emerged in the territory of ex Yugoslavia, up to now only Croatia has introduced peculiar type of integrated supervision, by creating the Croatian Financial Services Supervisory Agency, excluding control over banks which remained the competence of the central bank. Among neighbouring countries Hungary and Bulgaria have introduced integrated supervision, creating single regulators. The other countries retained securities commission as institutional regulator: Macedonia, Bosnia and Herzegovina (both Republic of Srpska and the Federation of Bosnia and Herzegovina), Montenegro and Serbia.

Integration and centralisation of supervision is a global trend and the necessity in the long term. Regardless of the institutional model which would be chosen for Serbia if/when the issue of the integration of supervision emerges, in the short term it is necessary to improve the institutional status of the

Securities Commission and enhance its competences in the field of regulation and supervision of financial market participants.

The National Bank of Serbia (NBS) supervises banks' compliance conduct-of-business and exercises prudential control over banks, financial leasing companies, insurance sector and pension funds management companies. That made the NBS one among the very few central banks in the World which supervise the overall financial sector (except brokers and dealers, stock exchanges and investment funds) almost as central banks in Ireland and Slovakia do. Law on the Market of Securities and Other Financial Instruments, Law on Takeover of Joint Stock Companies and the Law on Investment Funds entrust the Securities Commission with the tasks to control the establishment and the conduct-of-business of the authorised financial intermediaries on the money and capital markets, as well as the control of issuance and trade of financial instruments.

Objectives of financial market regulation and supervision and goals of the regulator

International Organization of Securities Commissions (IOSCO) defined the securities regulation main goals and principles in its *"Objectives and Principles of Securities Regulation"*. Principles and standards which regional legislators, especially Serbian, should take into account are specifically the following: clear and objective responsibilities of the regulator; its operational independency in exercise of its functions and powers; adequate powers, capacity and resources; development of clear and consistent regulatory process; comprehensive inspection, investigation, surveillance and enforcement powers; regulation should be designed to detect and deter manipulation and other unfair trading practices.

As the financial market develops, the competences of regional securities regulators were broadened and thus include the supervision of institutional investors, particularly investment funds. Redefinition of their competences and authorities was necessary in order to meet the augmented supply and demand on national financial markets, which resulted from the growing number of the issuers of securities, and particularly from the privatisation of some of domestic public enterprises.

Modern financial regulation, now increasingly technical in nature, requires more robust regulatory powers. Centralisation of the regulation and supervision functions and the emerging integrating regulatory agencies for financial services around the World, contributed to the strengthening of regulatory agencies' institutional capacity and operational independence.

The basis of the regulatory regime of a modern financial regulator are the main goals of financial regulation. Therefrom derive intermediary goals which justify the powers necessary to attain these goals. However, the formulation of main goals makes regulatory bodies responsible for their attainment. Therefore, the legislator should not only formulate the main aims of the law along the lines of the philosophy of modern financial legislation, but also establish the goals of the regulatory body and enhance its regulatory powers and supervisory authority. The legal framework should at the same time enable the regulator to develop an effective regulatory strategy and make it responsible for the attainment of the set goals and principles.

As opposed to banking regulators which, although protecting the depositors' interests, traditionally gave primacy to the stability of banking system and protection against systemic risk, primary goal of financial market regulators is to prevent manipulations and fraudulent behaviour and protect the investors. The main activities of securities regulators aimed at investor protection are directed towards securing the quality of securities and provision of information to clients, enforcement of financial discipline, observance of compliance with the rules on the conduct of trade in securities, prevention of speculation and market manipulation.

Among countries in our neighbourhood the objectives of regulation, which in the same time became the goals of the regulatory agency, and the guiding principles are the most explicit in Croatian law. The main goals of HANFA (Croatian Financial Supervisory Agency) are set out in Article 13 of the Law on Croatian Financial Services Supervisory Agency: to attain and to maintain the stability of the financial

system and supervision of conduct-of-business of authorised firms. In performing its goals, the HANFA must be guided with principles of transparency, building of market confidence among financial market participants and provision of information to consumers. The Agency is obliged to inform the public with the role and functioning of the financial system, including rising the knowledge of benefits and risks related to different types of investment and financial transactions. HANFA is obliged to ensure fast and efficient access to all information which might be of interest to the users of financial services, investors and public.

Within its legal powers and authorizations under the Law on Securities of 2005, Macedonian Securities Commission provides the legal and efficient functioning of the securities market, as well as for the protection of investors' rights, with the aim of continual building up public trust in the institutions of the securities market.

The main goal of the National Bank of Serbia is to attain and to maintain price stability. Besides this main goal, the National Bank of Serbia has an additional goal to maintain financial stability. Wide competences of the NBS in the process of supervision of financial institutions derive from the necessity to preserve financial stability (Article 3 of the Law on the National Bank of Serbia). Laws for which enforcement the Serbian Securities Commission is responsible, particularly the Law on the Market of Securities and other Financial Instruments as the basic law, failed to state its goals explicitly. However, Article 220, par.1(8) of the LMS stipulates that one of the conferred powers of the Commission is to secure efficient operation of the organised market and investor protection. This opens one of the key questions of modern financial regulation: What are the objectives of regulation and goals of the regulator? However, the idea that this provision has introduced the main goals should be backed by a stronger proof of record. Serbian legislator should define several main goals of regulation, and oblige the Commission to undertake the measures necessary for fulfilment of set goals, making in the same time its managing body responsible for the attainment of these goals.

Guarantees of institutional independence and accountability mechanisms as preconditions for the effective operational independence

Institutional independence of regulators and supervisors is a precondition of an effective financial market regulation (*Quintin i Taylor, 2004; Hupkes i dr. 2005*). *Personal independence* is one of the components of the institutional independence. It is primarily the independence of the regulatory agency's managing bodies. The guarantees of personal independence, basically transparent criteria for appointment and dismissal of the members of the managing body, clear authority and criteria of their impartiality, may be observed in the region.

One of the characteristics of regulatory agencies, as professional quasi-administrative organisations that discharge public authorities, is *independence in relation to the political dimension of power*.

Management bodies of regional securities supervisors are appointed by parliaments, as a rule upon the suggestion of their governments or presidents. Serbian Securities Commission is established by law regulating financial markets and instruments as independent and autonomous *organisation*. The President and members of the Serbian Securities Commission are appointed and dismissed by the National Assembly of the Republic of Serbia, following a proposal of the internal working body of the National Assembly responsible for the financial system.

The status of the National Bank of Serbia, as a central bank, is upgraded on a higher level, as the Constitution of the Republic of Serbia in its Article 95 provides that the NBS is independent and is subject to the control of the National Assembly, to whom it is accountable. Being the "organisation", Serbian Securities Commission, as well as the other "Commission" in the Serbian administrative order (the Commission for Protection of Competition), are not public agencies in the sense of Serbian Law on Public Agencies. They are neither administrative organisations that belong to the classic administrative apparatus nor state establishments. This is one of the reasons why their operational independence, their regulatory and control powers are confusing and underdeveloped.

Another side of political control is the accountability of regulator, which should not be limited only to regulator's periodical reports on its activities. As well as the other financial regulators in the region, Serbian financial regulators, both the Securities Commission and the National Bank of Serbia are accountable to the National Assembly. Besides, the Commission is obliged quarterly to inform the Government on its operation and trends in the financial market and to provide certain information.

In comparative financial systems there aren't any uniform solutions in terms of competences for the election of the managing body's members. A solution pursuant to which the parliament elects these persons is adopted in most countries, but a group of authorised proposers varies. The differences are obvious from the fact that the Board of Directors of the UK Financial Services Authority is appointed by the Ministry of Finance. This confirms that competences for the appointment of members is not a decisive guarantee of personal independence. In some countries, the members of sectoral regulator's or integrated financial services agency's management bodies are proposed and/or elected directly by the Government or by other bodies, such as the governors of central banks, ministers in charge of finance or the other officers (and, if this is a case, the same body is usually entitled to revoke their function), or these must be consulted in the process of nomination and election of members of regulator's management bodies (e.g. in Austria, Ireland, Japan, Latvia, Belgium, France, Poland, Slovenia). This clearly suggests that personal independence cannot be limited to the competence to elect the regulator's management but is primarily linked to the guarantees for continuity of the performance of their activities. This is why, as a component of personal independence, the election by the parliament should not be overestimated as the experience of these countries shows that operational independence of the agency is the key element. Accordingly, the fact that Serbian Securities Commission is independent due to the provision that Assembly appoints and revokes members of the Securities Commission should not be overestimated.

Regulatory agencies, particularly financial regulators, have acknowledged *budgetary independence* so that they can resist political interference and in general achieve more effective regulatory strategy. Several empirical studies have proven that higher budgetary independence results in higher level of institutional independence and better attainment of the main goals of financial regulation (*Quintin i Taylor, 2004*).

Capital market regulators are financed from budget resources, fees collected from authorised subjects, as well as fees for rendered services. On the other hand, some securities regulators, or financial supervisory agencies, have independent budget which represents a component of the state budget, which the Government or some ministries cannot alter (i.e. Bulgarian Commission for Financial Supervision). Regional securities regulators are primarily financed by fees for rendered services.

In a comparative law, tariff and financial plan of financial market regulators is usually reviewed by the parliament, but in some countries, such as Croatia, by the Ministry of Finance, or the Government as in the Republic of Srpska.

From its inception, the Serbian Securities Commission has been self-financed, although the law entitled it to use budgetary resources, while it paid into it the excess of revenues. This problem, the payment of the excess of revenues over expenditures in the budget, should be remedied as soon as possible in order to enable the Commission to attract high-level experts and acquire resources which would strengthen its operational independence.

Regulatory and supervisory powers

Operational independence implies effective regulatory and supervisory powers. Supervisory autonomy or procedural independence, implies clear competences and mechanisms for the effective enforcement of supervision and sanctioning of violators of law. Operational independence of some of regional securities supervisors, especially Serbian Commission, is endangered not only by their weak procedural powers in the supervisory process, but also by their limited regulatory function and legal instruments, and lack of legislative authority.

Amongst compared regulators, Law on Croatian Financial Services Supervisory Agency and Law on the Securities Commission of the Federation of Bosnia and Herzegovina are the best examples of clear competences and regulatory powers in the region.

Competences of the Serbian Securities Commission are governed by the Law on the Market of Securities and Other Financial Instruments (further LMS), Law on Takeover of Joint Stock Companies and Investment Funds Law. Article 220 of the Law on the Market of Securities and Other Financial Instruments categorised the Commission's powers and opened the possibility that the Commission may perform competences set out in other laws which application it monitors. However, in the third paragraph of this Article it is explicitly provided that the Commission exercises the majority of its competences "*as delegated competences*". This provision reveals that, although the Law itself declared it an independent institution which performs a certain scope of activities, the Securities Commission actually obtained the character of a state administrative body, or a public agency to whom the competent ministry, or the Government, delegates selected competences.

Modern financial regulation is directed towards enlargement of competences of regulatory bodies in terms that they may also decide on issues which are not explicitly put into their field of competence, if it may be justified by the necessity of implementation of regulatory goals. Rising number of capital market regulators, particularly if it is an integrated body, in addition to the authority to issue regulations on enforcement of the law whose implementation they control, in cases when explicitly authorised by law to do so, is authorised to initiate the enactment of laws and other legal acts, as well as to interpret and give opinion on the enforcement of laws which they are in charge of in the process before persons who may show their legal interest. Besides, significant number of regulators enact secondary legal acts in order to prescribe the conditions, manner and procedures for unified supervision within its sphere of action and competences even if they are not expressly authorised by the systemic law to do so.

Regional securities regulators have acknowledged regulatory functions, as the founding laws explicitly determined that in performance of their competences they may enact regulations, instructions, adopt professional guidelines and orders, give opinions and recommendations if required for the interpretation of specified provisions of those laws which enforcement the agency is authorised to control.

In the domain of the regulatory function of the Serbian Securities Commission in the sphere of its legislative competences, it may be observed that there is a misbalance in comparison with the legislative powers of the National Bank of Serbia and the correspondent competences of securities regulators not only in developed EU countries, but also many neighbouring countries, especially Croatian HANFA.

Agencies' regulatory competences are derived from the objectives of regulation, while the Commission derives its competence directly from the provisions of the Law on the Market of Securities and Other Financial Instruments. Because of this, in some cases, such as investigation and sanctioning of the market manipulations, the Commission may not interpret the provisions of the LMS by its secondary legislative acts. On the basis of an explicit authorisation provision of the laws for which enforcement the Commission is in charge, the Commission has enacted several secondary legal acts which interpret selected issues regulated in the Law on the Market of Securities and Other Financial Instruments, Law on Investment funds and the Takeover Law, which may be categorised within the following topics: reporting, issuing of securities, subjects of supervision, investment funds establishment and operation and takeovers.²

In addition to the Law on Banks, regulatory function of the National Bank of Serbia is also established by Insurance Law, Law on Voluntary Pension Funds and Pension Schemes, Law on Financial Leasing etc. The Law on the National Bank of Serbia has additionally strengthened regulatory powers of the NBS in comparison with the Securities Commission. Pursuant to this Law, the Ministry competent for finance delivers to the NBS, for the purpose of giving its opinion, drafts of laws and other acts related to the goals and functions of the National Bank of Serbia (Article 72 par. 2); the National Bank of Serbia proposes to the Government to propose to the National Assembly to pass laws which are in

² Available at: <http://www.sec.sr.gov.yu>

relation with the attainment of the goals and performance of functions of the National Bank of Serbia (Article 72 par. 4).

In the conduct of supervision, securities regulators are authorised to pronounce supervisory measures with the aim to eliminate illegalities and irregularities in the conduct of business of regulated subjects. Failure to comply with the administrative ruling entitles the supervisor to pronounce a new measure accompanied by a pecuniary sentence. The objectives based approach to capital market regulation calls for empowering the regulator to undertake as well the other measures necessary for the elimination of consequences which are result of actions or omissions of licensed subjects and public companies. There is no uniform manner of determination of supervisory measures among laws empowering regional supervisors. Clear-cut provisions may especially be found in Croatian legislation. Legislation in Macedonia, Federation of Bosnia and Herzegovina and Republic of Serpska is also consistent (e.g. Republic of Serpska Securities Commission has broader powers if the damage has occurred or has been clear that it would occur).

Provisions of the Serbian Law on the Market of Securities and Other Financial Instruments which refer to general supervisory measures demonstrate logical inconsistencies of this law with regard to procedural powers of the Commission. Although this and the other laws which enforcement is being monitored by the Commission entitle the Commission to prescribe more detailed conditions and the manner of exercising supervision, the procedure of issuing the order and undertaking of measures, time limits for execution of orders and the duration of measures in its Regulation on the Conditions and Manner of Supervision of Financial Market Participants, the right to introduce new measures and to determine the choice of measures is reserved only for the legislator. Applicable laws which enforcement the Commission monitors also failed to determine precise criteria on the valuation of the seriousness of the infraction.

The existing supervisory measures foreseen by relevant laws in relation to authorised participants are too broad and cumulative, which means that in a specified case the Commission cannot choose the measure which corresponds to the committed infringement or to apply an alternative measure. By this reason in the following revision of the provisions on the general supervisory measures, as well as those directed towards selected regulated participants, these measures should be laid down alternatively and gradually starting from the weakest (written reprimand) to more weighty measures. Therefore the provision on general supervisory measures should be amended, and the legislator should particularly beware of using method of referencing to the other provisions of this Law or other laws which implementation the Commission oversees. It seems not to be sufficient only to amend each article of the law which relates to supervisory measures, but with the aim to achieve its consistency, the powers of the Commission in conducting supervision and pronouncing the measures should be regulated within the special section.

Laws which give the National Bank of Serbia, as a banking regulator, precise and clear supervisory powers may serve as a good basis. In line with the Basel accord, the Law on Banks has introduced the differentiation based on the capitalisation of banks and has established further restrictions towards these banks, and in the same time clearly determined the character and conditions for imposing supervisory measures. One of the most important powers of the NBS in performance of its control function is its discretionary right, actually the possibility to render the decision on a measure it takes regarding a bank in which operation it established irregularities, according to a discretionary evaluation. However, this discretionary right is limited by the duty to consider several parameters stipulated in Article 120 of the Law on Banks.

In addition to reviewing the existing regime of supervisory measures regarding conduct of business of regulated subjects, Serbian legislator should draw his attention to the shortcomings in procedural powers of the regulator in relation to the specified types of illegalities and irregularities, notably in the domain of prudential control, compliance with the rules on safe and sound conduct of business of financial intermediaries and observance of the professional duties, as well as concerning market abuse. Failing to announce the main goals which the regulator must follow, the LMS renders the Commission's possibility to undertake the appropriate measures in relation to financial market abuses more difficult, owing to the fact that this Law did not allow the Commission closer to determine the abuses,

on the first place the forms of manipulation and accepted market practices. One provision on the prohibition of market manipulation (Article 117 of the LMS), which is limited in comparison with the determination of manipulative practices in the EU law and in the region, is not a sufficient basis for an active conduct of supervision over the business activities of authorised participants.

Sanctioning powers of the Commissions should be more comprehensive not only in relation to broker-dealer companies, stock exchange and the Central Registry, but especially in relation to brokers, investment advisers and portfolio managers which are quite narrowed in the existing Law. This absurd situation that the Commission is obliged to supervise their activities, in the situation when the law failed to prescribe the concrete supervisory measures to be passed upon these subjects, should be remedied as soon as possible. Moreover, the new law which would regulate the market for financial instruments should clearly prescribe criteria of professional duties and the responsibility of financial/investment advisers. Further, the legislator should consider extension of the scope of law to all investment services and activities, and therefore all the subjects which provide investment services and related activities, not only broker-dealer companies and currently regulated financial intermediaries.

Conclusion

Strengthening the operational independence calls for the urgent identification of the main weaknesses of the current status of the Serbian Securities Commission, its regulatory powers and supervisory measures. Not less important problems relate to issues of human resources policy and financial independence.

Scope of the Commission's competences should be enlarged not only using the method of enumeration, but in a functional sense, in line with the recommendations of international organisations, on the first place IOSCO and the relevant legislation on the EU level. In particular, the existing failure in terms of the narrow possibility of sentencing should be corrected, in order to enable the Commission faster to react in case of the violation of the rules of the conduct of business on the capital market.

In order for the competences of the Commission in the domain of monitoring the conduct of business of financial intermediaries to be effective, especially market abuses and protection of small investors, and in general its powers in the sphere of prudential control and the control of legal compliance, it is necessary to introduce to the existing Law on the Market of Securities and Other Financial Instruments numerous modifications or to enrich its provisions with numerous amendments. The best option would be to pass the new law which would particularly determine business standards and the standards of responsibility of financial intermediaries, regulate the provision of investment services and investment activities, more precisely define the forms of abuses on the financial market and in general harmonise national legislation with the relevant EU *acquis*. With regards to Commission's institutional features, author is of the opinion that a special law specifying goals, authorities, regulatory and supervisory powers as well as its accountability measures should be passed, as in Croatia and Federation of Bosnia and Herzegovina.

References

- Abrams R., M. Taylor: Issues in the Unification of Financial Sector Supervision, IMF Working Paper 00/213, 2000
- Briault C.: The Rationale for a Single National Financial Services Regulator, Occasional Paper Series No. 2, Financial Services Authority, 1999
- Carmichael J., A. Fleming & D. Llewellyn (eds): Aligning Financial Supervisory Structures with Country Needs, World Bank Institute, 2004
- Ferran E., C. Goodhart (eds): Regulating Financial Services and Markets in the 21st Century, Hart Publishing, Oxford, 2001
- Goodhart C., D. Schoemaker: «Institutional Separation Between Supervisory and Monetary Agencies», u C. Goodhart (Ed.): The Emerging Framework of Financial Regulation, Central Banking Publications, London, 1998, s. 133-212
- Hupkes E., M. Quintin, M. Taylor: The Accountability of Financial Sector Supervisors: Principles and Practice, IMF Working Paper WP/05/51, IMF, 2005
- Milovanović D.: Uloga uprave u regulisanju finansijskog tržišta, doktorska disertacija, Pravni fakultet Univerziteta u Beogradu, Beograd, 2001
- Moloney N.: EC Securities Regulation, Oxford University Press, 2008
- Mwenda K.: Legal Aspects of Financial Services Regulation and the Concept of a Unified Regulator, World Bank, Washington, 2006
- Quintin M., M. Taylor: Should Financial Sector Regulators Be Independent? 34 Economic Issues 6, IMF 2004

Foreign Direct Investment and Economic Growth: the Role of Domestic Financial Sector

Gradimir Kožetinac¹

ABSTRACT – *The role of foreign direct investment (FDI) has been widely recognised as a growth-enhancing factor in developing countries and transition economies. Most of these countries rely primarily on FDI as a source of external finance because FDI stimulates economic growth more than other sources of capital inflows. There are a variety of channels through which FDI can promote economic growth in the host country. The most important being is technology transfer and spillovers. Recent theoretical and empirical literature suggests that the development of the domestic financial system of the host country is an important pre-condition for foreign direct investment to have a positive impact on economic growth. A well-developed financial system can help to mobilise savings and monitors investment projects, which in turn, contribute to higher economic growth. Particularly, a more developed financial system positively contributes to the process of technological diffusion associated with foreign direct investment. In this paper, we examine the link between foreign direct investment, domestic financial sector, and economic growth, thereby relying on the theoretical and empirical literature. We focused, in particular, on the role of local financial markets and the link between foreign direct investment and growth. The empirical evidence suggest that FDI inflows exerted positive impact on economic growth in the short-run and the long-run if the domestic financial system has achieved a certain minimum-level development. However, the level of development of local financial markets is crucial for these positive effects to be realized.*

KEY WORDS: *foreign direct investment, financial sector development, economic growth, financial markets, technology spillovers*

Introduction

There is a general theoretical consensus among development economists that foreign direct investment (FDI) inflows are likely to play a critical role in explaining growth of recipient countries. FDI inflows in fact represent additional resources a country needs to improve its economic performance and provides both physical capital and employment possibilities that may not be available in the host market. In recent times, the importance of FDI has been taken for granted. As a consequence, the debate among academics and policymakers has shifted from whether or not countries should attract FDI to how countries can attract and reap the full benefits that come with FDI.

Any discernible positive growth effects for FDI occur not so much *via* investment as *via* efficiency or total factor productivity. The impact of FDI depends on a multitude of factors, such as the level of technology used in domestic production in the host country, the level of education of the host country workforce, institutional development, and the level of financial sector (or financial development). All these factors contribute to whether the host country in question can „absorb“ and hence benefit from FDI. The last factor- financial development- is very important. If foreign firms introduce new products or processes to the domestic market, domestic firms may benefit from accelerated diffusion of new technology. In other situations, technology diffusion might occur from labor turnover as domestic employees move from foreign to domestic firms. Namely, FDI exerts demonstration, competition, and linkages effects on domestic producers which coax them to invest in upgrading their technologies and practices. This requires, especially for new and potential entrepreneurs who lack internal funds, the

¹ Gradimir Kožetinac, Belgrade Banking Academy, Belgrade

presence of financial institutions that can provide access to external finance and can better allocate and monitor these funds. The development of domestic financial institutions is also crucial in determining to what extent foreign firms can borrow so as to extend their innovative activities to the domestic economy.

The development of the financial system of the recipient country is an important precondition for FDI to have a positive impact on economic growth. The financial system enhances the efficient allocation of resources and in this sense it improves the absorptive capacity of a country with respect to FDI inflows. The contribution of this paper is to emphasise the role of well-developed financial system plays in enhancing the positive relationship between FDI and economic growth.

The paper is structured as follows. Theoretical framework of FDI inflows and growth is discussed in section 2. The third section emphasises the importance of technological diffusion and the role of FDI, as well as the contribution the financial system can make in this respect. Finally, the fourth section provides a summary and concluding remarks.

Theoretical framework of FDI flows and growth

The economic impact of FDI remains more contentious in empirical than in theoretical studies. The empirical literature on FDI-growth relationship focusing on both developed and developing countries (included transitional economies) . While many studies observe positive impacts of FDI on economic growth, others also reported a negative relationship. Among the main reasons for this controversy remain data insufficiency and methodological flaws. Research that focuses on data from only less developed countries (and transitional economies) has tended to find a clear positive relationship, while studies that have ignored this distinction, or have focused on data from only developed countries have found no growth benefit for the recipient country. The following table shows the chosen results of empirical studies published in the 2001-2006 period.

Table 1. FDI - growth relationship: the results of empirical studies published in the 2001-2006 period

Studies	Sample	Period	Effects of FDI on growth
Nair-Reichert and Weinhold (2001)	24 developing countries	1971-1995	Significant and positive
Campos and Kinoshita (2002)	25 transitional economies	1990-1998	Positive
Choe (2003)	80 countries	1971-1995	Positive but weak
Hermes and Lensink (2003)	67 developing countries	1970-1995	Positive for 37 countries (Latin America and Asia region), for all others no effect
Mencinger (2003)	8 transition countries	1994-2001	Robust negative causal relationship between FDI and growth
Alfaro, et.al. (2004)	Different samples 71 countries	1975-1995	Positive effect. Regression analysis has suggested that FDI is associated with faster growth only in host economies with comparatively well developed financial markets
Hansen and Rand (2004)	31 developing countries	1970-2000	Positive
Li and Liu (2005)	84 countries	1970-1999	Positive
Busse and Groizard (2006)	82 countries	1975-2003	Effect depends on regulations and institutional framework
Lensink and Morrissey (2006)	87 countries	1975-1997	Positive

While there is yet no absolute consensus on the relationship between FDI and growth, there is a growing view in recent years that FDI is positively correlated with growth. Theoretically, this view has

been bolstered by growth theory, which highlight the importance of improvements in technology, efficiency, and productivity in stimulating growth. In this regard, FDI's contribution to growth comes through its role as a conduit for transferring advanced technology from the industrialized to the developing economies. FDI increases the rate of technical progress in the host country through a „contagion“ effect from the more advanced technology and management practices used by foreign firms².

Theory of foreign direct investment

Theory of foreign direct investment asserts that the basis for such investment lies in the transaction costs of transferring technical and other knowledge. In general, the theory of FDI answers the question as to why a firm would to produce in a foreign location (where indigenous firms have superior knowledge of the local market, consumer preference, and business practices) instead of exporting or entering into a licensing arrangement with a local firm. There are two main reasons why a firm would want to become a multinational one. One reason is to better serve the local market, and the other is to get lower-cost inputs. FDI to serve local markets is often called „horizontal“ or „market-seeking“ FDI since it normally involves building duplicate plants in a foreign location to supply the market there. The motive is to reduce the cost involved in supplying the market (such as tariffs or transport costs) or to become more competitive in other ways – such as through proximity to the market and being able to respond to changing local circumstances and preferences. FDI in search of low-cost inputs is often called „vertical“ or „production cost-minimizing“ FDI since it involves slicing the vertical chain of production and relocating part of the chain in a low cost location³. Both horizontal and vertical FDI may tend to cluster in a certain location (sometimes referred to as „agglomeration“) perhaps because of linkages among projects, creating incentives to locate close to other firms. An example may be regional groupings of service suppliers. While the distinction between horizontal and vertical FDI is useful, they are not mutually exclusive. At times, we may find one plant serving both functions (Shatz and Venables, 2000).

A firm must be satisfied three conditions to engage in FDI. First, the firm must possess ownership of some firm-specific tangible or intangible asset or skill that gives it an advantage over other firms (ownership advantage). Second, it must be more beneficial for the firm to use or exploit the firm-specific asset itself than to sell them or lease and license them to other firms⁴. Third, it must be more profitable to use these advantages in combination with at least some factor inputs located abroad (locational advantage). Otherwise, the foreign market could be served exclusively through exports.

Three important theories of FDI are: neoclassical economic theory, dependency theory and industrial organization theory. *Neoclassical economic theory* propounds that FDI contributes positively to the economic development of the host country and increases the level of social wellbeing. The foreign investors are usually bringing capital in to the host country, thereby influencing the quality and quantity of capital formation in the host country. The inflow of capital and reinvestment of profits increases the total savings of the country.

Dependency theory argues that foreign investment from developed countries is harmful to the long-term economic growth of developing nations. It asserts that First World nations became wealthy by extracting labour and other resources from the Third World nations. It further argued that developing countries are inadequately compensated for their natural resources and are thereby sentenced to conditions of continuing poverty.

According to the *industrial organisation theory*, FDI represents not simply a transfer of capital, but the transfer of a „package“ in which capital, management, and new technology are combined (Hymer,

² This contagion or knowledge diffusion (often referred to as externalities or efficiency „spillovers“) can lead to improvements in productivity and efficiency in local firms.

³ Vertical FDI also encompasses what is commonly called „raw material-seeking“ FDI since the inexpensive input could be primary commodities or raw materials in a specific location.

⁴ For instance, the firm-specific asset might be a brand name or a nonpatentable technical/managerial skill or process, which the firm might find in its interest to keep internally instead of licensing (internalization)-in order to prevent the asset from being replicated by competitors.

1976). FDI is more than a process by which financial assets are exchanged internationally and involves international production. Caves (1971) and Kindleberger (1984) extended the industrial organisation theory of FDI by emphasising the behaviour of the firms that deviate from perfect competition as the determinants of FDI. They are of the view that in comparison to the domestic firms, multinational corporations (MNCs) face a number of problems such as geographical distances in managing enterprises, linguistic, and cultural barriers. When a firm undertakes FDI in a foreign country, it must possess some special ownership advantages over domestic competitors (marketing and management skills, patent-protected superior technology, cheaper source of financing). FDI entails a cross-border transfer of a variety of resources, including process and product technology, managerial skills, marketing and distribution know-how, and human capital⁵.

Therefore, the new growth theories (unlike the neoclassical growth theory) focused on the creation of technological knowledge and its transmission: innovation and imitation efforts that respond to economic incentives are considered to be a major engine of growth. It emphasises the role of research and development (R&D), human capital accumulation, and externalities.

Models of growth

Neoclassical models of growth as well as endogenous growth models provide the basis for most of the empirical work on the FDI-growth relationship. The relationship has been studied by explaining four main channels: (a) determinants of growth, (b) determinants of FDI, (c) role of multinational firms in host countries, and (d) direction of causality between the two variables. As opposed to the limited contribution that the neoclassical growth theory accredits to FDI, the endogenous growth literature points out that FDI can not only contribute to economic growth through capital formation and technology transfers, but also do so through the augmentation of the level of knowledge through labor training and skill acquisition (De Mello, 1997, 1999). In the framework of endogenous growth models, three main channels can be detected through which FDI affects growth. First, FDI increases capital accumulation in the receiving country by introducing new inputs and technologies. Second, it raises the level of knowledge and skills in the host country through labor and manager training. Third, FDI increases competition in the host country industry by overcoming entry barriers and reducing the market power of existing firms (Dunning, 1993).

De Mello (1999) has pointed out that the impact of FDI on economic growth is expected to be two-fold. First, growth is achieved through capital accumulation in the host country. The inflow of FDI may increase the stock of domestically available physical capital and thus the economic growth of the recipient country. In this case, the increase of physical capital through FDI might have only transitory impacts on the economic growth of the recipient country. This theoretical argument is based on the premise that FDI complements domestic investment.

Next to the direct increase of capital formation of the recipient economy, FDI may also help increasing growth by introducing new technologies, such as new production processes and techniques, managerial skills, ideas, and new varieties of capital goods (spillover effects). The one principal characteristic of FDI that distinguishes it from other sorts of capital flows is its ability to transmit technology and know-how, broadly defined to include managerial and marketing know-how. The growth rate of developing countries is perceived to be highly dependent on the extent to which these countries can adopt and implement new technologies available in developed countries. One important channel through which adoption and implementation of new technologies and ideas by LDCs may take place is FDI. FDI promotes technology spillovers that constitute the major contribution of FDI to development.

There are several channels through which such spillovers occur. The spillover may take place through *demonstration* or *imitation* channel. Spillovers through the demonstration channel emphasises that technologies used by foreign firms are more advanced than those used by domestic firms, and that these domestic firms may imitate the newer technologies, which will make them more productive.

⁵ Earlier theorists neither calculated the benefits and costs of technology transfers, nor analysed their impacts on a host country via spillover effects.

Therefore, the imitation channel is based on the view that domestic firms may become more productive by imitating the more advanced technologies or managerial practices of foreign firms (the more so the greater the technology gap). In the absence of FDI, acquiring the necessary information for adopting new technologies is too costly for local firms. FDI lowers the cost of technology adoption and may expand the set of technologies available to local firms.

Another type of channel (referred to as *competition* channel) occurs when local firms are forced to use existing technology and resources more efficiently, or to search for more efficient technologies, because the entrance of foreign firms has increased competitive pressure in the local market. The spillover may take place through effect of *training* channel. The training channel arises if the introduction of new technologies requires an upgrading of domestically available human capital. New technologies can only be adopted when the labour force is able to work with them. The entrance of when an affiliate demonstrates new techniques to and trains local workers, who later accept employment in local firms or star foreign firms may give an incentive to domestic firms to train their own employees. If labour moves from a multinational to a local firm (through labour turnover), the physical movement of workers causes knowledge to move between firms. Finally, spillovers can occur through *linkages* channel. The linkages channel stresses that foreign firms may transfer new technology to domestic firms through transactions with these firms. By purchasing raw materials or intermediate goods a strong buyer-seller relationship may develop that gives rise to technical assistance or training from the foreign firm to the domestic firm.

The adoption of new technologies and management skills requires inputs from the labour force. High-level capital goods need to be combined with labour that is able to understand and work with the new technology. Therefore, technological spillover is possible only when there is a certain minimum, or *threshold* level of human capital available in the host country⁶. This suggests that FDI and human capital are complementary in the process of technological diffusion.

The message of all this is clear. Externalities or spillovers of technology are significant sources of growth and technical change, and FDI is a major *engine* of such spillovers. Increased volumes of FDI alone, however, are unlikely to generate widespread spillovers. In the absence of the necessary ingredients and cooperant factors such as local R&D and human skills, spillovers from FDI may be limited. Foreign direct investment is a catalyst of technical change and growth. It cannot be expected to be the prime mover. The absorptive capacity of the host country affects the volume and type of FDI inflows⁷.

Foreign direct investment and domestic financial sector

While many studies observe positive impacts of FDI on economic growth, others also reported weak support for an exogenous positive effect of FDI on economic growth. Findings in latter studies indicate that a country's capacity to take advantage of FDI externalities might be limited by local conditions, such as the development of the local financial markets or the educational level of the country, i.e., absorptive capacities. In an effort to further examine the effects of FDI on economic growth, economic research of many economists emphasize the role of financial institutions in this process.

Almost a century ago, Schumpeter (1912)⁸ recognized the importance of well-developed financial intermediaries in enhancing technological innovation, capital accumulation, and economic growth. It can be argued that well-functioning financial markets by lowering the costs of transactions, ensures that capital is allocated to the projects that yield the highest returns, and therefore enhances growth rates. Well-known early protagonists of this view include Goldsmith (1969), McKinnon (1973), and

⁶ Borensztein, De Gregorio, and Lee (1998) show that FDI brings technology, which translates into higher growth only when the host country has a minimum threshold of stock of human capital.

⁷ The type of FDI depends on institutional factors, such as, the recipient country's trade regime, legislation, political stability and scale factors, such as balance of payment constraints and the size of the domestic market for goods produced through FDI.

⁸ Schumpeter, Joseph A. (1912), „Theorie der wirtschaftlichen Entwicklung (The Theory of Economic Development), Leipzig: Dunker and Humblot (translated by Redvers Opie, Cambridge, Massachusetts: Harvard University Press, 1934).

Shaw (1973). The development of financial markets is necessary and sufficient to foster the adoption of best-practice technologies and learning by doing process. Limited access to credit markets restricts entrepreneurial development.

King and Levine (1993a, 1993b, 1993c) and Levine (1997) re-established the importance of efficient financial markets. Apart from having a first order impact on growth, financial development also affect other aspects of economic development. Financial development can make foreign aid work better for aid recipient countries⁹. An agreed view of the functions of financial development identify the following functions: (1) channelizing resources efficiently, (2) mobilizing savings, (3) reducing information asymmetry problem, (4) facilitating trading, (5) hedging, (6) pooling and diversification of risk, (7) aiding the exchange of goods and services, and (8) monitoring managers by exerting corporate control.

The work on endogenous growth model has focused the role of domestic financial sector as a mechanism in transferring the technology level between international capital inflows and economic growth. A well-developed financial system may contribute to economic growth through two main channels. On the one hand, it mobilises savings, which may increase the volume of resources available to finance investment. On the other hand, it monitors investment projects, lowering information acquisition costs and increases the efficiency of on going projects¹⁰.

Alfaro, Chanda, Kalemli-Ozcan and Sayek (2004), Durham (2004), and Hermes and Lensink (2003) provide evidence that countries with better financial systems and financial market regulations can exploit FDI more efficiently and achieve a higher growth rate. These studies argue that countries need not only a sound banking system, but also a functioning financial market to allow entrepreneurs to obtain credit to start a new business or expand an existing one. The deeper financial systems absorb capital inflows such as, equity foreign portfolio investment, and even FDI more effectively especially in the case of fungible flows. Thus, we may concluded that a well-functioning financial system promotes higher economic growth by absorbing the benefits embodied in the foreign capital flows, especially in the form of FDI.

Alfaro, et.al. (2004) examine whether economies with better-developed financial markets are able to benefit from FDI to promote their economic growth. These authors found that although FDI alone plays an ambiguous role in contributing to economic growth, having well-developed financial markets alters the results significantly. They found, too, that this result holds true even after controlling for a large number of other variables that have significant influences on economic growth and also after addressing concerns regarding endogeneity. If entrepreneur adopts new technologies made available by FDI, then the absence of well-developed financial markets limits the potential positive FDI externalities. The economies with well-developed financial markets are able to benefit more from FDI in promoting their economic growth. An improvement in the efficiency of the domestic financial sector tends to reduce the threshold level of entrepreneurship. This implies that an improvement in the efficiency of the financial sector increases the social marginal product of FDI.

The better financial markets can enhance the effects of FDI on output. In practice, financial markets affect both the financing of investment and day-to-day business activities. Hence, well-efficient domestic financial markets encourage entrepreneurial activities and output. Consequently, it attracts more FDI.

The financial system in general and specific financial institutions in particular, may help to reduce risks associated to upgrade existing technology or adoption of new technologies introduced by the firms. Thus, the financial institutions positively affect the speed of technological innovation, thereby enhancing economic growth. The technological spillover can take place when domestic firms are willing to invest in order to upgrade their own technology or adopting new technologies based on demonstration effect, competition effect, linkage effect or training effect. Hermes and Lensink (2003) investigate the association of FDI and growth and argue that the development of the domestic financial system of the recipient country is an important precondition for FDI to have positive impact on economic growth. They have come up with several justifications as to why a developed financial system

⁹ See, Nkusu and Sayek (2004).

¹⁰ For detailed discussion, see Levine (1997).

should have a positive impact of FDI. A developed financial system mobilizes savings efficiently which, in turn, expand the amount of resources available to finance investment. Also, it filters and monitors investment projects by reducing information acquisition costs. Financial development also speeds up adoption of new technologies by minimizing the risk associated with it. With developed financial infrastructure, the foreign firms are able to judge how much they can borrow for innovative activities and are able to make ex-ante planning about their investments¹¹. Financial development also increases liquidity and, thus, facilitates trading of financial instruments and timing and settlement of such trades (Levine, 1997). This will also lead to greater FDI inflows as the projects can be undertaken with lesser time being spent in settling the trades.

The association between financial development and FDI inflows is positive after a threshold level of financial development is reached¹². Better financial institutions attract greater foreign capital. But, for significantly higher levels of financial development, the impact is negative. Once the country reaches substantially higher levels of financial development, lesser and lesser foreign investment is needed to boost the economy. Domestic investment is adequate to sustain and pace up the growth rate of such economies.

Although most FDI relies on capital from abroad, it is important to recognize that the spillovers for the host economy might crucially depend on the extent of the development of domestic financial markets. There are different ways in which financial markets matter. The spillovers are restricted to only cost-less improvements in the organization of the workforce. In particular, to take advantage of the new knowledge, local firms need to alter everyday activities and reorganize their structure, buy new machines, and hire new managers and skilled labor. Although some local firms might be able to finance new requirements with internal financing, the need for external finance is obviously: the greater the technological-knowledge gap between their current practices and new technologies, the greater the need for external finance. However, in most cases, external finance is restricted to domestic sources. Furthermore, the lack of financial markets also can constrain potential entrepreneurs. This is especially true when the arrival of an entirely new technology brings with it the potential to tap not just domestic markets, but export markets.

Well-functioning stock markets, by increasing the spectrum of sources of finance for entrepreneurs, play an important role in creating linkages between domestic and foreign investors. The interaction between financial markets and growth has been studied extensively and has reached positive conclusions – namely, that well-developed financial markets promote economic growth. The theoretical framework has been well established in the literature with supporting evidence at the country level reported in the empirical studies such as those of King and Levine (1993a, 1993b) and Beck, Levine and Loayza (2000). King and Levine and Beck, et al., suggest that financial systems are important for both productivity and development. In an analysis of the roles of different types of financial institutions, Levine and Zevros (1998) show that stock markets and banks provide different services, but both stock market liquidity and banking development positively predict growth, capital accumulation, and productivity improvements. At the level of economic subjects (firms), Rajan and Zingales (1998) found that the state of financial development reduces the cost of external finance to firms, thereby promoting growth. Wurgler (2000) shows that even if financial development does not lead to higher levels of investment, it seems to allocate existing investment better and hence promotes economic growth.

¹¹ It is argued that multinational corporations transfer modern technology and know-how to their foreign affiliates may depend on capacity to absorb FDI, openness to trade and institutional development of the host country. The other factors such as rule of law, the degree of corruption, the quality of public management, the protection against property rights infringements and discretionary government interference is also very important in attracting FDI [Nunnenkamp and Spatz (2004)].

¹² Overall financial development and FDI have a concave relationship. At very low levels of financial development, the relationship becomes ambiguous. For such levels of financial development, firms suffer from constrained cash flows and, thus, cannot attract greater FDI inflows. The relationship is ambiguous in the sense that FDI inflow occur due to factors other than financial development (see, Rioja and Valev, 2004).

Conclusions

FDI can affect growth in two ways, directly, by increasing the amount of physical capital by bringing new inputs and technologies to the recipient economy, and indirectly by human capital augmentation, *via* technology or knowledge transfers. Therefore, through both channels, FDI is a crucial factor of technology diffusion in the host country. The volume and type of FDI and its impact on the host economy may depend on country-specific characteristics, such as the host economy's trade regime, legislation, political stability, and its scale factors such as balance of payments constraints, the size of domestic market for goods produced *via* FDI, etc.

There exists a wide body of empirical literature which tries to explain the FDI and GDP relationship. The human capital seems to be an important factor that allows the host country to benefit from positive knowledge spillovers that result from the presence of FDI. Another strand in the empirical literature investigates the relationship between FDI and growth underlining the importance of well developed financial markets in the recipient country. In the previous century Schumpeter recognized the importance of well-developed financial intermediaries in enhancing technological improvement, capital accumulation, and economic growth. The Schumpeterian tradition has been reviewed in the recent empirical studies that devote a lot of attention to the interaction of financial markets in searching for the influence of FDI on economic growth. The findings of these studies provides supporting evidence that a well-developed financial sector can represent a source of comparative advantage for the country, having better ability to absorb the positive impact of FDI and promoting economic performance. In other words, FDI promotes economic growth in economies with sufficiently developed financial systems. Secondly, developing countries (and economies in transition) are unable to reap the benefits of FDI inflows in the absence of development of domestic facilities such as infrastructure, financial system evolution, human capital development and macroeconomic stability cannot take place. Finally, a host country can influence the technological change through extending its absorptive capacity by further promoting financial sector reforms to gain sustainable economic growth and make productive use of FDI inflows. This implies that to take the advantage of positive interaction between FDI and growth, one should liberalise the economy particularly, stimulate financial sector development in the economy.

References

- Alfaro, Laura, Areendam Chanda, Sebnem Kalemli-Ozcan and Selin Sayek (2004). "FDI and Economic Growth: The Role of Local Financial Markets", *Journal of International Economics*, Vol. 64, Issue 1, October, pp. 89-112.
- Beck, Thorsten, Ross Levine and Norman Loayza (2000), "Finance and the Sources of Growth", *Journal of Financial Economics*, Vol. 58, pp 261-300.
- Borensztién, Eduardo, Jose De Gregorio, and Jong-Wha Lee (1998), "How Does Foreign Direct Investment Affect Economic Growth", *Journal of International Economics*, Vol. 45, pp. 115-135.
- Busse, Matthias and José Luis Groizard (2006), *Foreign Direct Investment, Regulations, and Growth*, World Bank Policy Research, Working Paper Series, No.3882, April, pp.1-26.
- Campos, Nauro F. and Yuko Kinoshita (2002), "Foreign Direct Investment as Technology Transferred: Some Panel Evidence from the Transition Economies", William Davidson Institute (at the University of Michigan Business School), Working Paper No.438
- Caves, Richard E. (1971), "International Corporations: The Industrial Economics of Foreign Investment", *Economica*, Vol. 38, pp. 1-27.
- Caves, Richard E. (1982), "Multinational Enterprise and Economic Analysis", New York: Cambridge University Press.
- Choe, Jong.I. (2003). "Do Foreign Direct Investment and Gross Domestic Investment Promote Economic Growth?", *Review of Development Economics*, Vol.7, Issue 1, pp. 44-57.
- De Mello, Luiz R. Jr. (1997). *Foreign Direct Investment in Developing Countries and Growth: A Selective Survey*, *Journal of Development Studies*, 34 (1), pp. 1-34.
- De Mello, Luiz R. Jr. (1999), "Foreign Direct Investment-led Growth: Evidence from Time Series and Panel Data", *Oxford Economic Paper*, Vol. 51, pp. 133-151.

- Dunning, John H. (1993), „Multinational Enterprise and the Global Economy“, Washington, D.C.: Berks: Addison-Wesley.
- Durham, Benson J. (2004), „Absorptive Capacity and the Effects of Foreign Direct Investment and Equity Foreign Portfolio Investment on Economic Growth“, *European Economic Review*, Vol. 48(2), April, pp. 285-306.
- Goldsmith Raymond W. (1969), „Financial Structure and Development“, New Haven: Yale University Press.
- Hansen, Henrik and John Rand (2004), „On the Causal Links Between FDI and Growth in Developing Countries“, Institute of Economics, University of Copenhagen, Discussion Paper 04-30, December, pp. 1-28.
- Hermes, Niels and Robert Lensink, (2003), „Foreign Direct Investment, Financial Development and Economic Growth“, *The Journal of Development Studies*, Vol. 40(1), October, pp. 142-163.
- Hymer, Stephen H. (1976), „The International Cooperation of National Firms: A Study of Foreign Direct Investment“, Cambridge, Mass: MIT Press.
- Kindleberger, Charles P. (1984), „Multinational Excursions“, Cambridge MA (USA): MIT Press.
- King, Robert G. and Ross Levine (1993a), „Financial Intermediation and Economic Development“, in *Financial Intermediation in the Construction of Europe*, (eds.): Colin Mayer and Xavier Vives, London: Centre for Economic Policy Research, pp. 156-189.
- King, Robert G. and Ross Levine 1993b), „Finance and Growth: Schumpeter Might Be Right“, *Quarterly Journal of Economics*, Vol. 108(3), pp.717-737.
- King, Robert G. and Ross Levine 1993c), „Finance, Entrepreneurship, and Growth: Theory and Evidence“, *Journal of Monetary Economics*, Vol. 32(3), pp. 513-542.
- Lensink, Robert and Oliver Morrissey (2006), „Foreign Direct Investment: Flows, Volatility, and the Impact on Growth“, *Review of International Economics*, Vol 14(3), pp. 478-493.
- Levine, Ross (1997), „Financial Development and Economic Growth: Views and Agenda“, *Journal of Economic Literature*, Vol. 35, pp. 688-726.
- Levine, Ross and Sara Zervos (1998), „Stock Markets, Banks and Economic Growth“, *American Economic Review*, Vol. 88(3), June, pp. 537-558.
- Li, Xiaoying and Xiaming Liu (2005), „Foreign Direct Investment and Economic Growth: An Increasingly Endogenous Relationship“, *World Development*, Vol. 33, No.3, March, pp.393-407.
- McKinnon, Ronald I. (1973), „Money and Capital in Economic Development“, Washington, D.C.: Brookings Institute.
- Mencinger, Jože (2003), „Does Foreign Direct Investment Always Enhance Economic Growth?“, *Kyklos*, Vol.56, Issue 4, pp. 491-508.
- Nair-Reichert, Usha and Diana Weinhold (2001), „Causality Tests for Cross-Country Panels: A New Look on FDI and Economic Growth in Developing Countries“, *Oxford Bulletin of Economics and Statistics*, Vol. 63(2), pp. 153-171.
- Nkusu, Mwanza and Selin Sayek (2004), „Local Financial Development and Aid-Growth Relationship“, IMF, Working Papers, No. 04/238, December, pp.1-34.
- Nunnenkamp, Peter and Julius Spatz (2004). „FDI and Economic Growth in Developing Economies: How Relevant are Host-Economy and Industry Characteristics?“, *Transactional Corporations*, Vol. 13(3), pp. 53-83.
- Rajan, Raghuram G. and Luigi Zingales, (1998). „Financial Dependence and Growth“, *American Economic Review*, Vol. 88(3), pp. 559-586.
- Rioja Felix and Neven Valev (2004). "Finance and the Sources of Growth at Various Stages of Economic Development," *Economic Inquiry*, Oxford University Press, vol. 42(1), January, pp. 127-140.
- Schumpeter, Joseph A. (1912), „Theorie der Wirtschaftlichen Entwicklung (The Theory of Economic Development), Leipzig: Dunker and Humbolt (translated by Redvers Opie, Cambridge, Massachusetts: Harvard University Press, 1934).
- Shatz, Howard J. and Anthony J. Venables (2000), „The Geography of International Investment“, The World Bank, Development Research Group, Policy Research Working Paper, No. 2338, May, pp. 1-34.
- Shaw, Edward S. (1973), „Financial Deeping in Economic Development“, New York: Oxford University Press.

Competitiveness in Banking Sector of Serbia¹

Marija Lazarević², Milica Mladenović³

ABSTRACT – *As a positive effect of implemented macroeconomic reforms of financial system of Serbia, Serbian banking sector, according to solvency criteria, is visible in comparison to neighboring countries. Regulative reforms of this sector were primarily directed at acquisition of foreign investors and competitive climate. This paper examines and evaluates current level of internal competitiveness of banking sector in Serbia. Based on many earlier researches, carried out by official competent institutions, the paper presents a number of tables aimed at presentation of current market structure state and mentioned sector services. The greatest part of this paper is dedicated to the analysis of the data in the context of determination of banking market internal competitiveness factor and evaluation of conditions in Serbian banking according to given criteria. In accordance with conclusions of already mentioned analysis, as well as short comparison with structure of banking sectors of neighboring countries, the general conclusion is that banking market competitiveness in Serbia is still at very low level. From the aspect of banking services expansion, the banking sector of Serbia still has a chance for development and improvement, thus, it has great investment potentials. The last part of the paper comprises the short view of possible directions of further development of banking sector in Serbia.*

KEY WORDS: *banking sector, competitiveness, development, reform*

Introduction: the history of banking sector of Serbia

Key words to describe the state of financial system in socialist countries would be: oligopoly, inexistence of profit driven business and bad and unqualified management; so, two facts and one assessment (which could be argued easily). Financial system in centrally planned economies, the Central bank and few commercial *state owned* banks, had a very simple role to allocate the financial resources as it was established by the *plan* and no member of this system functioned independently. Loans have been approved to (state/socially - owned) enterprises with negative interest rates without any verification and/or valuation of their credit ability. Besides this, in case of foreign loans, banks took all the risk to themselves. On the other hand, (centrally planned) prices, artificially kept at very low level, have not stimulated the production, so the huge business losses appeared; they were, again, absorbed by the banks relying on the monetary emissions. Liberalization of the market in the 80's and 90's has faced most of the state/socially – owned enterprises to bankruptcy but despite to this, they would continued their business since their closing would present a huge social loss. Survival of these enterprises was provided by loans or money emissions. In this way, banking system, once again, absorbed all the economic loss and the notion of «bankruptcy» was left aside to wait a period of transition.

However, the thing that certainly separates the history of Serbian banking system, in comparison to the other ex socialist economies, is the ill-fated period of the 90's when this system had been «reformed» to even worse state. In the years of 1992/93, the Law on banks and other financial institutions and the Law on Central Bank were established. New institutional framework had not abolished soft budget constraints nor sanctioned adequately illiquidity, and the notions of financial and banking systems were practically synonyms. In 1992 the foreign-currency savings was frozen, the record hyperinflation

¹ This paper is a part of researching project no.159004, financed by the Ministry of Science and Technological Development of Republic of Serbia, named: "The Integration of Serbian Economy into the EU - Planning and Financing of Regional and Rural Development and Enterprise Development Policy"

² Marija Lazarević, Institute of Economic Sciences, Belgrade

³ Milica Mladenović, University of Nice

was recorded (both in this and in the year that follows), banks with so-called pyramidal savings first emerged so they would be very fast shipwrecked altogether with the savings. The five large state-owned banks dominated the market, doing business mostly in the service of politics, and besides them, the unbelievable number (in comparison to the economies of similar size) of small state and privately owned banks, of which majority was insolvent, functioned (by the end of 2000 there were 82 of them). So in this way, new Government in 2000, aside with unreformed and dysfunctional banking system with huge losses, faced as well the reflectivity and distrust of the citizens and industry in the banking system.

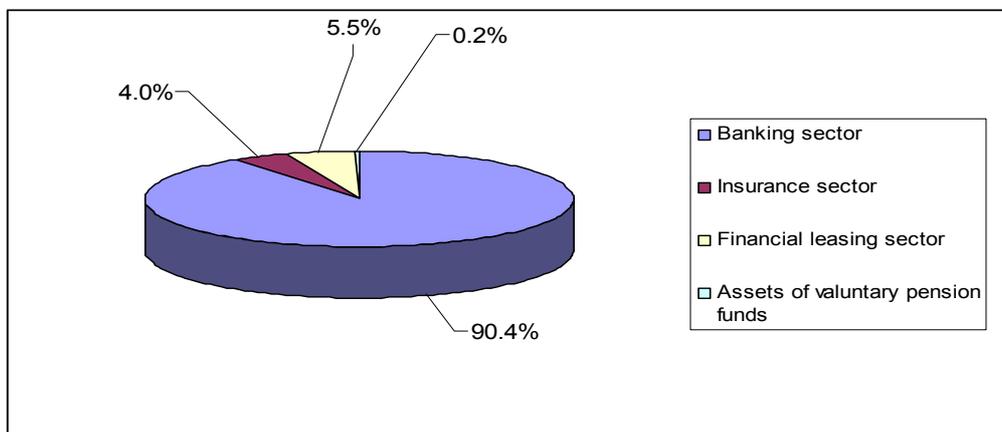
Despite of specific past and time delay lag of about ten years, the reform of banking sector in Serbia had followed the similar path as in the other economies in transition. The common factor of the reforms, in all Balkan countries in transition, is gradualism. Every single one country avoided radical changes of their financial systems so they liberalized financial markets and stimulated autonomy of the commercial banks leaving the mono-banking system little by little. Many researches have shown that the key element of the reforms in banking systems of these countries was ownership.

The year of 2001, when the Government approved the strategy for recovery of the banking system, is considered as the start up year of (true) reforms in Serbia. This was the foundation for categorization the banks in four groups based on their solvency, liquidity and profitability. In the following year the Law on bankruptcy was established according to which four largest state-owned banks (Jugobanka, Beogradska Banka, Beobanka and Investbanka) were put down, while the others were merged or remained under supervision until their final privatization. In 2001 the entrance of foreign banks to the banking market of Serbia was enabled, in order to encourage the competition, and the first foreign banks that penetrated the market (in the same year) were Raiffeisen and HVB. The low of Central Bank was improved with the amendments which enabled functioning of these institutions in the proper range. In the years that come, an intense privatization of the banking sector has been continued as well as the stimulation of the internal competitiveness and working to gain trust back from the citizens in this sector.

Evaluation of banking sector position in Serbia

Banking sector transformation in Serbia stated in 2001. Since that period, when on Serbian market was existing more than 90 banks; Serbian banking system has been passing through deep changes. Privatization, foreign investors entering, sophisticated technology and methods implementation caused capacity, profitability and productivity growth of national banking. Upon the finished restructuring and rehabilitation process, the banking sector has become the most dynamic and the most important segment of Serbian financial market.

Chart 1. Financial Sector Structure in Serbia (u %)



The national banking system, upon the years of reforming changes, in the recent years is transformed obtaining the properties and attributes of developed economies banking sector. In relation to year 2000, the number of banks is seriously decreased. According to National Bank of Serbia report concerning the second quarter of 2008, the banking sector of Serbia comprises 34⁴ banks with 2.564 business units, subsidiaries, branches, desks, agencies and exchange offices, which represent 129 more in respect to the end of 2007, and 406 in comparison to the end of 2006.

Constant decreasing of banks number on our market was accompanied by bank services distribution network enlargement and a number of employees growth in banking sector. In the period 2003-2008 the number of bank's units is increasing by average annual rate of 11.84%. Banking sector in Serbia in 2008 counts on 31.331 employed persons that is 1.4 times more in respect to 2003, namely, in year when banking sector comprised 47 banks.

Table 1. Banking Sector in Serbia (2003-2008)

	2003	2004	2005	2006	2007	2008
Number of banks	47	43	40	37	35	34
Number of organization units	1465	1709	1867	2158	2435	2564
Number of employees	22310	23463	25680	28092	30246	31.331

Source: National Bank of Serbia

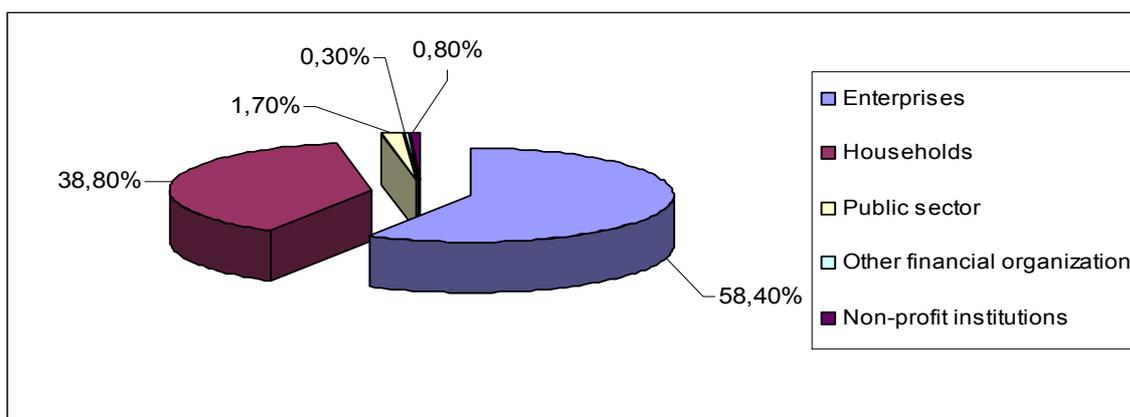
The top players on Serbian banking market, counting on 75% participation on balance amount, are the banks majority owned by foreign shareholders. Five banks of major balance amount, over 100.000 billions Dinars have market share of 46.2%. Concerning the balance assets, the major market share of 11% pertain to Banka Intesa, the second position belongs to recent leader, Raiffeisen bank, then Hypo Alpe/Adria/Bank, Komercijalna Banka and Eurobank EFG. The greatest progress, according to monitored indicator, last year realized AIK Banka.

Bank's financial sources review points to banks credits in foreign countries decrease, which in context of credit expansion, leads to conclusion that stable financial sources banks can find, to great extend, at domestic deponents, and that deposits have an important role in financial source structure.

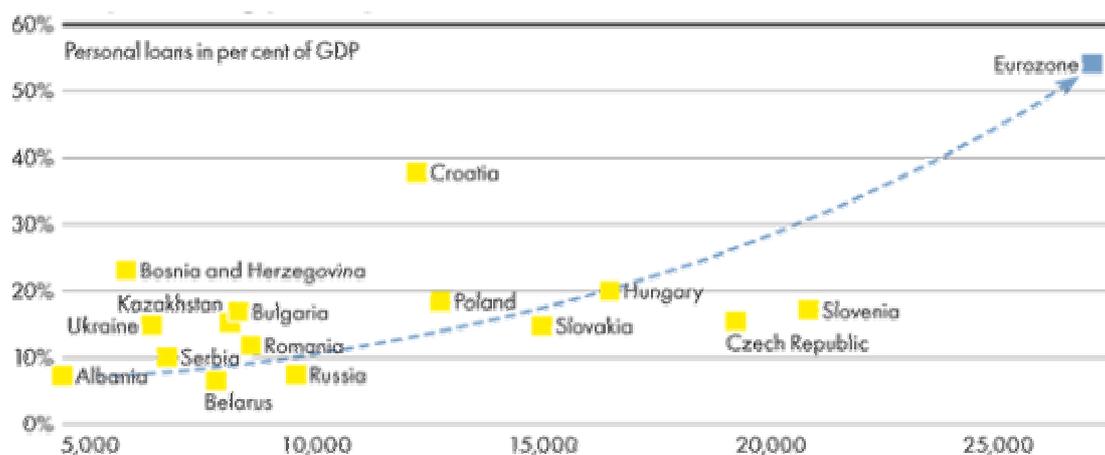
In second quarter of 2008, banks' deposit potential amounted 984.302 millions dinars. In comparison to first quarter 2008 results, currency potential is decreased for 2.6 billions Dinars. Share of 47.4% in total deposit potential and realized growth of 38.8 billions Dinars in respect to year 2007, besides the growth of 9.37 billions Dinars comparing to first quarter 2008, the citizens' deposits have the dominant position regarding deposit structure. The population in first months of 2008 was very economic, depositing foreign currency into national banking system

The population saving growth, refinancing and banks' borrowing abroad impacted to banks' credit activities reinforcement. The banking sector credit activity in 2008 concerning the previous year is increasing for 109.9 billions Dinars that is, 4.7% respecting the monitored year first quarter results. The structure of banks' placement implies the major placements in industry, contrary to year 2007, when placements to industry and citizens, concerning the growth rate, were equal. In the period 2006/2008, it was noticed the placement to citizens increase, particularly regarding the expansion of credits for individual housing construction. Placement share of individual housing construction is permanently growing, from 8.7% share in 2006, its participation has achieved 13.1% (2008). If uncontrolled credit expansion trend in Serbia will be continued in the future period, the consequences could be severe, such as companies and citizen's overdebttness, and considerable inflation growth.

⁴ 20 banks majority owned by foreign shareholders, 6 majority owned by domestic physical and legal persons, 8 majority owned by government.

Chart 2. Banking Sector Activities in Serbia (year 2008)

The Balance amount of banking sector in second quarter 2008 was for 2.1%, or 33.6 billions Dinars was higher respecting the one at the end of first quarter of the monitored year. The last three years exhibit assets balance growth tendencies. The total banking sector assets growth is noticed not only in Serbia, but in all other countries of the region. Such a positive trend is, at first place, the subject of great demand for consumer and individual housing construction credits, as well as the credits to small and medium enterprises, which started to present the considerable part in banks' financial results.

Chart 3. Individual loans in GDP percentage concerning GDP per capita in EUR for 2007

Source: Annual report, Raiffeisen research

In recent years banking in Serbia did not suffer profitability problems. The same trend is continued in 2008. For the first quarter 2008, the banking sector presents profit of 11 billions Dinars, consequently reaching the record of 20.9 billions Dinars for the first six months. The financial results for the first six-month period achieved the new record of 20.8 billions Dinars. The financial result of the first six months is equal to banks' realized profit in last year.

The conclusion could emerge that during the banking system reforming in Serbia, the great stress was pointed to competition strengthening, resulting in increased market concentration, foreign banks domination and, ultimately, interests decrease, as a consequence of competitiveness and system risk attenuation. The efficiency and stability of Serbian banking system is growing year by year, and vulnerability is increasing. Despite expressed expanding of banking sector, the main deficiency, as recorded, is the financial sources and placement term disharmony.

Competitiveness of banking sector in Serbia

One of the basic principles of banking system reforming in Serbia is competitiveness reinforcement in this sector. Notwithstanding the fact that this market in Serbia is still in developing phase, the banks are mutually in severe competition. They are fighting for lower interest rates, each customer, both among industries and population, as well as quality human resources which, considering all the history of Serbian banking system, are very poor.

Intensive competitive struggle in progress simultaneously with decreasing the number of banks on our market caused increasing credit offer. Wide banks' organization network is indicating evidently the competitiveness of this sector.

Banking sector in 2008 is for 129 units (business units, subsidiaries, branches, desks, etc.) richer in relation to previous year. The process of opening new desks, branches, etc begun in 2003, when banking sector counted on half of that number. The average organizational units *per* bank in 2008 are 75,4 units. The number of customers *per* bank unit is decreased considerably by extending banking network. According to mentioned competitiveness indicators, banking market in Serbia is becoming similar to neighborhood markets, even to some developed countries in Europe. Concerning the fact that simultaneously by increasing the number of banks, the banking network enlargement trend is evident, it could be noticed that our market still suffer lack of banking services, while the banks express their desire to meet the market needs.

Finally, after the years of current payment instruments lack, contemporary Serbia has the banking system capable to respond to growing industry and individual needs, even E-banking transactions included. The capacity of Serbian banking system regarding branch density is approaching to EU average. In the years of 2004/2007 the number of ATMs is growing for 360%. The average annual ATMs growth rate, in that period, arose to 66,4%. Besides the ATMs number increase, the same period notice the ATMs rates *per* branch, annual transaction number, money transfer per ATM, POS terminals number, and their turnover volume.

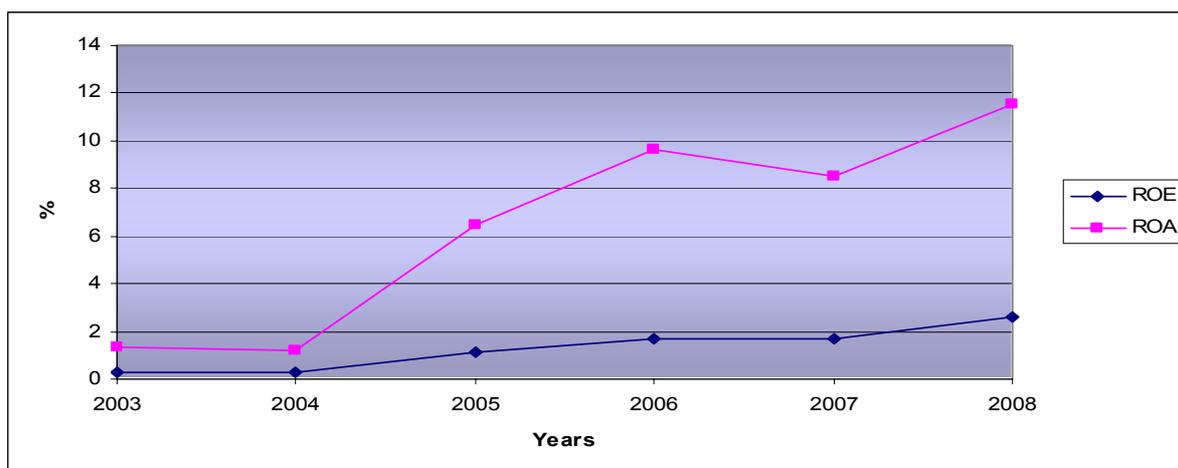
Table 2. Number of ATM, transactions and total turnover

Year	Number of ATM	Number of ATM per branch	Annual number of transactions per ATM	Turnover per ATM in din	Total turnover in billions din
2004	450	0,26	12.675	44.808.889	20.164
2005	837	0,46	15.697	62.136.201	52.008
2006	1.348	0,62	18.774	80.876.855	109.022
2007	2.074	0,85	17.263	79.777.242	165.458

Source: National Bank of Serbia

The banks' efforts to go on with spreading the organizational network and bank services are the important proof that banking market potentials and competitive advantages are not exhausted to their maximum. The banking market in Serbia is still very investment attractive, therefore, in days to come, it could be expected the entrance of new players and competitive struggle intensifying. The competitive struggle reinforcement on banking market is positive, particularly for bank's service customers. The wider market space pretensions force existing banks to constant service adjustment creating the attractive and harmonized interaction in accordance with customers' needs and requirements.

The essential indicator of market competitiveness is sector profitability. Concerning balance data, the banking sector in 2003 realized the loss of 1.06 billions Dinars. The similar situation happened in 2004, when the loss was 4.99 billions Dinars. Owing to ownership, technology and management transformation of banking sector, the negative tendency is restrained, and this sector in last years records positive financial results. The nominal profit in 2007 was almost double (42%) in respect to previous year. In 2008 (second quarter) the banking sector realized the income of 20.9 billion dinars.

Chart 4. ROA and ROE bank profitability indicator in Serbia

The main cause of profitability trend in banking sector could be considered the credit expansion, especially in citizens sector. In general, all the profitability indicators have the positive trends, except moderate growth of operative expenditure coverage deducted from balance assets from 2007 and 2008. It is interesting to stress the significant share growth of net interest income in balance assets comprising the same years. However, the noticed is the continuing sector efficiency growth trend, beginning from 2007; the operational expenditures coverage by net interest and tax income is significantly decreasing this year, too, although during the passed years the banks have been realizing intensive operational expansion.

Despite the considerable transition realized in profitability coefficients, should be added that achieved results are lower to certain extent in relation to other countries from our neighborhood.

The competitiveness on Serbian bank market in future period will be significantly determined by entrance barriers. The extremely restrictive monetary policy was the greatest regulatory barrier of entering our market. Concerning current events on global market, the hypothesis is that the restrictive monetary policy would be the main tool of banking sector stability protection in days to come. The continuous increase of referent interest rates distress the new players entering and decrease the credit activities of existing banks. Besides the restrictive monetary policy, the barrier role can play other factors, such as: instable business atmosphere, inadequate legislation policy, language and cultural difference, economy developing level, information technology, etc.

Conclusion: future perspectives of banking sector of Serbia

Large financial crises that hit world's economy will most certainly influence macroeconomic stability of Serbia, especially its banking sector. Global financial crisis is mostly due to the overspendings, first of all in mortgage market, especially in the USA and in Western Europe. Nevertheless, in this region the opinion of experts does not comply. Certain number of analysts forecasts very difficult period for Serbia. Recession, according to their opinion, could slow down the economy and its development in almost every segment, as well as the banking sector. Dynamical growth of banking sector will be disturbed by large scale of factors emerged as a result of global crises. The interest of foreign investors to invest in our economy will be increased; capital will be more expensive, interest rates significantly higher.

Analysts, with the opposite attitude, claim that the influence of global crises on our market, as well as on the markets in Central and Eastern Europe, will be limited. According to their opinion, banking sector in this region is very liquid with a strong deposit base so it is too pessimist to talk just about the negative consequences of the international crises. Yet, the assumption is that it is possible to expect slower growth of the real economy and as its effect slower growth of banking sectors due to the lim-

ited liquidity on the global market and the increase of the prices of capital. According to their opinion, the concernment of Serbian citizens regarding the money invested in banking sector as well as the overpanicking that has been present over the last few months, is more than unjustified, considering the fact that the deposits are secured and covered by the liable reserves within the Central Bank of Serbia.

For the economy and the citizens, current situation most certainly demands higher state of caution and deeper analysis before the eventual decisions to invest, or to indebt further.

The issue that certainly represents the bad side of financial system in Serbia is a disproportional development of banking sector. Alternative financial sources are minimized which increases costs of banking services. For the enterprises this means domination of self financing, whereby no company with high potential growth cannot rely just on that, which most certainly puts the question mark on the long run. An inadequate development of capital market also additionally complicates the situation. However, the changes in regulatory framework, first of all regarding the possibilities for investment funds to function, most certainly represent a positive step forward towards solving problem of over bank position in Serbian financial system.

Current competition in banking sector is most certainly high which could be observed based on tendency of the banks towards riskier loans and the portion of NPL in the sum of loans. But, this is just the beginning and the place for further development of competition in this system most certainly exists. Interest rates are still relatively high and the demand is large. So far, banks have been relying their business dominantly on the citizens (consumer and mortgage loans) but completed the privatization in this sector and re-approval of license for Greenfield investments, which means penetration of our market by large global banking systems, a growth of the portion of economy in banks' assets could be expected. The enterprises are still skeptical regarding long run loans and most certainly large number of them doesn't have adequate business history based on which they could apply for loans. By improving competition in the financial market in general, these problems should be overcome spontaneously.

The fact that most certainly aggravates and complicates continuance of the reforms in Serbian financial sector, within the whole banking system as well, is the current global financial crises. Though the optimists claim that it is possible to even find an opportunity within this crises (!) and/or that Serbia will not feel the consequences, and the pessimists claim that the Serbian economy in general will almost collapse, most probably the truth is somewhere in between. By restrictive monetary and fiscal politics, Serbia can mitigate the consequences of the crises and relative insensibly survive it. The fact that could be observed even now in banking sector of Serbia, as a reaction to the crises, is the Government's resolution – increase of the guaranties on the citizens' saving in foreign currency (to 50.000 e), the decision of the Central Bank – increase of the referent interest rate. The growth of referent interest rate consequently decreases the volume of credits and in the same time the possibility to indebt in international financial market decreases. The decrease of foreign investments, meaning the decrease of foreign currency inflow, also complicates the functioning not only of the banks but initiates the slowing down of the economic growth. Also, some of the banks calculated that the flow of Swiss frank is very unpredictable at the moment, so they withhold loans in this currency. However, dramatic consequences of the global financial crises are beyond measure to expect in Serbia.

References

- Barisitz S. (2008), *Banking transformation (1989 - 2006) in central and eastern Europe - with special reference to Balkans*, Bank of Greece - Economic Research Department – Special Studies Division, ISSN 1109-6691
- Dimitrijevic J. and B. Najman (2007), *Inside the credit boom: competition, segmentation and information; Evidence from Serbian credit market*, Comparative Economic Studies 50 (2008), 217-252, DOI : 10.1057/ces.2008.1
- Golubovic S. and N. Golubovic (2005), *Financial sector reform in the Balkan countries in transition*, Economics and Organization Vol. 2, No 3, 2005, pp. 229 - 236

- Hirschhofer H. (2006), *A very successful banking sector reform – but watch out!*, IMF representative office in Serbia for The Banker Magazine
- National Bank of Serbia (2007), *Report on financial system in Republic of Serbia for 2006*
- National Bank of Serbia (2008), *Report on financial system in Republic of Serbia for 2007*
- National Bank of Serbia (2008), *Banking Supervision, Second Quarter Report 2008*
- National Bank of Serbia (2007), *Banking Supervision, Fourth Quarter Report 2007*
- National Bank of Serbia (2006), *Banking Sector in Serbia, Fourth Quarter Report 2006*
- National Bank of Serbia (2005), *Banking Sector in Serbia, Fourth Quarter Report 2005*

Global Financial Meltdown: What Went Wrong, What Is Still Going Wrong and What the Consequences Will Be?

Marko Malović¹

ABSTRACT – Current international financial crisis of apparently unprecedented scale (ever since the Great Depression of 1929) could have been spotted from afar and should have been nipped into a bud as early as in 2002! Global political and financial elites are not unable to find the solution to it, they are simply unwilling to identify the problem. The IMF and the BIS once again proved to be useless in their own professional backyard, since it was and still is politically incorrect and financially unremunerative to do so. Crisis has been amplified by sky-rocketing food and oil prices, lax regulation of credit derivatives and cheap-money policy worldwide, but essential culprit of this latest global distress is the greed of the international financial community that spawned fancy asset-backed securitized monsters, which came in too many guises and ultimately got out of hand. Financial mutation brought about jitters of illiquidity across the industry and likely return of depression economics. The paper deals with ill-suited handling of the crisis and probably dire consequences for both the present financial architecture in the economic centres and the future of developing countries at the periphery.

KEY WORDS: subprime crisis, speculative bubbles, credit derivatives, SPVs, boom bust cycles, bailout packages, countercyclical expansion, (de)regulation, recession, global financial reforms, developing countries

“This is not the end. It is not even the beginning of the end. But it is, perhaps, the end of beginning”
-W. Churchill-

“We are both always and everywhere better off not dealing in lemons at all – because what goes around comes around.”
-U. Haque-

Introduction

This what we’re going through is the fifth global financial crisis in the last three decades,² and by far the biggest one after WWII. According to the IMF, immediate and direct losses in the form of balance sheet write-offs amount to 1.45 trillion \$ [IMF, 2008] and rising while investment bodies are still being counted throughout the world financial centres. Massive bailout schemes earmarking even greater, breath-taking sums to be injected in the nearly collapsed financial system on a top of dead weight losses, shouldn’t surprise us given that the combined equity capital stock of all US financial institutions is roughly \$1.2 trillion dollars [Sinn, 2008]. Five global investment banks, nevertheless, succumbed to the crisis already, with Wall Street, City of London, Moscow, Tokyo and Frankfurt stock indices nose-diving for longer than anyone cares to remember. Some countries, notably Iceland and Pakistan, are likely to fall off the cliff without globally coordinated rescue and worldwide recession is by now a clear and present reality [The Financial Times, 2008].

¹ Marko Malović, Belgrade Banking Academy, Belgrade

² World debt crisis of 1982, S&L and stock market crisis in late 1980s, Asian crisis of 1997 and particularly global financial crisis of 2001 predated the latest subprime mess.

The tongues, who claim that the worst is over, are the same ones who blatantly (mis)took progressively degenerating flew for a benign autumn cough back in '01, '07 and '08 alike. I'm afraid that the global financial turmoil may have only just begun. "While we have a process, we don't have a definition", F. Engels often used to say. Yet, bewildering times are instances when scientists cannot afford to be quiet at the expense of being potentially wrong. By now, we all know how the mortgage-backed tsunami first splashed in August 2007 and the fearful word "subprime" crept into the public discourse. Perhaps we don't gather enough on why neither G7 nor IFIs did anything substantial about it? Even more so since the paper boom was out there already in 2001/02 crisis, when banks were let off the hook and allowed to repackage and sell of their "smelly assets" only to inflate the non-banking portion of the speculative balloon and let the global financial bomb ticking [Malovic, 2006]. Moreover, in spite of the fact that dramatic transformation of international financial architecture is both needed and inevitable, it is too soon and even more so dangerous to reinstate Marxian communism in capitalist globalisation. However, the rise of pretty linear state interference and announced backlash of financial regulation among defenders of democracy and liberal capitalism themselves, are not directing crisis management or longer-term reforms in the right course either! Lastly, little is understood as yet on the far-reaching consequences of (handling) the global financial meltdown for the future of international banking and finance as we know it, let alone for the probability of lower-intensity lagged explosions across developing world in financial as well as real economic sense. The rest of the paper is stretched along the timeline of causes (past), management (present) and potential consequences (future), so as to tackle these crucially important issues.

What went wrong?

When growth is high as well as seemingly sustainable and money is cheap³ and abundant, bankers tend to expand. That is so because low inflation, lots of liquidity and stable economic growth almost invariably produce real estate and other asset price bubbles which have "windfall (capital) gain" written all over them. While expanding aggressively or simply to keep up with their greedy competitors, bankers soon run out of credit-worthy prime borrowers. Hence, they went for subprime ones charging somewhat higher interest rate.⁴ In nice weather terms, this initially glided very smoothly. Mortgage loans were government supported business in US, many borrowers got comfy grace periods⁵ and hoped for either salary increases (due to unprecedentedly long period of impressive growth in the US) or cozy refinancing deal (due to capital gains from ever growing real estate bubble). Some of the expectations and suppositions of home buyers were obviously not well founded in foul weather conditions, but still there would be no crisis whatsoever without credit securitization [BBC Business, 2007].⁶ It frees banks' capital (often more than once) and enables them to earn more fees by extending loans which are effectively disbursed by other financial intermediaries willing to buy MBSs, CDOs and

³ Unrestrained credit boom, as first noted by Kindleberger (2000), has always been the main ingredient of the build-up to financial crisis. Following Jubak (2008), current global financial fallout was arguably amplified by many additional circumstances that made the money cheap and credit abundant: 1) stubbornly expansionary interest rate policy of FED to fend off economic slowdowns during dot com and in particular after the NASDAQ bubble, 2) a weak yen and almost zero real rates in Japan which enabled speculators to engage in carry trade or massive security purchases elsewhere, 3) a gigantic surge of exports from emerging giants determined to hold down their national currencies and domestic absorption, and not least due to 4) soaring petro-dollar profits which were reinvested in Western banks just like three decades ago.

⁴ As a rule, the spread charged is circa 2%. Subprime borrowers, aka „B“ or „second chance“ borrowers, are individuals with FICO credit score below 620 (on a scale from 380 to 850), who are taking loans considered risky both for lenders and themselves [NematNejad, 2007]. FICO score is credit-analysis synthetic which shows how likely one is to repay the loan, pending –among other things- on monthly earnings, credit history and amount of accumulated debt still unpaid. Alternatively, subprime borrower is the one who doesn't qualify for Freddie- or Fannie-supported mortgage.

⁵ For example, usually offered deals included: interest only mortgages, or adjustable rate mortgages, or even low initial fixed rates [Gorton, 2008]. Some brokers went as far as supplying "no doc" mortgages which do not require any evidence of income or savings [NematNejad, 2007].

⁶ Credit securitisation implies pooling together several active (still unpaid, immature) banking assets and offering them as collateral for third party investment in yet another derivative asset.

alike credit derivatives issued by investment banks.⁷ The catch being that many financial institutions are prohibited or at least restricted by law from buying subprime debt or risky credit derivatives.

In order to circumvent the regulations, just as so many times before, investment bankers came up with novelty – they chopped off the subprime portfolio into half a dozen of tranches, defining the pecking order of risk taking if and when any of the subprime borrowers from the pool defaulted. As the notes from different tranches, senior (AAA), mezzanine (BBB), subordinated (A) and equity note (junk), carry different ratings, there is so-called cash flow waterfall, i.e. priority of payment, which attracted otherwise skittish or legally-constrained investors too. Problem with CDOs as opposed to CDSs and other balance sheet derivatives lies in the fact that the asset pool in contemporary CDO typically is not static, in other words it is being actively managed for better or worse [Anson *et alia*, 2004]. Credit enhancements⁸ and rather questionable (up)grading methodology of credit rating agencies⁹ blurred the investment picture a step further. However technically suffocating as it may seem, such a malevolent usage of credit derivatives is not horribly innovative, nor illegal for that matter. Confronted with bad loans and foreclosures coming from media sector and window dressing performed by discredited auditing agencies back in 2001/02, international banks did exactly the same trick and got away with it.¹⁰ Once again, genetically mutating credit derivatives enabled investment banks to get rid of the large portion of the subprime loans as debt instruments with above prime credit ratings thus expanding the number of potential buyers of that debt and, in fact, making money on it!

Nevertheless, by offering better returns on the riskier slices of portfolio in order to attract suckers to buy them, banks had to lower the yields on the super senior tranches (since the overall cash flows from the pool backing a CDO is given). That made it harder to sell senior slices once they became “a liability” and practically forced many banks to keep them on their own books after all [The Economist, Dec.8th-14th, 2007]. On the other hand, recent surge in exploiting synthetic CDOs made risks global banks were exposed to even more obscure. Obligated by the law, intermediaries that held huge amounts of these instruments kept them in semi separate off-balance sheet entities, legal shells called SPVs, so as to allow themselves more business flexibility in accounting and regulatory terms. SPVs fund their operations by frequent roll-overs of short run debt which is then used to buy longer run debt. Now, synthetic CDOs¹¹ enable removal of credit exposure without actual asset transfer (and costly administrative burden of true sale of the underlying) to SPV. In addition, through intense use of credit derivatives, synthetic CDOs transfer credit risk directly from the sponsor (originator of the transaction) to the end buyers, so that after delinking, investors have no credit exposure to the sponsor. A synthetic arrangement also means that the risk of assets otherwise not suited for securitisation (bank guarantees, letters of credit etc.) may be transferred [Anson *et alia*, 2004]. Nonetheless, assets in question stay on the banks’ balance sheets! And indeed, contradicting one of the fundamental aims of securitisation, it doesn’t seem that this time, “thanks to” synthetic deals, the awful lot of credit risk did leave the banking sector via financial innovations, but was rather shuffled around instead! When unmonitored credit boom, adverse selection and increasingly worsening financial visibility brought about first losses and suddenly slipped into a slump, interest rate differentials turned against SPVs and the hell broke loose.

⁷ These other financial intermediaries were also banks, but often much more vulnerable investors like insurance companies, pension funds etc [NematNejad, 2007].

⁸ Overcollateralisation (meaning that overlying notes are engineered to appear lower in value compared to the underlying portfolio), cash reserve accounts (liquid contingency account to cover initial wave of losses), excess spreads (which de-leverage derivative) and insurance wraps being the most frequent form of enhancement [*Ibidem*].

⁹ Which are competing with each other and which in any case, it has been proven, cannot accurately calculate credit rating of structured products which contain market material by many issuers [Malovic, 2006].

¹⁰ Citigroup and J.P. Morgan Chase, the biggest creditors of Enron and WorldCom (companies whose default put together represent greatest corporate loss of all times-34 bill.\$), in the second quarter of 2003 already announce billions in profits! Deutsche Bank reduced its loan assets for 40% in 2002 and early 2003, ABN Amro transferred 34bill.\$ of credit risk and Credit Suisse and UBS “freed up” more than 10bill.CHF each [*Ibidem*].

¹¹ Synthetic CDO consists of two legs: a short position in CDS (bought protection), by which the sponsor transfers portfolio risk to the issuer and a long position in a portfolio itself (of bonds and loans), the cash flow from which pays liabilities of overlying notes [Anson *et alia*, 2004].

What is still going wrong?

Just about everything! The problem being, nobody truly knows what this collapse is all about. And yet, national authorities were mostly prophesying about how the end is near. In such a cocktail, panic and recession are regrettable, but not surprising by-products. In a nutshell, instead of recognizing it, we are still throwing money at the problem.¹² Libertarians in office around the globe have been advocating elaborate plans to do little more than nothing. Neo-socialists on both sides of the pond are still screaming for “dirigisme” and ritual purging of every institutional pillar of free market capitalism. As an arithmetic mean of those voices, we have lots of newly released liquidity flashing around¹³ and not much hard thinking: amazing rescue package of nearly 1 trillion US\$ apparently left investors more or less unimpressed. Heavy government spending earmarked for 2009-10 is on its way as an attempt to mitigate bone-freezing recession in the US and consequently worldwide. In fact, European and US policymakers are doing exactly the opposite of what any money and banking textbook would suggest. They proved to be genuinely lenient towards moral hazard of the financial sector, they are bailing out and even recapitalizing greed- or competition-driven banks by taxpayers’ money, they are mistreating the meltdown as liquidity crisis, whereas the confidence game at hand has much more to do with systemic failure, they are making unsecured loans directly to corporate sector etc. Moreover, too slowly disappearing information asymmetry within the overregulated banking sector is being accompanied by asymmetric information in policy arena as well as real economy, while suggestions for reforming the (inter)national financial architecture, rectifying bad off-balance policies and strengthening global financial oversight are frankly varying from ignorant to scary.

Some are blaming the subprime market for financial Armageddon, yet they are only shooting the messenger.¹⁴ Others, German finance minister as the most prominent among them, are accusing the US in as much as Americans exported their toxic assets, bad (de)regulation standards and cut out their import potential.¹⁵ Yet some are accusing the IMF and the BIS, while forgetting the fact that developed countries themselves, for the past decade or so, deliberately avoided and dwarfed those IFIs both in terms of financial and policy making relevance [The Guardian, 2008].¹⁶ Another lot is blaming the illiquidity

¹² Stiglitz (2008) rightfully compares the ongoing bailout to massive blood transfusion to a patient with severe internal hemorrhaging. Congressional revisions, in my opinion, only increased the sum but regrettably decreased the effectiveness of the rescue package.

¹³ Even that being possible without instantaneous inflation cost only because or exactly because the eventual fall of crude oil price in the world markets.

¹⁴ Indeed subprime market was the fastest growing particle of real estate market: 21% of mortgage applications between 2004 and 2006 were subprime compared to 9% between 1996-04. Subprime mortgages reached a record of \$805 billion in 2005. However, statistics show that only 3.3% of subprime loans end up in foreclosure compared to 1.1% for conventional loans [NematNejad, 2007]. Without the help of greedy bankers and exuberant independent brokers who originated the dodgy underwritings, this number would hardly provoke an international crisis. Mortgage market is one of the most regulated segments of US financial system, and even though almost 12 million mortgages were contaminated as the real-estate bubble started to deflate [Stiglitz, 2008], only some 2 million foreclosures actually took place so far.

¹⁵ This is downright stupid since US BoP position represents nothing more than a mirror-image of someone else’s willingness (not obligation) to invest in its financial system, whereas not even economic superpower can be deprived of adjusting its import demand elasticity in the face of balance of payments/currency adversity. When it comes to financial regulation, Europeans (unlike the US) implemented Basel 2, which obviously didn’t do miracles for prudential supervision either. Nonetheless, the first circumstantial causes of the crisis do lie with Clinton’s repeal of the Glass-Steagal Act [Chossudovsky, 2008] and the Fed’s monetary ease, i.e. responsibility for it rests with the US. “If too much money was lent and borrowed, it was because Chinese savings made capital cheap and the Fed was not aggressive enough in hiking interest rates to counteract that. Moreover, the Fed’s track record of cutting interest rates to clear up previous bubbles had created a seductive one-way bet. Financial engineers built huge mountains of debt partly because they expected to profit in good times - and then be rescued by the Fed when they got into trouble” [Mallaby, 2008, p.1]. However, after becoming aware of the possible demise of Northern Rock in the UK and several Landesbanken in Germany, Europeans did exactly the same thing. According to Trichet (2008), since August 2007 ECB injected almost 300 billion € to stabilize euro-area money markets.

¹⁶ Having said that, the IMF and BIS did fail us big time, however, not so much due to the lack of human and financial resources, but for lack of courage and professional ethics to say the truth. Priminister Brown’s and Kanzlerin Merkel’s recent statements bear the taste of tautology at best or cynicism otherwise, when they urge for reform of the global financial system which will empower IMF and BIS with maintaining international financial stability and capacity to act as an early warning system for markets!

paradigm for financial cardiac arrest.¹⁷ In fact, and for deep theoretical reasons, the world financial system has collapsed into insolvency, but before prescribing the diet and exercise, we had to restart the heart. “Nuclear option” might eventually work beyond and above the fire-fighting call of duty if re-capitalized financial system picks up and returns to the precrisis lending pattern, but only provided that the asset price bubble subsequently gets back at least some of the air it lost through deflation process. Nonetheless, even if it doesn’t, there’s a widespread consensus among both academic economists and practitioners that political, financial as well as business cycle consequences of standing idly by for taxpayers across the globe would be even dearer. On the other hand, nobody likes recessions, nor overturning tables, hence, devil’s advocate could argue that taxpayers raw deal could have been stricken more wisely if spent on unemployment benefits and SME tax holidays for investment in real capital, rather than on bailing out reckless speculation [Shiller, 2008], [Stiglitz, 2008]. Lack of regulation argument is the last but the most frequent and more misleading among the usual suspects. Yes, we certainly long for “reconstruction of creative destruction” epitomized by originate-and-distribute structured products, having in mind that -dipped into globally wandering liquidity- they created a favourable breeding ground for quite shockingly imprudent risk taking [McCreevy, 2008]. However, my argument is that too much regulation in banking sector has been equally disastrous as too little regulation in the rapidly expanding non-banking industry! On balance, we need as much further deregulation in the banking sector as additional regulation in banks’ off-balance sheet activities and overall activity of the non-bank intermediaries.¹⁸

What the consequences will be?

It would be impossible to foresee every single crossroads where international financial crisis management might go awry. Thus, this last section may in fact push more on the normative side of the argument: what should the corollaries be, and therefore, what additional consequences might be lurking downstream.

Whatever happens, the world is unconditionally heading towards murky waters of re-regulation, significantly more government involvement in economic activity and strikingly larger budget deficits. With counter-depression Keynesianism back in macroeconomic fashion, Kyoto-inspired environmental protection is, alas, designated to be probably the first virtuous casualty [The Economist, Oct.11th-17th, 2008].

Big emerging markets like China, India or Brazil, will slow down for sure, but still are expected to grow at 4-5% *p.a.* which takes them out of immediate scope of this paper.

With regard to international financial centres and developed world, the length and severity of inevitable recession shall be chiefly determined by three interdependent developments. First is the ability (and speed) of nuclear option and bank-nationalization cum re-regulation experiment to deliver sustained breeze of reflating asset value into the global financial sales, *caeteris paribus*.¹⁹ Second is the quality of urgently needed reform of IFIs (often dubbed Bretton Woods 2²⁰). Third is pending on fre-

¹⁷ In such a constellation, bailout is justified and meaningfully required only during the intermezzo of confidence restitution in inter-bank money markets, whose nervousness is depicted by spread between the LIBOR and OIS or 3 month LIBOR compared to 3 month treasury bonds rate [Taylor-Williams, 2008]. Sadly enough, it has become evident that we are dealing with much a nastier situation here, namely, inter-bank illiquidity reflects the size of announced and estimated losses in the financial system as a (w)hole, i.e. mistrust of non-banking sector in its’ own and counterparty’s credit worthiness. FED’s recent decision to ban “shorting” is only a wrap up on the reasons why hedge funds and the like won’t be able to ride in rescue of prime brokers any time soon.

¹⁸ For opposite argument engulfed in much more cynical political connotations see interesting article by Chossudovsky (2008).

¹⁹ Desai (2008) warns that reestablishing credibility of financial system can be just as cumbersome as reestablishing solvency. The Economist (2008, Nov.1th-7th) illustrates the point with first indications of rescue packages being diverted from intended demand-driven use into precautionary household savings and excess banking reserves, without significant impact on the reference rates.

²⁰ The announced multilateral summit on November 15th could at best draw a blueprint of reform allies for present global financial architecture, something like a wish list of primarily Europeans and Chinese in terms of decision-making weight

quency and whereabouts of sporadic financial failures yet to occur among non-banking financial intermediaries. If I was to give condense answer to each of the presently unknown developments it would be: *I don't know, I sincerely doubt it* at least in the short run, and *Yes most likely*.

Thus, further reforms on several economic fronts may be safely identified at the horizon, some of them approaching dead ahead, others still spinning in intellectual and/or regulatory conundrum. When it comes to valuation failures, Sinn (2008) swiftly proposed the most resilient version of amending the mark-to-market accounting: company's assets should be valued according to the lower (of historical and current) value principle at tranquil times already, so that bubbles get deflated on the runaway rather than kept artificially overvalued in the midst of crisis.²¹ Equally crucial, weaknesses in underwriting and upgrading procedures need urgent attention of BIS or alike global regulator, which has to find the way of attaching the collateralized responsibility for the risk assessment on distribution of asset-backed securities [Wellink, 2008].²² In an overall perspective, arguably, central banks' operating frameworks for controlling broader liquidity concepts would also have to be improved. As pointed out earlier, a considerable source of funding stems from non-bank intermediaries and is fair to admit that central banks' control over such liquidity is quite indirect and pretty limited [Clerc, 2008], for no profound theoretical reason. The last point of concern is of utmost importance since, in historical retrospect, government purchases of bad assets in the banking sector itself and *de facto* centralized asset-management units usually failed to enforce institutional learning in the core lending practices of lemon banking industry [Desai, 2008].

Depending on their own traits, financial systems can serve as a shock absorber or if the right failure-screws are loosened, may innovate themselves into nasty amplifiers of havoc [Allen-Carletti, 2008]. For some people from financial industry, regrettably, competitive advantage boils down to making markets work less efficiently. One catastrophically diligent way of doing that is to surf on a deliberately raised asset-price tide whose ephemeral nature tends to be secluded by hidden or obscured information [Haque, 2008]. But what about all of us caught off-guard in the shallow waters?

In other word, let me finally turn to the foreseeable consequences of global financial turmoil for small open developing economies with still emerging financial markets. The good news is that sturdiness of their banking sector presently seems more or less genuine, with separate banking accounts from the parent HQs and no immediate exposure to contaminated loans. Also, foreign exchange reserves of developing countries appear to be bigger and more robust than ever before. On the other hand, even absent the global financial crisis, their precarious macroeconomic position would undoubtedly require them to follow the straight and narrow due to astonishing BoP deficits and steeply rising foreign debts they have amassed. Global credit crunch shall only add up to that. Stock market slump in transition countries we owe to the fact that over there, or in South-East Europe at least, domestic residents represent a minor percentage of securities holders, and majority of, in fact foreign, investors simply flew to safety or fled emerging markets in order to cover losses incurred elsewhere on first signs of global distress. As the sovereign credit-rating scores storm the fire stairs, many of the developing countries overvalued currencies will be finally battered by either contagious, speculative or debt servicing capital outflows, which will supplement - here and there already contemplated- wage freeze and revive

and policy dogmas (e.g. Jayaraman (2008) accentuates notorious Washington consensus and hypocrite double standards in stabilisation requirements for South vs. North) which should be fundamentally altered, but not much would happen hastily and without consent of the US, who's new administration is still in the forming and simply isn't ready for anything of a Bretton Woods 2 scale.

²¹ "It is difficult to keep a proper perspective and to exercise prudent judgment when all of your competitors are generating huge volumes of business. As one banker famously said last year: *As long as the music is playing, you've got to get up and dance*. Well, if it is the role of the central banker to take away the punch bowl just as the party gets going, perhaps the role of the supervisor is to silence the band so the bankers stop dancing." [Wellink, 2008, p.2]

²² Rating agencies consider themselves answerable for assessing credit risk solely, whereas investors typically reckon with liquidity risk being accounted for in leading agencies' ratings too. Moreover, the metric used for structured product rating is identical to methodology used for simple bonds [Clerc, 2008]. In addition, if unresolved, this aggravates the awkward marriage of chiefly national bailouts and evidently international contagion [The Economist, Oct.18th-24th].

competitiveness in the medium run.²³ Meanwhile, exporters will have exhaustingly hard time to keep - let alone acquire new- foreign market shares, hence macroeconomic reply through pseudo-governmental export promoting banks and agencies should prop them up in their utmost capacity.²⁴ Crisis-provoked savings hike will prove detrimental in the shortest run, which is why the attempt should be made to replace the absorption loss by public infrastructural project spending and officially negotiated bilateral investment-related debt or equity inflows. Unfortunately, FDI, cross-border credits and other forms of international capital expansion are certainly going to shrink too, now when wealthy countries' businesses are suffering from recession themselves.²⁵ Similar drying up of remittances could be reasonably foreseen together with vanishing of multilateral and official transfers. In spite of alarming external position, monetary policy stance in developing countries needs to remain roughly neutral, with FX reserves used up for running the foreign debt down rather than for dissipation in defense of the misaligned national currencies. Obsolete austerity orthodoxies of the IMF should be kept at minimum until its deregulate, liberalize and privatize ideology is reduced so as to deliver faster and more obvious net-benefits for IMF's protégés. For those aspiring a soon EU accession as a last resort, sufficient is but the gaze at the institutional, financial and political tears in the fabric of the European project cruelly exposed during the international financial meltdown. The odds are that there shall be no swift enlargement, and if it happens after all, newcomers might be developed countries (like Iceland and Norway) rather than any of Balkan states. Provided that non-EU developing countries came to terms with their infrastructural, public administration and corruption insufficiencies, their end of recession tunnel may be in attracting the already deployed neighbouring businesses looking for cost-cutting asylums.

One way or the other, developed countries shall recycle and spread the burden of the crisis onto the rest of the world. Asian economies learnt the lesson of their own financial gambling and felt the bitterness of double-edged IMF policies only too well back in 1997/98 [Hüfner, 2008]. And indeed, by and large Asians appear not to have stepped on the wrong parts of financial minefield so far. If this *ad hoc* reasoning hints at any conclusion, I am at the point of suggesting that the next international crisis might touch upon the still untrusted bubble economies, namely South-East Europe or even Russia itself.

References

- Allen, F.-Carletti, E. (2008), "Financial System: Shock Absorber or Amplifier?", BIS Working Paper 257.
- Anson, M. *et alia* (2004), „Credit Derivatives, Instruments, Application and Pricing“, The Frank J. Fabozzi Series, Wiley Finance, J. Wiley&Sons, Ch.7.
- BBC Business (2007), "The US sub-prime crisis in graphics", BBC, London, 21th November.
- Chossudovsky, M. (2008), "Global Financial Meltdown: Sweeping Deregulation of the US Banking System", Centre for Research on Globalization, *mimeo*.
- Clerc, L. (2008), "A Primer on the Subprime Crisis", Banque de France Occasional Paper No.4.
- Desai, M. (2008), "On the Politics of Financial Meltdowns", Brookings Institution, *mimeo*.
- Gorton, G. (2008), "The Panic of 2007", NBER Working Paper 14358.
- Hüfner, M. (2008), "The Sub-prime Crisis and Global Justice", The Globalist online, September 26th.
- The Economist (2007), "The end of cheap food", *Put out*, December 8th-14th.
- The Economist (2008), "Saving the system", October 11th-17th, *passim*.
- The Economist (2008), "Capitalism at bay", October 18th-24th, *passim*.

²³ The conventional caveat reminding that exchange rate changes coupled with popping of real estate bubble can result in large losses in the banking system and eruption of full-blown crisis if the banks passed on too much loans with foreign exchange clause onto debtors that lack foreign-currency revenue [Roubini-Speter, 2004].

²⁴ However, for the time being, export-credit finance and infrastructure projects with spill-over effects remain the only two elements of fiscal expansion I would advise for.

²⁵ Outgoing structure of FDI in South-East Europe reveals that almost a third of the money ended up in real estate, feeding the local asset bubbles still standing only because of uneven demographic distribution biased towards the urban centres.

- The Economist (2008), "It's time", November 1st-7th, *passim*.
- The Financial Times (2008), "In Depth Coverage of Global Financial Crisis", FT online, *mimeo*.
- The Guardian, (2008), "The Fund with Few Takers", Editorial, 29th October.
- Haque, U. (2008), "Beyond the Banking Crisis: A Strategy Crisis", Harvard Business Publishing, HBS, April 3rd.
- IMF, (2008), "Global Financial Stability Report", International Monetary Fund, Washington DC.
- Jayaraman, T. (2008), "Did the IMF Fail to Check?", Fiji Times Online, October 20th.
- Jubak, J. (2008), "The next banking crisis on the way", *mimeo*.
- Kindleberger, C. (2000), "Manias, Panics, and Crashes – A History of Financial Crises", John Wiley&Sons, Inc., 4th Edition.
- Mallaby, S. (2008), "Blaming Deregulation", The Washington Post, Op-Ed, October 6th.
- Malovic, M. (2006), "International Financial Crises", (in Serbian), National Bank of Serbia and Faculty of Economics, Belgrade.
- McCreevy, C. (2008), "International Financial Crisis: Its' causes and what to do about it?", paper presented at the economic workshop of the Alliance of LibDems for Europe (ALDE), Brussels, February 27th.
- NematNejad, A. (2007), "The Sub-prime Crisis", *mimeo*.

Balance of Payment as the Indicator of B&H Economy Situation and Its Trends

Željko Marić¹

ABSTRACT – Balance of payment is a basic document which enables sustained description of financial reliability of the country as well as economic forecasts for certain country that can be expected in the future. But, correct economic concluding requires gradually balance of payment statement analysis, i.e. analysis of all current (goods, services and transfers) and capital (foreign direct investments, portfolio investments and credits) transactions. It is necessarily because of great number of various types of international economic transactions and payment operations modes in the area of international economic relations. The subject of this paper is global analysis of Bosnia and Herzegovina balance of payment structure through its main items. On the basis of that analysis, the goal of this paper is to predict some trends in balance of payment structure which Bosnia and Herzegovina can expect according to existing B&H macroeconomic situation and its intention to wider international economic integration joining. So, the paper has intention to consider and propose the possible ways of balance of payment disequilibrium overcoming in the case of B&H frame of economic development (Washington consensus, currency board system, CEFTA enlargement on Western Balkan countries and EU enlargement).

KEY WORDS: Bosnia and Herzegovina, balance of payments disequilibrium measures, balance of payments disequilibrium overcoming, economic forecasts

B&H balance of payments analysis

Balance of payments represents systematized and overall list of all the international transactions between residents of the certain country with a rest of the world during a particular period of the time, usually a year. It is basic document whose sustained analysis enables evaluation about country creditworthiness and forecast about potential problems of certain country in international economic relations with a rest of the world. All IMF country members have a liability to use method of measuring the balance of payments in accordance to *Balance of Payment Manual* which is created by IMF. In that sense all nation use comparable method in collecting data and in reporting to the International Monetary Fund. The Central Bank is an institution which is responsible for data acquisition and reporting to the IMF. The structure of consolidated B&H balance of payment during last 10 years, i.e. since it has been collecting and public representing, is showed in a table 1.

Table 1. Bosnia and Herzegovina Balance of Payments

(in millions KM)	1998	1999	2000	2001	2002	2003	2004	2005	2006
I – Current account (1+2+3+4)	-607,2	-920,4	-839,9	-1.630,0	-2.450,2	-2.813,9	-2822,40	-3357,20	-2041,20
1. Goods	-5.482,4	-6.052,5	-5.868,4	-6.470,5	-6.891,6	-7.180,0	-7.192,6	-7.834,2	-6661,20
Export of Goods, fob	1.168,2	1.526,9	2.398,4	2.480,2	2.285,5	2.548,4	3.279,9	4.082,4	5255,80

¹ Željko Marić, Faculty of Economics, University of Mostar

Import of Goods, fob	-6.650,6	-7.579,4	-8.266,8	-8.950,7	-9.177,1	-9.728,4	-	-	-11917,0
2. Services	334,8	328,7	396,7	497,7	453,3	580,9	678,40	774,00	950,00
Export	809,8	851,3	955,3	1.087,2	1.079,6	1.244,4	1361,50	1500,60	1736,80
Import	-475,0	-522,6	-558,6	-589,5	-626,3	-663,5	-683,1	-726,60	-786,80
2.1. Transportation Services, export	30,8	42,4	56,6	61,2	66,7	76,7	81,0	109,20	142,10
2.2. Transportation Services, import	-237,2	-252,2	-262,2	-259,7	-276,4	-291,0	-307,8	-316,0	-324,90
2.3. Travel Services, Export	435,2	450,7	494,4	580,9	592,0	651,2	760,40	808,20	918,90
2.4. Travel Services, Import	-142,6	-151,9	-154,8	-163,2	-172,9	-184,1	-186,7	-194,5	-244,00
2.5. Other Services, Export	343,8	358,2	404,3	445,1	420,9	516,5	520,1	583,20	675,80
2.6. Other Services, Import	-95,2	-118,5	-141,6	-166,6	-177,0	-188,4	-188,6	-216,1	-217,90
3. Income	1.423,7	1.336,6	1.253,3	1.163,1	1.055,2	925,1	760,40	712,20	720,60
Income receivable from abroad-credit	1.518,5	1.456,6	1.415,6	1.366,4	1.255,8	1.132,8	1015,90	1021,30	1071,70
Income payable abroad-debit	-94,8	-120,0	-162,3	-203,3	-200,6	-207,7	-255,5	-309,1	-351,10
3.1. Compensations to the labours, revenues	1.478,1	1.420,7	1.339,9	1.269,7	1.120,5	1.029,9	914,70	898,10	898,10
3.2. Compensations to the labours, expenditures	0,0	0,0	-5,0	-12,7	-15,3	-18,2	-21,0	-19,3	-21,1
3.3. Investment income, Revenues	40,4	35,9	75,7	96,7	135,3	102,9	101,2	123,2	202,3
3.4. Investment income, Expenditure	-94,8	-120,0	-157,3	-190,6	-185,3	-189,5	-234,5	-289,8	-330,0
4. Current Transfers	3.116,7	3.466,8	3.378,5	3.179,7	2.932,9	2.860,1	2931,40	2990,80	2949,40
Transfers from abroad - credit	3.268,5	3.625,5	3.538,5	3.339,2	3.143,2	3.072,8	3261,10	3305,20	3300,40
Government Sector	768,3	894,8	662,0	880,1	678,8	582,9	509,90	486,60	292,10
Other sectors	2.500,2	2.730,7	2.876,5	2.459,1	2.464,4	2.489,9	2751,20	2818,60	3008,30
Transfers to abroad - debit	-151,8	-158,7	-160,0	-159,5	-210,3	-212,7	-329,7	-314,4	-351,00
Government Sector	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Other sectors	-151,8	-158,7	-160,0	-159,5	-210,3	-212,7	-329,7	-314,4	-351,0
II – Capital and Financial Account (1+2)	345,6	472,6	1.171,1	1.394,5	2.228,2	2.290,4	2183,90	2673,50	1247,80

1. Capital Account	871,3	1.148,0	1.159,9	875,4	848,6	804,6	679,80	645,80	532,40
Credits	871,3	1.148,0	1.159,9	875,4	848,6	804,6	679,80	645,80	532,40
Debits	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
2. Financial Account	-525,7	-675,4	11,2	519,1	1.379,6	1.485,8	1504,10	2027,70	715,40
2.1 Direct investments	117,4	324,5	310,1	259,8	551,1	660,3	1.042,0	820,7	660,60
Direct investment - Abroad	0,0	0,0	0,0	0,0	0,0	0,0	-2,4	-1,9	0,0
Direct investment in B&H	117,4	324,5	310,1	259,8	551,1	660,3	1.044,4	822,6	660,6
2.2. Portfolio investments	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
2.3. Other investments	-495,1	-412,3	-134,0	1.924,6	583,4	1.141,5	1136,40	1943,50	1259,40
Assets (sign "minus" means "increase")	-1.194,9	-1.870,6	-1.432,9	1.426,1	-283,0	173,4	528,6	824,4	548,4
Liabilities	699,8	1.458,3	1.298,9	498,5	866,4	968,1	607,8	1119,10	711,0
2.4. Reserve assets (sign "minus" means "increase")	-148,0	-587,6	-164,9	-1.665,3	245,1	-316,0	-676,7	-738,4	-1204,6
Monetary gold	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Special drawing rights	-8,8	-5,1	-9,3	9,8	7,1	0,8	4,8	0,2	-0,1
Reserve position in the IMF	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Foreign Exchange	-139,2	-582,5	-155,6	-1.675,1	238,0	-316,8	-681,5	-738,6	-1204,5
Other claims	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
IV - Net errors and Omissions	261,6	447,8	-331,2	235,5	222,0	523,5	638,5	683,7	793,40

Source: B&H Central Bank.

Deficit in the foreign trade of goods (the visible foreign trade) is the highest and the most disadvantageous item in B&H balance of payment as a whole. It is direct consequence of insufficient B&H economy competitiveness toward international market.² Besides that, Bosnia and Herzegovina is faced with a full foreign trade liberalization which is one of the main items in neoclassical economic development program known as "*Washington Consensus*" which is applied in Bosnia and Herzegovina in a full sense.³ The statement that free foreign trade competition brings benefits through competitiveness increment for all its foreign trade partners is not correct in this case. The free foreign trade competition is fair field for all its members and no favour for anyone only in the conditions of equalized economic

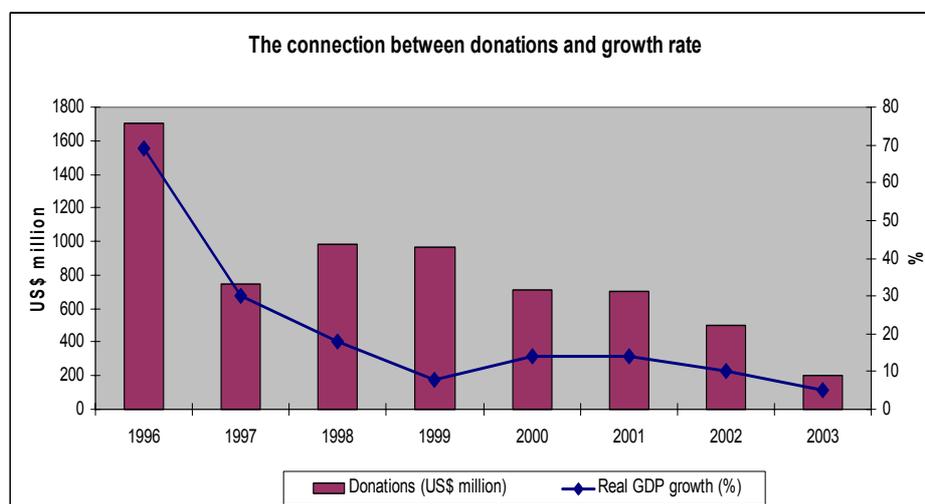
² *The Global Competitiveness Report* is well-known annual report which gives detailed report about world competitiveness for certain countries. The publishing house is a *World Economic Forum, Davos-Geneva*.

³ The term "Washington Consensus" was initially coined in 1989 by John Williamson to describe a set of ten specific economic policy prescriptions (Fiscal discipline; A redirection of public expenditure priorities toward fields offering both high economic returns and the potential to improve income distribution, such as primary health care, primary education, and infrastructure; Tax reform - to lower marginal rates and broaden the tax base; Interest rate liberalization; A competitive exchange rate; Trade liberalization; Liberalization of inflows of foreign direct investment; Privatization; Deregulation - to abolish barriers to entry and exit; Secure property rights) that he considered to constitute a "standard" reform package promoted for crisis-wracked developing countries by Washington D.C based institutions such as the International Monetary Fund (IMF), World Bank and the U.S. Treasury Department.; <http://en.wikipedia.org>

development of certain countries which are on the level of full employment. All today developed countries have applied the effective custom policy in the past to protect their insufficiently developed economy until they have achieved significantly level of economic development to join into wider international economic integrations. The comparative advantages in the conditions of a free trade and bigger differences in economic development lead to a greater polarization on developed and undeveloped countries. In such conditions, liberal trade can bring economic benefit only to the developed countries. It is clear, that the foreign trade liberalization is a consequence but not a source of economic development. It is confirmed by many economic development ways of all today developed countries in the past. So, the policy of a full foreign trade liberalization which has been applying through different forms and agreements ("*Washington Consensus*", Central European Free Trade Area enlargement on Western Balkan, *Stabilisation and Association Agreement – SAA*) is inappropriate in the case of B&H economy. Liberalization level should reflect the relative differences in the level of competitiveness. Also, it is a fact that the foreign trade in goods is dominated in relation to foreign trade in services within a structure of B&H Balance of Payments. It is also an additional signature of not enough developed country.

Bosnia and Herzegovina has achieved surplus in the foreign trade in services (factor and non-factor services), but because of their relatively smaller share in relation to foreign trade in goods, the total foreign trade balance has a very high deficit, too. The main part of services is a tourism which is expressed through the item of „travel services“, but it is not correctly because the tourism represents a group of a different activities where the tourists spent on travelling, food, drinks, and many other various kind of entertainment. Many economists claim that the tourism could be a way of B&H foreign trade deficit overcoming. Bosnia and Herzegovina disposes with a relatively huge amount of natural resources which could be a base for development in all tourism types. But, it can be developed in successful way only if it will be developed on the principle of „cluster industry“ building in tourism activity among Bosnia and Herzegovina and its neighbours countries, because Bosnia and Herzegovina is a very small country. In that way, the tourism activity can help not only for foreign trade deficit overcoming, but for economy development in all countries in the region.

Figure 1. The connection between donations and growth rate.⁴



The current account that includes all sales and purchase of currently produced goods and services, income on foreign investments and unilateral transfers is also in deficit, but it is significantly smaller than foreign trade deficit. It is a consequence of a high level of current transfers (donations, retirements, foreign aid ...) which have the most stable and the most important role into foreign trade deficit

⁴ Joseph K. Ingram: *The World Bank Role in the Development of a Financial Market in Bosnia and Herzegovina*, (<http://siteresources.worldbank.org/INTBOSNIAHERZ/Country>)

overcoming. The current transfers inflow of B&H citizens from abroad (about 3 billions per year or 1.5% of GDP in B&H) enable survival not only B&H citizens, but B&H economy as a whole. Although item „current transfers“ represents a negligible share into balance of payments in many countries in the world, in the case of Bosnia and Herzegovina, it is very important.

But, the total balance of the B&H balance of payments (all current and capital transactions) has noted sustained surplus during last years. The technical equilibrium of B&H balance of payments has been achieving mostly by international financing support (for example – support from IMF, World Bank and some Governments) in the form of donations and foreign aid which has had very high share in post-war years and by foreign credits.

According to high international support (donations) and foreign credits, i.e. surplus in the capital account, Bosnia and Herzegovina has achieved continual foreign exchange increase.

Table 2. The continuous grow of foreign-exchange reserves

Gross foreign-exchange reserves	1999.	2000.	2001.	2002.	2003.	2004.	2005.	2006.	2007.
(in millions KM)	866	1021	2697	2484	2793	3479	4225	5452	6699,0
(in millions US \$)	472	482	1234	1196	1611	2208	2686	3496	4686,0

Source: B&H Central Bank.

The current transfers and credits from abroad can not be solution for foreign trade deficit overcoming in a long period. The trend of foreign exchange reserves increase will has to be changed if the foreign trade deficits shouldn't be eliminated.

Donations were being smaller and smaller, and today they are practically disappeared. So, the foreign indebtedness has its reasonable limits. That's why these two ways can only temporarily be a method of foreign trade deficit overcoming.

Table 3. B&H foreign debt

Year:	2003.	2004.	2005.	2006.	2007.
Foreign debt (in millions KM)	4014.0	4032.0	4338.0	4071.0	3904.0
Foreign debt (in millions US \$)	2565.0	2804.0	2617.0	2741.0	2730.0
Foreign debt (in % of GDP-a)	27.7	25.5	25.6	21.3	18.6

Source: B&H Central Bank.

Bosnia and Herzegovina has to find adequate approach to the competitiveness increase, so it could be possible to overcome B&H foreign trade deficit, i.e. to achieve economic balance of payments equilibrium. Such a huge foreign trade deficit is not sustainable in a long period and it has very negative consequences for B&H economy. B&H is in a very bad situation, and it is visible from the audit of the main real macroeconomic indicators (unemployment rates, income per capita, economic growth rate, foreign trade balance ...). The macroeconomic equilibrium (the aggregate demand and aggregate supply equilibrium, i.e. price level stability) in such situation of a high unemployment is not a good solution. The stability of nominal macroeconomic indicators (inflation rate, public debt, budget deficit, exchange rate ...) in Bosnia and Herzegovina is not a consequence of economic development but very restrictive macroeconomic policy (currency board system, hard budget policy) and impossibility of domestic producers to increase prices because of high foreign competition. The historical experiences of all today developed countries (for example Western European countries after Second World War) point out that Bosnia and Herzegovina in such situation should apply theory of expansive Keynesian economics (combination of budget deficit because of investing into infrastructure that is a base for industrialization, moderate inflation which can be under control of monetary policy and national currency depreciation which is a complementary to inflation and instrument for export encouragement), as well as effective custom protection to protect domestic not enough developed economy. The effec-

tive custom protection is also instrument for direction with a domestic unemployment resources and FDI as additional source of economic growth into certain sectors where Bosnia and Herzegovina has potential comparative advantages. But, the neoclassical concept of economic development (Washington Consensus) which is applied in Bosnia and Herzegovina with a total liberalization of foreign trade and macroeconomic stability is not logical in economic sense according to existing economic situation. Both the economic theory and historical experiences show that Bosnia and Herzegovina should implement different kind of economic development. Free market competition and FDI entrance can not bring economic development in the case of B&H economy.

Table 4. The most important macroeconomic indicators in B&H

	2003.	2004.	2005.	2006.	2007.
Real GDP growth rate (in %)	3.0	6.3	3.9	6.7	6.0
Inflation rate (in %)	0.6	0.4	3.8	6.1	1.5
Unemployment rate (in %)	42,0	43,0	45,5	32,4	31,1
State budget deficit (in % of GDP)	0.7	1.6	2.4	2.9	1.3
Current account balance (in % of GDP)	-19.4	-16.3	-18.0	-8.4	-13.1
The balance of foreign trade in goods (in % of GDP)	-49.5	-45.6	-45.8	-34.8	-38.7

Source: B&H Central Bank.

If the foreign trade deficit wouldn't be overcome, the trend of foreign exchange reserves increase will have to be changed in the opposite way. In that case, the foreign exchange reserves decrease, i.e. monetary base decrease will have negative influence on economic activity and make worse the economic situation in B&H economy. Then, the currency board, as the main source of macroeconomic stability will lose its economic sense, because the national currency will be crowded out, i.e. Bosnia and Herzegovina will pass through „informal currency substitution“. Such situation in Bosnia and Herzegovina will have a great influence on national currency depreciation. But, the national currency devaluation in the conditions of high economy openness and capital market liberalization will bring so high flight of capital and destabilizing speculations. The final result of this will be financial crisis and recession.

How Bosnia and Herzegovina can bring its balance of payments into equilibrium

The real economic situation in Bosnia and Herzegovina is not optimistic in the sense of foreign trade balance. Bosnia and Herzegovina is a very limited in accordance with the possibilities for foreign trade deficit overcoming.

In accordance with economic theory, there are a few different ways for foreign trade deficit overcoming. The application and efficiency of each way depend on concrete terms and conditions in certain economy. The effective custom protection is a measure to protect some certain sectors where the domestic production can substitute import, i.e. the sectors where the domestic economy has comparative advantages or unused resources.⁵ But, foreign trade liberalization is one of the main items of „Washington Consensus“ program which is applied in a full sense in Bosnia and Herzegovina. *Effective customs protection* is very important at the very beginning of development of each country. During the time, as economies of scale will bring greater domestic production and smaller import dependence,

⁵ The rate of effective protection is calculated by following formula:

$$T = \frac{t - rq}{1 - r}$$

where: T – the rate of effective protection to producers of the final commodity; t – the nominal tariff rate on consumers of the final commodity; q – the nominal tariff rate on the imported input; r – the ratio of the cost of the imported input to the price of the final commodity.

effective customs protection will be cancelled. So, the CEFTA⁶ 2006 agreement aims at establishing a free trade zone in the region of the South East Europe by 31 December 2010. And third, *Stabilization and Association Agreement*⁷ aims free foreign trade among Bosnia and Herzegovina and EU countries by the end of 2008. In that way, Bosnia and Herzegovina will be much more exposed to the higher foreign competition. But, from the other side, *Stabilization and Association Agreement* can not bring higher export for Bosnia and Herzegovina, because she has had free export's possibilities toward EU through preferential trade arrangements since 1997. Unfortunately, Bosnia and Herzegovina hasn't used advantages of preferential trade arrangements because she hasn't had appropriate products, or production investments which can enable export for EU market. Besides that, Bosnia and Herzegovina hasn't had the adequate institutions for standard issue which are necessarily for EU market.

The balance of payment deficit can be also overcome by current macroeconomic policy (fiscal and monetary) through domestic production and export encouragement. But, Bosnia and Herzegovina has applied the currency board system from the very beginning of its establishment as a state (currency board is also part of Dayton peace agreement) and current macroeconomic policy is not possible. The money supply changes depending on balance of payment balance, i.e. the money supply is proportional to the foreign exchange reserves amount. So, the monetary authority in currency board system doesn't determine the money supply, and that is why the monetary authority is named „currency board“. In this system, the monetary authority can not encourage economic growth by monetary policy. Monetary authority is entirely disabled in the state budget deficit encouragement or financing by primary issue of money which is necessary to obtain greater economic growth rates, i.e. for financing of the establishment of those parts of economy that market economy cannot function without (infrastructure, institutions, research and development, staff education etc.). Since debt accumulation of the state with domestic and foreign residents is restrained, as well as inflow of donations which significantly participate in coverage of budget deficits in the previous years and inability of deficit financing by Central Bank, B&H is forced on so called "hard budget policy", where public revenues are only covered from disposable domestic financial resources and developing politics cannot be conducted.

It will be impossible to overcome the foreign trade deficits in Bosnia and Herzegovina in long term because of all restrictions in macroeconomic policies (monetary, fiscal, foreign trade and exchange rate policy). In that case, the trend of foreign exchange reserves increase will have to be changed, i.e. foreign trade reserves amount will decrease. Within a framework of currency board system, it means money supply decrease, interest rate increase and recession of national economy. Devaluation as a measure for export encouragement and foreign trade deficit overcoming is not good solution because of high level of B&H economy openness and speculations. Devaluation will also make worse the import expenditure and foreign debt value. Such pessimistic forecast about possibilities for foreign trade deficit overcoming is a consequence of wrong macroeconomic policy in Bosnia and Herzegovina as a whole. The solution for B&H economy competitiveness increase should be achieved into public expenditure structure, because it is generally known that Bosnia and Herzegovina has so high administration costs. Public expenditure – switching policy is a measure by which Bosnia and Herzegovina can reduce a significantly part of public expenditure and increase productive investments. It means that Bosnia and Herzegovina should simplify a state and reduce administrative costs.

Conclusion

Bosnia and Herzegovina has been achieving very stable macroeconomic balance situation, i.e. stable price level from the very beginning of its establishment as a state. It is not a consequence of real economic development but the strictest macroeconomic policy implementation (*currency board* system implementation, hard budget policy implementation) and foreign trade liberalisation. Bosnia and Her-

⁶ Conference on CEFTA (Central European Free Trade Area) enlargement held in Bucharest, 7. April 2006. The parties of the CEFTA agreement are: Croatia, Bosnia and Herzegovina, Serbia, Montenegro, Macedonia, Kosovo, Albania and Moldova.

⁷ The European Commission has created the Stabilisation and Association Process in 1999, as the framework for Western Balkan countries to move closer to the European Union.

zegovina has noted sustained foreign reserves increase, i.e. total balance of payment surplus. But, the analysis of B&H balance of payments structure or its items shows that B&H economic situation is a very unfavourable. The huge and continuous foreign trade deficit in goods shows the real situation about B&H economy competitiveness toward international competition. Besides that, the relatively small foreign trade share in services and current transfers as the most stable and most important source of B&H balance of payment deficit covering is a confirmation of insufficient B&H economy development.

The balance of payment deficit financing through foreign donations and foreign debts can not be the solution for a long period. Bosnia and Herzegovina has to achieve balance in autonomous transactions with a foreign trade partners because they take place for business or profit motives and they represent the real situation of relative economic competitiveness of certain country. The long-term disequilibrium in autonomous transactions will cause recession in a B&H economy as a whole.

But, Bosnia and Herzegovina is a very limited in autonomous macroeconomic policies conducting (custom policy, monetary policy, fiscal policy and exchange rate policy) which can be used, according to economic theory, for foreign trade disequilibrium overcoming.

The application of neoclassical macroeconomic program (known as a Washington Consensus), which is appropriate for high-competitiveness developed countries on the level of full employment but not for underdeveloped countries, in the case of B&H economy can not bring good results.

In the case of foreign trade disequilibrium overcoming impossibility, the trend of foreign exchange reserves will has to be changed in a long period. The devaluation of national currency in that case will be inevitable. The expectation of devaluation will cause high level of speculation and flight of capital because of foreign exchange risk and those two facts will probably generate financial and economic crisis in the conditions of full international capital movement.

References

- Appleyard, D. R., Field, A. J. (1998): *International Economics*, Irwin, McGraw Hill, Boston
- Ingram, K. Joseph, *The World Bank Role in the Development of a Financial Market in Bosnia and Herzegovina*; <http://siteresources.worldbank.org>
- Kenen, P. (2000): *The International Economy*, Cambridge University Press, Cambridge
- Krugman, P. R, Obstfeld, M. (2000): *International Economics – Theory and Policy*, Addison Wesley Longman, INC, Reading, Massachusetts
- Salvatore, D. (1998): *International Economics*, Prentice Hall, New Jersey
- Stojanov, D. (2000): *International Finance in Global Economy*, Economic faculty University of Sarajevo, Sarajevo
- IMF (1995), *Balance of payments compilation guide*, Washington, D.C.

Applying MGARCH Models in Finance

Jelena Minović, Ivana Simeunović¹

ABSTRACT – In this paper we give literature review about application of multivariate GARCH (MGARCH) models in modern finance and economy. First, we will present basic concept of multivariate volatility (GARCH) modeling. MGARCH models specify equations for how the covariance moves over time and these models have been designed to model the conditional covariance matrix of multiple time series. Problems of portfolio Value-at-Risk (VaR) estimates, portfolio optimization, risk assessment, volatility transmitting, asset allocation, hedging in futures markets, pricing of assets and derivatives, CAPM betas require a multivariate framework, because all problems mentioned above require covariances as inputs. This implicates very wide application of MGARCH models. Additionally, in this paper we will also describe the leverage effect in multivariate GARCH models.

KEY WORDS: multivariate GARCH models, volatility, application of MGARCH models, leverage effect

Introduction

The goal of this paper is to give overview about application of multivariate GARCH (MGARCH) models in finance. The application of MGARCH models is very wide. Some of typical applications are: portfolio optimization, pricing of assets and derivatives, computation of the value at risk (VaR), futures hedging, volatility transmitting and asset allocation. All aforementioned problems require covariances as inputs, so these problems require a multivariate framework [15]. It should be noted that in many financial econometric models the conditional-variance equation plays a major role. For example, the systematic risk as measured by beta depends on the (conditional) second moments of the asset returns, and so does the minimum-variance hedge ratio. Reliable estimates and inference of these quantities depend on well-specified conditional heteroscedasticity models [24], [15].

The paper is organized as follows. In Section 2, we present basic concept of multivariate volatility (GARCH) modeling. In Section 3, we give literature review about application of multivariate GARCH (MGARCH) models in different areas of finance. Section 4 presents the leverage effect in multivariate GARCH models. Finally, Section 5 concludes.

Basic concept of volatility modeling

Multivariate GARCH models specify equations for how the variances and covariances move over time. Modeling a covariance matrix is difficult because of the likely high dimensionality of the problem and the constraint that a covariance matrix must be positive definite [18]. The crucial stage in MGARCH modeling is to provide a realistic but parsimonious specification of the variance matrix ensuring its positivity. Obviously a disadvantage of the multivariate approach is that the number of parameters to be estimated in the GARCH equation increases rapidly, which limits the number of assets that can be included [9], [15]. In this section we give an overview of different types of MGARCH models. The models covered are vector ARCH model (VEC, initially due to Bollerslev, Engle and Wooldridge, 1988), diagonal VEC model (DVEC), the BEKK model (named after Baba, Engle, Kraft and Kroner), Constant Conditional Correlation Model (CCC, Bollerslev, 1990), Dynamic Conditional Correlation Model (DCC models of Tse and Tsui (2002) and Engle (2002)) [16].

¹ Jelena Minović, Ivana Simeunović, Belgrade Banking Academy, Belgrade

The VEC model

The general multivariate GARCH(p, q) model is given as:

$$VEC(\Sigma_t) = C + \sum_{i=1}^q A_i \cdot VEC(\varepsilon_{t-i} \varepsilon'_{t-i}) + \sum_{j=1}^p B_j \cdot VEC(\Sigma_{t-j}), \quad (2.1)$$

where A_i and B_j are parameter matrices containing $(N^*)^2$ parameters [with $N^* = N(N+1)/2$], whereas the vector C contains N^* coefficients. VEC is the column-stacking operator. We will assume that all eigenvalues of the matrix $\sum_{i=1}^q A_i + \sum_{j=1}^p B_j$ have modulus smaller than one, in which case the vector process \square_t is covariance stationary with unconditional covariance matrix given by \square_t , say [12], [16].

The diagonal VEC (DVEC) model

Under the diagonal VEC (DVEC) model, each variance-covariance term is postulated to follow a GARCH-type equation. The model can be written as follows [25, 7]:

$$\sigma_{ij,t} = c_{ij} + \sum_{h=1}^p a_{hij} \varepsilon_{t-h,i} \varepsilon_{t-h,j} + \sum_{h=1}^q b_{hij} \sigma_{t-h,ij} \quad 1 \leq i \leq j \leq k, \quad (2.2)$$

where c_{ij} , a_{hij} and b_{hij} are parameters. The DVEC multivariate GARCH model could also be expressed as an infinite order multivariate ARCH model, where the covariance is expressed as a geometrically declining weighted average of past cross products of unexpected returns, with recent observations carrying higher weights. Now, we will present the diagonal VEC model in the form:

$$\Sigma_t = C_0^* + \sum_{i=1}^m A_i^* \square (\varepsilon_{t-i} \varepsilon'_{t-i}) + \sum_{j=1}^s B_j^* \square \Sigma_{t-j} \quad (2.3)$$

where m and s are non-negative integers, and \square denotes Hadamard product² (element by element matrix multiplication) [21]. Let us define the symmetric $N \times N$ matrices A_i^* and B_j^* as the matrices implied by the relations $A = \text{diag}[\text{vec}(A^*)]$ ³ for and $B = \text{diag}[\text{vec}(B^*)]$ for and C_0^* as given by $C = \text{vec}(C_0^*)$ [4]. The model which is represented by Eq. (2.3) is DVEC(m, s) model [21], [16].

The BEKK model

The BEKK model is in form:

$$\Sigma_t = C_0 C_0' + \sum_{k=1}^K \sum_{i=1}^q A_{ki}' \varepsilon_{t-i} \varepsilon'_{t-i} A_{ki} + \sum_{k=1}^K \sum_{i=1}^p B_{ki}' \Sigma_{t-i} B_{ki}, \quad (2.4)$$

where C_0 is a lower triangular matrix and A_{ki} and B_{ki} are $N \times N$ parameter matrices. The BEKK representation in Eq. (2.4) is a special case of Eq. (2.1) [12]. Based on the symmetric parameterization of

² If $X = (x_{ij})$ and $Y = (y_{ij})$ are both $m \times n$ matrices, then $X \square Y$ is the $m \times n$ matrix containing element wise products $(x_{ij} y_{ij})$ [4].

³ If v is a vector of dimensions m then $\text{diag}(v) = I_m \times v$ [4].

the model, Σ_t is almost surely positive definite provided that C_0C_0' is positive definite [21]. The necessary condition for the covariance stationarity of the BEKK model is having the eigenvalues, i.e. the characteristic roots of $\sum_{i=1}^q \sum_{k=1}^K (A_{ik}^* \otimes A_{ik}^*) + \sum_{i=1}^p \sum_{k=1}^K (B_{ik}^* \otimes B_{ik}^*)$ less than one in modulus [17], [16].

Constant Conditional Correlation (CCC) Model

Bollerslev (1990) suggested a multivariate GARCH model in which all conditional correlation are constant and the conditional variances are modeled by univariate GARCH models. This so-called the Constant Conditional Correlation Model (CCC) [25]. Thus the CCC model is given by

$$\sigma_{ii,t} = c_i + \sum_{h=1}^p a_{hi} \varepsilon_{t-h,i}^2 + \sum_{h=1}^q b_{hi} \sigma_{t-h,i} \quad i = 1, \dots, k \tag{2.5}$$

$$\sigma_{ij,t} = \rho_{ij} \sqrt{\sigma_{ii,t} \sigma_{jj,t}} \quad 1 \leq i < j \leq k \tag{2.6}$$

$$\rho_t = \rho = [\rho_{ij}], \rho_{ii} = 1 \tag{2.7}$$

where Σ_t is the $N \times N$ conditional correlation matrix of Σ_t and Σ_t is symmetric with unit diagonal elements. The dynamic of the covariances is determined only by the dynamics of the two conditional variances. There are $N(N - 1) / 2$ parameters in Σ_t , [16].

Dynamic Conditional Correlation Model (DCC)

For N -dimensional returns, Tse and Tsui (2002) assume that the conditional correlation matrix Σ_t follows the model (DCC_T(M)) [21]:

$$\rho_t = (1 - \theta_1 - \theta_2) \rho + \theta_1 \psi_{t-1} + \theta_2 \rho_{t-1} \tag{2.8}$$

$$\psi_{ij,t-1} = \frac{\sum_{m=1}^M e_{i,t-m} e_{j,t-m}}{\sqrt{\left(\sum_{m=1}^M e_{i,t-m}^2\right) \left(\sum_{m=1}^M e_{j,t-m}^2\right)}}, e_{it} = \varepsilon_{it} / \sqrt{\sigma_{iit}} \tag{2.9}$$

where θ_1 and θ_2 are scalar parameters, $\theta_1, \theta_2 > 0$ and $\theta_1 + \theta_2 < 1$. Ψ is like in CCC, i.e. $N \times N$ positive-definite matrix with unit diagonal elements, and ψ_{t-1} is the $N \times N$ sample correlation matrix using shocks ($\varepsilon_{t-M}, \dots, \varepsilon_{t-1}$) from $\varepsilon = t - M, t - M + 1, \dots, t - 1$ for a prespecified M . A necessary condition to ensure positivity of ψ_{t-1} is that $M \geq N$. Notice that $\psi_{ii,t-1} = 1$ for each i by construction [21, 2]. Ψ_t is a weighted average of correlation matrices ($\Psi, \psi_{t-1}, \Psi_{t-1}$). Hence, $\Psi_t > 0$ if any of three components is greater than zero. If $\theta_1 = \theta_2 = 0$, the CCC model is obtained. Hence one can test for CCC against DCC_T(M) [2]. Estimation of the two scalar parameters θ_1 and θ_2 requires special constraints to ensure positive definiteness of the correlation matrix. The choice of Σ_t and M deserves a careful investigation [21], [16].

Engle (2002) proposes the model (DCC_E(1,1)):

$$\rho_t = (\text{diag } Q_t)^{-1/2} Q_t (\text{diag } Q_t)^{-1/2} \tag{2.10}$$

where $Q_t = (q_{ij,t})$ is a $N \times N$ matrix, symmetric and positive, given by

$Q_t = (1 - \theta_1 - \theta_2)\bar{Q} + \theta_1 e_{t-1} e_{t-1}' + \theta_2 Q_{t-1}$, where $e_t = (e_{1t}, e_{2t}, \dots, e_{Nt})'$ is the standardized innovation

vector with elements $e_{it} = \varepsilon_{it} / \sqrt{\sigma_{iit}}$, \bar{Q} is the unconditional covariance matrix of e_t , it is $N \times N$ matrix, symmetric and positive, and θ_1 and θ_2 are non-negative scalar parameters satisfying

$0 < \theta_1 + \theta_2 < 1$, what implies that $Q_t > 0$ and $\psi_t > 0$ [21, 2]. Q_t is the covariance matrix of e_t , since q_{iit} is not equal to one by construction. If $\theta_1 = \theta_2 = 0$, and $\bar{q}_{ii} = 1$, the CCC model is obtained. Hence one can test for CCC against DCC_E(1,1). In both DCC models, all the conditional correlations have the same dynamics [2], [16].

The application of MGARCH models

The success of the autoregressive conditional heteroscedasticity (ARCH) model and the generalized ARCH (GARCH) model in capturing the time-varying variances of economic data in the univariate case has motivated many researchers to extend these models to the multivariate dimension [23]. While univariate descriptions are useful and important, problems of risk assessment, asset allocation, hedging in futures markets and options pricing require a multivariate framework, since high volatilities are often observed in the same time periods across different assets [27]. There are many examples in which empirical multivariate models of conditional heteroscedasticity can be used fruitfully. An illustrative list includes the following analyses: model of the changing variance structure in an exchange rate regime (Bollerslev, 1990), calculation of the optimal debt portfolio in multiple currencies (Kroner and Claessens, 1991), evaluation of the multiperiod hedge ratios of currency futures (Lien and Luo, 1994), examination of the international transmission of stock returns and volatility (Karolyi, 1995) and estimation of the optimal hedge ratio for stock index futures (Park and Switzer, 1995) [23].

C. M. Hafner and H. Herwartz (1998) introduced volatility impulse response functions (VIRF) for multivariate time series exhibiting conditional heteroskedasticity. For the general VEC representation of multivariate GARCH models they provided the analytic expressions for VIRF. The structural dependence of the conditional correlation was shown to depend crucially on the multivariate GARCH specification in use. Volatility shocks were highly persistent for bivariate exchange rate series. Using the BEKK model as parameterization device they found deviations from a restricted version of the so-called diagonal model to be significant [14]. These authors (2006) introduced a new concept of impulse response functions tracing the effects of independent shocks on volatility through time while avoiding typical orthogonalization and ordering problems. They applied their methodology to a bivariate system consisting of foreign exchange (FX) rate series, and they discussed various examples of historical shocks and their impacts on volatility. They found, among other things, considerably different interpretations using VIRF and conditional volatility profiles, respectively, for shocks affecting the volatilities in an asymmetric way, that is, a shock that perturbs one series but not the other [12]. Again, same authors (2004) used the general VEC representation of multivariate GARCH model. They proved sufficiency or necessity of particular parameter restrictions for noncausality in variance (linear causality in variance). They showed that a convenient alternative to residual based testing was to specify a multivariate volatility model, such as multivariate GARCH (or BEKK), and constructed a Wald test on noncausality in variance. The Wald test was shown to have superior power properties under a sequence of local alternatives. Furthermore, they showed by simulation that the Wald test is quite robust to misspecification of the order of the BEKK model, but that empirical power decreases substantially when asymmetries in volatility are ignored [17]. In their paper (1998) these authors employed bivariate GARCH in Mean time series models in order to explain excess return of 20 major German stocks in the light of the CAPM framework with time varying betas. The dependence of beta on news was characterized with respect to different sources (asset specific vs. market general news). The empirical result suggested that negative news emerging from the market involve a stronger impact on beta relative to positive news [13].

Wenling Yang, David E. Allen (2004) estimated futures hedge ratios from four alternative modeling frameworks, an Ordinary Least Squares (OLS)-based model, a Vector Autoregression (VAR) model, a Vector Error-Correction model (VECM) and a diagonal VEC (DVEC) multivariate GARCH model. They compared the hedging effectiveness of these hedge ratios. The multivariate GARCH time-varying hedge ratios outperform the other constant hedge ratios, and MGARCH hedge ratios provide the highest rate of return as well as the greatest portfolio risk reduction [28]. Bera, Garcia and Roh (1997) reported that the BEKK model did not perform well in the estimation of the optimal hedge ratios. Lien, Tse and Tsui (2001) reported difficulties in getting convergence when using the BEKK model to estimate the conditional-variance structure of spot and futures prices [22].

To capture the time-varying feature of conditional correlation between equities and exchange rates, Tong (1996) adopted the BEKK multivariate GARCH model. The BEKK algorithm permits time-variation in the conditional covariance while it ensures the condition of a positive-definite, variance-covariance matrix. But as for many currency markets, Sheedy (1998) found that the BEKK specifications would not be effective in eliminating the correlation structure [26].

Siu Pang Au-Yeung and Gerard Gannon (2002) applied BEKK-GARCH model with multiple switch points in the variance equations and they found to capture the structural changes that have taken place in the Hong Kong markets. They found the BEKK-GARCH (1,1) model with 3 switching points was superior to other models with less switching points. It was able to capture structural changes in the volatility structure of the HSI and HSIF. Hence, their results showed there are significant impacts on the informational efficiency in the stock and futures market following the policy changes [17].

Matteo Bonato (2006) combined the appealing properties of the stable Paretian distribution to model the heavy tails and the GARCH model to capture the phenomenon of the volatility clustering. A multivariate GARCH structure (diagonal BEKK and VEC) is then adopted to model the covariance matrix of the Gaussian vectors underlying the sub-Gaussian system. He was applied the model to daily U.S. stock returns [6].

Aslihan Altay-Salih, Mustafa C. Pinar and sven Leyffer (2003) proposed a constrained nonlinear programming view of multivariate GARCH volatility estimation models in financial econometrics. Their results demonstrate that constrained nonlinear programming (NLP) is a worthwhile exercise for GARCH models, especially for the bivariate and trivariate cases, as they offer a significant improvement in the quality of the solution of the optimization problem over diagonal VECH and BEKK representation of the multivariate GARCH model [1].

Rombouts and Verbeek (2004) analyzed optimal portfolio choice focusing explicitly on downside risk. In particular, they investigated the economic value of multivariate volatility models (DVEC, DCC models of Tse and Tsui (2002) and Engle (2002)) when optimal portfolios are constructed under a Value-at-Risk (VaR) constraint. Value-at-Risk defines the maximum expected loss on an investment over a specified horizon at a given confidence level, and is used by many banks and financial institutions as a key measure for market risk. They explored the usefulness of semi-parametric multivariate GARCH models for asset returns for evaluating the VaR of a portfolio. They also illustrated how such models can be used to determine an optimal portfolio that is based on maximizing expected returns subject to a downside risk constraint, measured by VaR. The advantage of the multivariate approach is that the VaR of any portfolio of assets can be determined from the GARCH estimates and the corresponding non-parametric estimate of the multivariate distribution of the innovations [19].

C. Brooks, A.D. Clare and G. Persaud (2002) have investigated the possible use of multivariate GARCH models with time-varying conditional covariances and correlations in calculating minimum capital risk requirements (MCRRs) for portfolios of assets. Their most important result is that more accurate MCRRs estimates might be achievable if they can consider the VaR problem in a multivariate context. The model that they have applied in paper appears to have been relatively accurate, at least compared with equivalent calculations based on univariate models [8].

Kroner and Sultan (1991) applied the constant-correlation bivariate GARCH (bivariate CCC-GARCH) model to hedge the currency exposure risk. While conditional variance of different assets and currency forward prices changes over time, the conditional correlations for currency markets are assumed to be

constant in order to get a positive definite variance-covariance matrix as proposed in Bollerslev (1990). This constant-correlation approach has been widely applied because of its computational simplicity. But the financial data of equities and exchange rates provided strong evidence that the assumption of having a constant correlation was violated for these markets [26].

Luc Bauwens and Sebastien Laurent (2004) showed that a high dimensional VaR problem could be solved without imposing strong restrictions on both the covariance structure and the distribution of the innovations. They showed that new family of distributions (the multivariate skew-Student density) combined with a multivariate DCC-GARCH model is useful for modeling financial returns and forecasting the Value-at-Risk (VaR) of portfolios of assets. Indeed, they found that the multivariate skew-Student density provides better, or at least not worse, out-of-sample VaR forecasts than a symmetric density [3].

Robert Engle (2002) showed in his paper that the bivariate version of DCC model provides a very good approximation to a variety of time varying correlation processes. The comparison of DCC with simple multivariate GARCH and several other estimators showed that the DCC is often the most accurate. This is true whether the criterion is mean absolute error, diagnostic tests or tests based on value at risk calculations. Empirical examples from typical financial applications are quite encouraging as they reveal important time varying features that might otherwise be difficult to quantify. Statistical tests on real data indicated that all of tested models are misspecified but that the DCC models are competitive with the multivariate GARCH specifications and superior to moving average methods [11].

Shohreh Valiani (2004) adopted MGARCH specification that has been applied to estimate the time-varying correlations of underlying assets and related currency forwards in order to hedge the currency exposure risk in an international portfolio context. His paper adopted a simple conditional risk minimizing model and based on the time-varying correlations of security and currency forward exchange rate returns estimate the optimal weights of investment in different underlying assets accompanied by the necessary amounts of currency forward hedges. The empirical investigation shows that the optimal multivariate GARCH dynamic hedging strategy can capture the currency fluctuations the best and over-performs the risk controlling procedure [26].

John Elder (2003) derived an analytical expression for an impulse-response function for a vector autoregression with multivariate GARCH errors, where the vector of conditional means is a function of the conditional variances. He also provided the appropriate interpretation of an impulse-response function for such models and suggest interesting empirical issues that can be addressed within this framework [10].

Y. K. Tse and Albert K. C. Tsui (1998), applied the multivariate GARCH model with time-varying correlation (DVEC) to three data sets, namely, the exchange rate data, the national stock market data and the sectoral price data. This model was found to pass the model diagnostics satisfactorily and compared favorably against the BEKK model, while the constant-correlation MGARCH (CCC) model was found to be inadequate. Extending the constant-correlation model to allow for time-varying correlations provided some interesting empirical results. In particular, the estimated conditional-correlation path provides an interesting time history that would not be available in a constant-correlation model [22].

Tim Bollerslev (1989) proposed a multivariate time series model with time varying conditional variances and covariances, but constant conditional correlations (CCC model). Parametrizing each of the conditional variances as a univariate GARCH process, the descriptive validity of the model was illustrated for a set of five nominal European U.S. dollar exchange rates following the inception of the European Monetary System (EMS). When compared to the pre-EMS free float period, the comovements between the currencies were found to be significantly higher over the later period [5].

Michael Schröder and Martin Schöler (2003) attempted to assess the Europe-wide systemic risk in banking. Systemic risk is one of the main reasons why banks are regulated and supervised. As a measure of systemic risk they used the conditional correlations between pairs of national bank stock indices of the EU countries. The correlations were estimated using bivariate GARCH-models which considered the influence of the national stock market index and a short-term interest rate as explanatory fac-

tors. The correlations measured the linear relationships between the residuals of the GARCH-models and as these residuals mainly reflect bank specific factors they are suitable to quantify the systemic risk [20].

Jelena Minović (2007) applied MGARCH (restricted BEKK, DVEC and CCC) models to the analysis of the Serbian financial market. She considered bivariate and trivariate time series models. The main finding of her paper is that conditional covariances exhibited significant changes over time for the both stocks (Hemofarm and Energoprojekt) and the index (BELEX15). So, the correlation between log returns of stocks and index was very unstable over time in Serbian frontier markets. She showed that even restricted version of BEKK, DVEC and CCC models with reduced number of parameters could give fairly accurate results (for detail see reference [15]).

Leverage effect in multivariate GARCH models

Leverage effect is the tendency for volatility to rise more following a large price fall than following a price rise of the same magnitude [7]. For example, for stock returns, negative shock may have a larger impact on their volatility than positive shocks of the same absolute value (this effect is unveiled by Black 1976). In other words, the news impact curve, which traces the relation between volatility and the previous shock, is asymmetric. For multivariate series the same argument applies: the variances and the covariances may react differently to a positive than to a negative shock [4]. Most multivariate GARCH models do not allow for asymmetries [9].

Kroner and Ng (1998) applied the model to large and small firm returns. They found that bad news about large firms can cause additional volatility in both small-firm and large-firm returns. Furthermore, this bad news increase the conditional covariance. Small firm news had only minimal effects [4].

Peter De Goeij and Wessel Marquering (2004) analyzed bond and stock market interactions by modeling the time-varying covariances between stock and bond market returns. The main contribution of their paper is that it extends the multivariate model by allowing for asymmetric effects in covariances between stock and bond returns. They used the asymmetric diagonal VECH⁴ model in the matrix notation:

$$\Sigma_{t+1} = C + B \Sigma_t + A_1 \varepsilon_t \varepsilon_t' + A_2 \left(\varepsilon_t^- \varepsilon_t^{-'} \right) + A_3 \left(\varepsilon_t^- \varepsilon_t^{+'} \right) + A_4 \mathfrak{I} \left(\varepsilon_t^+ \varepsilon_t^{-'} \right),$$

where $C, B, A_1, A_2, A_3,$ and A_4 are $(N \times N)$ parameter matrices, \mathfrak{I} is the operator that permutes rows of a square matrix, in such a way that the lower triangular part of the matrix is substituted by the upper

triangular part of the matrix, and $\varepsilon_t^- = \left[I_{\varepsilon_{1,t}} \varepsilon_{1,t}, \dots, I_{\varepsilon_{N,t}} \varepsilon_{N,t} \right]'$ and

$$\varepsilon_t^+ = \left[\left(1 - I_{\varepsilon_{1,t}} \right) \varepsilon_{1,t}, \dots, \left(1 - I_{\varepsilon_{N,t}} \right) \varepsilon_{N,t} \right]' \quad [9].$$

They showed that asymmetric effects are present in the covariances between stock returns and returns on a second asset. They also showed that daily returns on the S&P 500 and NASDAQ indexes exhibit significant leverage effects. Not only variances, but also covariances, between stock and bond returns exhibit significant asymmetries. Overall their findings imply that a symmetric specification is too restrictive to model the conditional covariances. Especially bad news in the stock market is followed by a much higher conditional covariance than good news in the stock market. This holds irrespective of the sign of the bond market shock. The cross effects in asymmetries appear to be important as well. Covariance between stock and bond returns tend to be relatively low after bad news in the stock mar-

⁴ VECH is the operator that stacks the lower triangle of a $N \times N$ matrix as an $N^* \times 1, N^* = N(N+1)/2$ vector, while VEC is the operator that stacks a matrix as a column vector [15].

ket and good news in the bond market. Thus they find evidence that the cross-asymmetry terms are important when modeling covariances between asset returns. Overall the results indicate that the performance of the asymmetric diagonal VECH model⁵ of conditional second moments is quite good. Asymmetries in covariances have important implications for portfolio managers [9].

Peter De Goeij and Wessel Marquering inferred that the conditional covariance is high after shocks of the same sign, while shocks in opposite directions lower the conditional covariance. This is because bond returns are positively correlated. As the assets move together, shocks in the same direction involve a higher risk than shocks in opposite directions. This makes sense, as it is riskier to invest in two assets that are highly positively correlated than to invest in two assets that are less correlated [9].

Hansson and Hordahl (1998) add the term $D \square v_{t-1} v'_{t-1}$, in a DVEC model like (2.3). Where D is a diagonal matrix of parameters. To incorporate the leverage effect in the (bivariate) BEKK model, Hafner and Herwartz (1998) add the terms $D_1' \varepsilon_{t-1} \varepsilon'_{t-1} D_1 1_{\{\varepsilon_{1,t-1} < 0\}} + D_2' \varepsilon_{t-1} \varepsilon'_{t-1} D_2 1_{\{\varepsilon_{2,t-1} < 0\}}$, where D_1 and D_2 are 2×2 matrices of parameters and $1_{\{\dots\}}$ is the indicator function. This generalizes the univariate GJR specification (for detail see reference [15]) [4].

Conclusion

The main aim of this paper is application MGARCH models in different area economy and finance. We present some literature review about application of these models. In the beginning of this paper we introduced basic concept of multivariate volatility (GARCH) modeling. The key is that in many financial econometric models the conditional-variance and conditional-covariance equations play a major role. There are many examples in which empirical multivariate models of conditional heteroscedasticity can be used fruitfully. So, multivariate descriptions are useful and important, because problems of risk assessment, asset allocation, hedging in futures markets and options pricing, portfolio Value at Risk estimates, CAPM betas, require a multivariate framework and covariances as inputs.

References

- Altay-Salih, Aslihan, Pinar Mustafa, Leyffer Sven. 2003. "Constrained Nonlinear Programming for Volatility Estimation with GARCH Models". <http://www.siam.org/journals/sirev/45-3/40011.html>
- Bauwens, Luc. 2005. "MGARCH-slides-LB-print". Universit e catholique de Louvain
- Bauwens, Luc and Laurent Sebastien. 2002, revised April 30, 2004. "A New Class of Multivariate Skew Densities, with Application to GARCH Models".
<http://www.core.ucl.ac.be/econometrics/Bauwens/papers/2002-20-JBESfinal.pdf>
- Bauwens, L., Laurent S. and Rombouts J. V. K. 2006. "Multivariate GARCH models: A survey". *Journal of Applied Econometrics*: 79-109
- Bollerslev, Tim. 1990. "Modelling the coherence in short-run nominal exchange rates: A multivariate Generalized ARCH Model". *Review of Economics & Statistics* 72: 498-505
- Bonato, Matteo. 2006. "A Multivariate Stable Model for the Distribution of Portfolio Returns".
http://www.phd-finance.unizh.ch/Courses/Downloads/SRP_Bonato.pdf
- Brooks, Chris. 2002. *Introductory Econometrics for Finance*. Cambridge University Press
- Brooks, C. Clare A.D. and Persaud G. 2002. "A Note on estimating market-based minimum capital risk requirements: A multivariate GARCH approach". *The Manchester School*. Vol 70, No.5, pages 666-681.
- De Goeij, Peter, Marquering Wessel. 2004. "Modeling the Conditional Covariance Between Stock and Bond Returns: A Multivariate GARCH Approach". *Journal of Financial Econometrics*. Vol. 2, No. 4: 531-564

⁵ For detail about VECH and diagonal VECH models we can see reference [15].

- Elder, John. 2003. "An Impulse-Response Function for a Vector Autoregression with Multivariate GARCH-in-Mean". *Economics Letters*, 79:1, 21-26.
- Engle, Robert. 2002. "Dynamic conditional correlation – A simple class of multivariate GARCH models". *Forthcoming Journal of Business and Economic Statistics*. Vol 17, No 5
- Hafner, Christian, Herwartz Helmut. 2006. "Volatility impulse response for multivariate GARCH models: An exchange rate illustration". *Journal of International Money and Finance*: 1-22
- Hafner, Christian, Herwartz Helmut. 1998. "Structural analysis of portfolio risk using beta impulse response functions". *Statistica Neerlandica* Vol. 52, No. 3, pp. 336-355
- Hafner, Christian M., Herwartz Helmut. 1998. "Volatility Impulse Response Functions for Multivariate GARCH Models". Core Discussion paper.
<http://darwin.core.ucl.ac.be/services/psfiles/dp98/dp9847.pdf>
- Minović, Jelena. 2007. „Multivariate GARCH models: theoretical survey and model application”. MS.c. Thesis, Faculty of Economics, University of Belgrade. Serbia
- Minović, Jelena. 2007. "Theoretical survey of multivariate GARCH models". *SYM-OP-IS 07*, zbornik radova, Zlatibor, Srbija.
- Pang, Siu, Au-Yeung and Gannon Gerard. 2002. "Regulatory change and structural effects in HSIF and HSI volatility". <http://www.docs.fce.unsw.edu.au/banking/seminar/2002/Gannon.pdf>
- Pourahmadi, Mohsen. 1999. "Joint mean-covariance with applications to longitudinal data: Unconstrained parameterization", *Biometrika* 86, 3: 677-690
- Rombouts, Jeroen V.K., Verbeek Marno. 2004. "Evaluating Portfolio Value-at-Risk using Semi-Parametric GARCH Models". <http://ideas.repec.org/p/iea/carech/0414.html>
- Schröder, Michael and Schüler Martin. 2003. "Systemic Risk in European Banking – Evidence from Bivariate GARCH Models". Discussion Paper No. 03-11. <ftp://ftp.zew.de/pub/zew-docs/dp/dp0311.pdf>
- Tsay, Ruey S. 2005. *Analysis of Financial Time Series*, Wiley, New Jersey.
- Tse, Y. K., and Tsui Albert K. C. December 1998. "A Multivariate GARCH Model with Time-Varying Correlations". <http://www.econometricsociety.org/meetings/wc00/pdf/0250.pdf>
- Tse, Y. K. 2000. "A test for constant correlations in a multivariate GARCH model". *Journal of Econometrics* 98: 107-127
- Tse, Y. K. 2002. "Residual-based diagnostics for conditional heteroscedasticity models". *Econometrics Journal*. Vol. 5, pp. 358-373.
- Tse, Y. K., and Tsui Albert K. C. 1999. "A note on diagnosing multivariate conditional heteroscedasticity models". *Journal of time series analysis*. Vol. 20, No. 6: 679-691,
<http://www.core.ucl.ac.be/econometrics/Bauwens/papers/2002-20-JBESfinal.pdf>
- Valiani, Shohreh. 2004. "Application of Multivariate GARCH in Optimal Dynamic Hedging and International Asset Allocation". European Financial Management Association, Basel, Switzerland.
- Wang, Mingjin, and Yao Qiwei. 2005. "Modelling multivariate volatilities: An ad hoc method". <http://stats.lse.ac.uk/q.yao/qyao.links/paper/wy04.pdf>
- Yang, Wenling, David E. Allen. 2004. "Multivariate GARCH hedge ratios and hedging effectiveness in Australian futures market". *Accounting and Finance* 45, 301-321.

Venture Capital in the Central and Eastern European Countries and Croatia

Bojan Morić Milovanović, Tihana Šmitran, Dajana Cvrilje¹

ABSTRACT – *Venture capital has greatly developed over the last three decades in the United States, but much less so in Europe, especially in the CEE countries. Therefore, the purpose of this paper is to provide a comparative analysis of the venture capital in the CEE and Croatia, with special emphasis on the situation of the venture capital in Croatia. After a short overview of the general development of venture capital and its origins, the situation in the CEE and Croatia is analysed in more detail by using different measures such as the ability to attract capital, venture capital investments as a percentage of GDP, index of economic freedom and combined scores. All the measures show that Croatia lags behind all the CEE countries, but more importantly, they also show that Croatia has a large potential for the development in this area.*

KEY WORDS: *venture capital, investment activity, sources of finance, Index of economic freedom, Central and Eastern Europe, Croatia*

Introduction

Entrepreneurial ventures – in other words, businesses that are innovative and oriented towards growth – are often resource constrained and they face considerable challenges in gaining the access to financial resources, as well as knowledge resources like business know-how, experience and networks. An answer to these problems could lie within the venture capital segment of the financial market. Venture capital and private equity funds represent a new and underdeveloped segment of the financial market in the CEE countries, as well as in Croatia. Therefore, the aim of this paper is to provide a historical overview of private equity and venture capital funds in the CEE countries, regarding their investment activity and type of investments. Furthermore, the paper will analyse the current state of private equity and venture capital funds in Croatia, with an emphasis on key problems why that financial market segment still is not quite developed. In the end, a comparative analysis of the CEE countries and Croatia will be presented, followed by some recommendations, given in the conclusion, on how to improve the overall investment climate in Croatia in terms of the venture capital financing.

Private equity and venture capital funds in CEE

Private equity and venture capital funds exist for over 18 years in CEE. These funds have raised over 7 billion euros from 1990 to 2005, while fundraising increased dramatically in the following 3 years. Therefore it can be said that although it is a very young segment of the financial market, it is also substantially developed. Moreover, around 75% of the total funds raised in the previously mentioned period has been invested in more than 900 investments (EVCA, 2007).

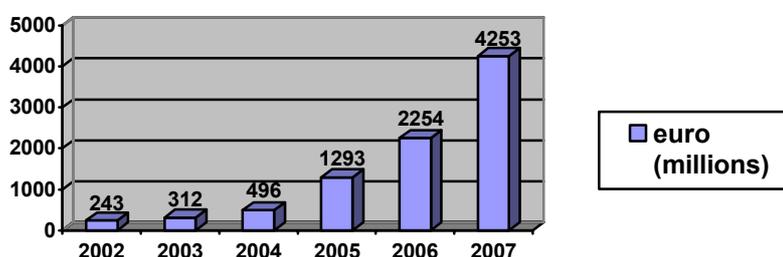
Especially interesting for the region, concerning the private equity and venture capital activity, were the years 2003 and 2004 that forgo the EU accession of some countries taken into analysis, since in those countries many changes occurred in that period, primarily in the judiciary system and overall business environment that gave a boost to the investment activity. Moreover, becoming a member of the EU is of great importance for the candidate country and has many positive connotations. Investors

¹ Bojan Morić Milovanović, Tihana Šmitran, Dajana Cvrilje, Faculty of economics and business, Zagreb

automatically perceive countries that are EU members, or EU candidates, as being less risky with growing markets, not to mention the importance of harmonisation with the EU standards in the law, administrative and economic policies that further improve investment climate. Economies of the CEE countries that recently entered the EU grew faster than the EU-15, with a constant increase in foreign and domestic investments. Therefore, similar scenario may be expected concerning Croatia's future EU membership status.

Graph 1 clearly demonstrates an evident increase of funds raised by private equity in the region over the last six years, which indicates a great interest of private equity investors for the region. The source of major part of funds collected was from non-domestic investors. More than 80% of capital in 2006 has been raised primarily from Western Europe and North America, which traditionally represent main sources of capital. On the contrary, in the EU more than half of capital needed, on average, comes from domestic sources of financing (EVCA, 2007).

Graph 1. Fundraising of the private equity in CEE, 2002–2007



Source: Authors' calculation based on the data collected from EVCA

The fundraising of private equity capital increased dramatically in 2004, in the amount of 59% compared to 2003, while the region experienced an all-time record of 161% increase in 2005 compared to 2004. The increase continued over the next years and in 2007 more than 4.25 billion euros were raised, which represents a growth of 89% in comparison to the record high in 2006 (EVCA, 2007). However, despite the recent remarkable growth of fundraising activity, the CEE countries still do not manage to attract the desired amount of capital needed to finance all the prospective business opportunities.

Investment activity

The private equity investment activity increased dramatically over the past years in all the observed CEE countries. An all-time record of threefold increase was reached in 2006 as compared to 2005, as it can be seen from Tables 1 and 2 (EVCA, 2007). The highest level of total investments was noted in Hungary, Poland, Czech Republic and Romania. Moreover, until 2006 some 90% of the region's investment activity was concentrated in these countries. However, only Hungary and Slovakia followed a smooth, long-term upward trend while most of the countries experienced changes. The trends turned negative significantly in Romania, Czech Republic, Lithuania, Estonia and Slovenia in 2004 and in Bulgaria, Latvia and Croatia in 2005. Fortunately, investments followed positive trend again from 2006 onwards. The reasons for such changes probably lie in the fact that year-to-year changes are usually affected by limited number of very large transactions.

Most of these countries showed an extreme growth in 2007, notably Poland, Bulgaria, Romania, Poland and the Baltic countries. Slovenia and Croatia experienced a large increase in 2006, which continued in 2007. Although Czech Republic and Hungary were the only countries that experienced a decrease in 2007, the long-term trend was still upward compared to prior years.

Table 1. Private equity investments as a percentage of GDP in CEE, 2002–2007

Country	2002	2003	2004	2005	2006	2007
Romania	0.037	0.159	0.055	0.088	0.115	0.392
Hungary	0.110	0.154	0.150	0.167	0.883	0.487
Bulgaria	0.016	0.101	1.110	0.000	0.143	1.923
Poland	0.069	0.098	0.069	0.045	0.118	0.222
Czech R.	0.037	0.052	0.019	0.112	0.315	0.133
Latvia	0.008	0.036	0.120	0.068	0.000	0.793
Lithuania	0.011	0.031	0.007	0.070	0.076	0.567
Estonia	0.010	0.022	0.004	0.120	0.031	0.332
Slovakia	0.018	0.016	0.021	0.052	0.045	0.043
Slovenia	0.007	0.015	0.000	0.007	0.130	0.139
Croatia	0.014	0.011	0.015	0.002	0.035	0.046
Total	0.054	0.088	0.096	0.073	0.218	0.325

Source: Authors' calculation based on the data collected from EVCA

Table 2. Total investments of private equity funds in CEE, 2002–2007 (in millions of euros)

Country	2002	2003	2004	2005	2006	2007
Romania	18,008	82,020	32,543	70,000	109,956	475,861
Hungary	75,747	110,755	121,562	147,247	734,360	491,367
Bulgaria	2,694	18,043	215,976	-	35,812	555,653
Poland	137,238	177,213	134,437	107,818	303,621	683,518
Czech R.	27,370	39,422	16,074	108,952	354,208	170,250
Latvia	998	2,692	13,261	8,719	-	159,211
Lithuania	1,206	5,647	1,182	14,359	18,103	158,821
Estonia	698	1,661	365	12,659	4,031	51,690
Slovakia	4,737	4,479	7,059	19,467	19,348	23,460
Slovenia	1,720	3,714	-	2,009	38,712	46,663
Croatia	3,312	2,799	4,021	756	12,033	17,244
Total	273,728	448,445	546,480	508,320	1,667,013	3,005,161

Source: Authors' calculation based on the data collected from EVCA

When measured as a percentage of GDP, investments are still below the average for Europe as a whole. Nevertheless, although the CEE region lags behind the European average, the gap is evidently shrinking. While in 2005 the CEE countries represented 19% of the European average of 0.388% of GDP, in 2007 they reached 57% of the European average of 0.571% of GDP (EVCA, 2007).

Type of investments

When comparing countries by type of investments, in the CEE region, just as in Europe as a whole, the largest volume of investments is in buyouts. However, unlike in Europe, buyouts made the largest proportion of total investments in 2006, even 91%, which was far beyond the European level, which was more or less stable over the years and around 70%, as it can be seen from Table 3.

The highest proportion after buyouts goes to expansion and replacement capital, but their ratios vary from year to year in both CEE and Europe. However, we may notice different trends. While in CEE expansion capital followed a downward trend until 2007, replacement capital showed an upward trend until 2006, whereas in 2007 they both grew significantly. Just the opposite, in Europe expansion capital was at similar level until 2006, when it started a downward trend, while replacement capital varied from year to year without a clear long-term trend (EVCA, 2007).

Table 3. Type of investments as a percentage of total investments in CEE and Europe, 2003–2007

CEE	2003	2004	2005	2006	2007
Seed	0.17	0.0	0.0	0.1	0.1
Start-up	5.40	1.1	1.8	2.7	0.8
Expansion	32.42	38.7	25.9	5.7	12.9
Rescue/Turnaround	-	-	-	-	0.2
Replacement capital	11.42	19.3	24.8	0.5	8.8
Buyouts	50.59	40.9	47.6	91.0	77.2
Total	100.00	100.0	100.0	100.0	100.0
Europe	2003	2004	2005	2006	2007
Seed	0.57	0.4	0.2	0.3	0.2
Start-up	6.82	6.0	5.0	10.0	3.2
Expansion	21.56	21.4	21.8	15.4	13.4
Rescue/Turnaround	-	-	-	-	0.2
Replacement capital	7.87	2.5	4.8	5.1	4.2
Buyouts	63.18	69.7	68.2	69.2	78.8
Total	100.00	100.0	100.0	100.0	100.0

Source: Authors' calculation based on the data collected from EVCA

Seed financing and start-up made only a small proportion of private equity investments just as in whole Europe, but they were both at much lower levels than in Europe. When comparing the distribution in CEE to the European one, we may say that buyouts, expansion and replacement capital are at the approximately same level, while seed and start-up investments are at the much lower level.

Venture capital and private equity in Croatia

The development of small and medium sized enterprises (SMEs) is the key to a stable and efficient economic growth in developed countries. Therefore, a half of all investments in the EU was financed by venture capital funds; in the USA this proportion is even higher. These funds in Croatia were restrained of doing business owing to an improper law on investment funds. In 2005, by adoption of the Law on Investment Funds² and the Law on Croatian Agency for Supervising Financial Services³, the legal framework for the development of venture capital was established in Croatia. The new law on investment funds allowed the registration of companies' venture capital funds as open-end investment funds with private offers, and it also regulated investment activities. Until then, the funds were founded offshore and they operated in Croatia through the intermediation of domestic companies that searched for potential investment candidates.

According to the new law on investment funds, the funds are to be established on a certain period, minimally 10 years, and should be governed by a special management society. The minimum size of each fund should be 75 million kunas. The number of investors should not exceed 20 and, after a period of 5 years, capital should not be beyond 50% of its initial value. Stakes should be sold only to qualified investors: institutional investors, or investors whose net value of assets is at least 20 million kunas and minimum amount of investments 10 million kunas. These facts are essential for the long-term venture capital financing and thus should be used only by those investors who have enough capital to invest for a longer period of time, without endangering its own portfolio. The new law on investment funds has speed up the formation of venture capital funds, and their value was recognized by the Ministry of the Economy, Labour and Entrepreneurship and the Croatian Bank for Reconstruction and Development, which got also involved in the formation of venture capital funds.

² Law on Investment Funds, NN – 150/05

³ Law on Croatian Agency for Supervising Financial Services, NN – 140/05

Currently, there are several venture capital funds operating in Croatia, and those are: Quaestus Private Equity, Nexus Private Equity Partners, Copernicus Capital, SEAF Croatia, Horizonte Venture Management, Vienna Capital Partners, KD Private Equity, and Poteza Ventures. They have invested approximately 80 million euros in a roughly 50 projects.

Quaestus Private Equity is the first registered venture capital fund with private offer in Croatia. The company is present on the market since 2003, but only in 2006 it was registered according to the new law on investment funds. Quaestus has invested in several companies in the field of telecommunications, food production and medical services⁴. It manages capital of 35 million euros, which was funded by 9 renowned Croatian companies⁵.

The second venture capital fund, and currently the newest one, Nexus Private Equity Partners is a private venture capital fund established in October 2008. It manages capital of 36 million euros, which was also invested by eminent Croatian companies (70%), institutional investors (12%) and individuals (18%). Since it is rather new, so far it has not made any investments.

Table 5. Venture capital and private equity funds in Croatia

VC & PE funds	Size (in millions)	Size of total investments (in millions)	Number of total investments
Quaestus Private Equity	€ 35.0	€ 11.67	3
Nexus Private Equity Partners	€ 36.0	-	0
Copernicus Adria	\$ 30.0	\$ 30.00	11
SEAF Croatia	\$ 8.2	\$ 8.00	21
Horizonte Venture Management	€ 20.0	-	12
Vienna Capital Partners	€ 35.0–40.0	€ 38.00	4
KD Private Equity	€ 31	-	0
Poteza Ventures 2007	€ 50	-	2
BICRO – VENCRO	€20	-	-

Sources: <http://www.nexus-pe.hr>; Čipčić Bragadin, S. (2007): *Venture capital financing*

Croatia Capital Partnership (CCP) is one of the first and most active private equity funds in Croatia. The fund is managed by Copernicus Adria. The founders and main shareholders are the European Bank for Reconstruction and Development (EBRD), Bank of Zagreb (Zagrebačka banka), Cassamarca Treviso Bank, Erste Bank Wien, International Finance Corporation and Advent International. Copernicus has invested in 9 companies in Croatia and in 2 companies in Serbia. The fund manages 30 million dollars and till today has invested all the available investment capital. It has invested 7.4 million dollars in telecommunications, then in CATV and Adriatic kabel (4 million dollars), IVB and KabelNet (2.2 million dollars). CCP is also a major owner of Globalnet group.

SEAF Croatia is one of the most active investors in SMEs. It was founded in 1997 by an international fund, the Small Enterprise Assistance Fund. It is partly financed by the USAID, and by SEAF headquartered in Washington DC, which manages or is a proprietor of 13 similar funds around the world. SEAF is, however, obliged to store profit in Croatia for further investments. This fund provides not only capital, but also support in terms of business planning, technical counselling, marketing, production and accounting. SEAF manages 8.2 million dollars, out of which 8.0 million dollars is invested in 21 projects like DCM Cable Television, Digital Point/Express, Iskon Internet, and Renoprom.

Horizonte Venture Management is an Austrian venture capital fund management team with a 16 years track record of investing in the South-eastern Europe. It was founded in 1985 as a venture manage-

⁴ Hospitalija, Metronet, Tele 2, Hlad, Akromion, GFG Gustus, Vulić & Vulić

⁵ Privredna banka Zagreb, Croatia osiguranje, Nexe grupa, Konstruktor inženjering, Dalekovod, FIMA holding, Institut građevinarstva Hrvatske, Jamnica, MSAN grupa

ment group for the South-eastern Europe. It has built network of branches outside Austria, which includes Croatia too. It manages capital of 20 million euros that was invested in 12 projects.

Vienna Capital Partners is an Austrian company that invests mainly in Austria and Croatia. It manages capital of roughly 40 million euros. In this area, it has invested mainly in media, so it also appears as an owner of several newspapers like Serbian “Blic” and Croatian “Nacional”.

KD Private Equity Fund manages capital of 31 million euros. The fund was launched in spring 2006. Investors in KD Private Equity Fund include KD Group, major Slovenian banks and the Swiss government development fund SECO. KD Private Equity Fund has intention to invest in companies in Albania, Bosnia, Bulgaria, Croatia, Macedonia, Moldavia, Montenegro, Romania, Serbia and Slovenia.

Poteza Ventures is the largest fund of venture capital, which actively invests in high tech projects in Croatia. It is a Slovenian fund in which is also incorporated Croatian capital. According to the newest information⁶, the fund manages 50 million euros, and has realized two investments: one in Slovenia and another in Croatia; in the latter case it is the Right Pace (Pravi korak), which launched vertical Internet search engine GoHome.hr. The management of Poteza Ventures announced two more investments in the near future.

Besides in legislation, Croatia made a step forward through the formation of the Business Innovation Centre (BICRO) and the Croatian Institute of Technology. BICRO is the key organization within the national innovation system, the basic role of which is the development and implementation of government support programmes aimed at strengthening the technology development as the main generator of a sustainable economic growth. These two institutions founded venture capital fund VENCRO. The fund is managed by a private sector management company selected through a public call for proposals⁷. The initial investment of the Croatia’s government was 4.5 million euros, and it is expected that the private partners will invest additional 20 million euros. The programme supports the establishment of venture capital funds and the development of the overall venture capital industry.

Reasons for the underdevelopment of venture capital and private equity funds in Croatia

Recently some progress has been made concerning conditions that could increase venture capital investments, but still it is the least developed segment of the Croatian financial market. According to the research of EVCA⁸, on the Eastern European market, Croatia is at the bottom of the ladder in terms of attractiveness for venture capital investors. In evaluating the problems that CEE transition countries and Croatia face regarding efforts in attracting venture capital, we considered only some of the factors included in the Index of Economic Freedom (IEF)⁹, while there are also other economic, political and cultural factors that might be considered. The degree of economic freedom shows situation in a certain country concerning business freedom, trade freedom, fiscal freedom, monetary freedom, investment freedom, financial freedom, labour freedom, government size, property rights and freedom from corruption. Variables of special interest to investors are investment freedom, trade freedom and property rights, since these are some of the critical factors that investors examine while deciding whether to invest in a certain country.

⁶ <http://www.poslovni.hr>

⁷ NN – 13/07

⁸ www.evca.com

⁹ The Index of Economic Freedom is a series of 10 economic measurements created by the Wall Street Journal and the Heritage Foundation. Its objective is to measure the degree of economic freedom in the world’s nations. The methodology has shifted and changed as new data and measurements have become available, especially in the area of labour freedom, which was given its own indicator spot in 2007. Another change is that the Index is overseen by an academic advisory board. The Index scores nations on 10 broad factors of economic freedom using statistics from organizations like the World Bank, the IMF and the Economist Intelligence Unit. The 10 factors are averaged equally into a total score. Each one of the 10 freedoms is graded using a scale from 0 to 100, where the upper limit (100) represents the maximum freedom. A score of 100 signifies an economic environment or set of policies that is most conducive to economic freedom.

Table 6. Index of Economic Freedom in 2008

Country	Overall ranking (out of 161 countries)	Regional rank (out of 41 countries)	Average economic freedom (%)
<i>Mostly free</i>			
Estonia	12	5	77.8
Lithuania	26	13	70.8
<i>Moderately free</i>			
Czech Republic	37	21	68.5
Latvia	38	22	68.3
Hungary	43	23	67.2
Bulgaria	59	28	62.9
Romania	68	30	61.5
Slovenia	75	33	60.6
<i>Mostly unfree</i>			
Poland	83	35	59.5
Croatia	113	37	54.6

Source: www.heritage.org

Taking into account all the ten factors, the European average of economic freedom is 66.8%. Most of the European countries fall into the category of moderately free countries, and none of them falls into the category of free or repressed countries. According to the data provided, the best performing countries, those most likely to attract venture capital, are Estonia and Lithuania, followed by Czech Republic and Latvia. Croatia is ranked 37th out of 41 countries in Europe, as it can be seen from Table 6, and its overall score of 54.6% is below the average for Europe, together with scores of Poland, Bulgaria, Slovenia and Romania. Croatia earned a score of 54.6%, which is 0.7 percentage points higher than the last year. Croatia stands slightly above the European average in trade freedom, financial freedom, and monetary freedom.

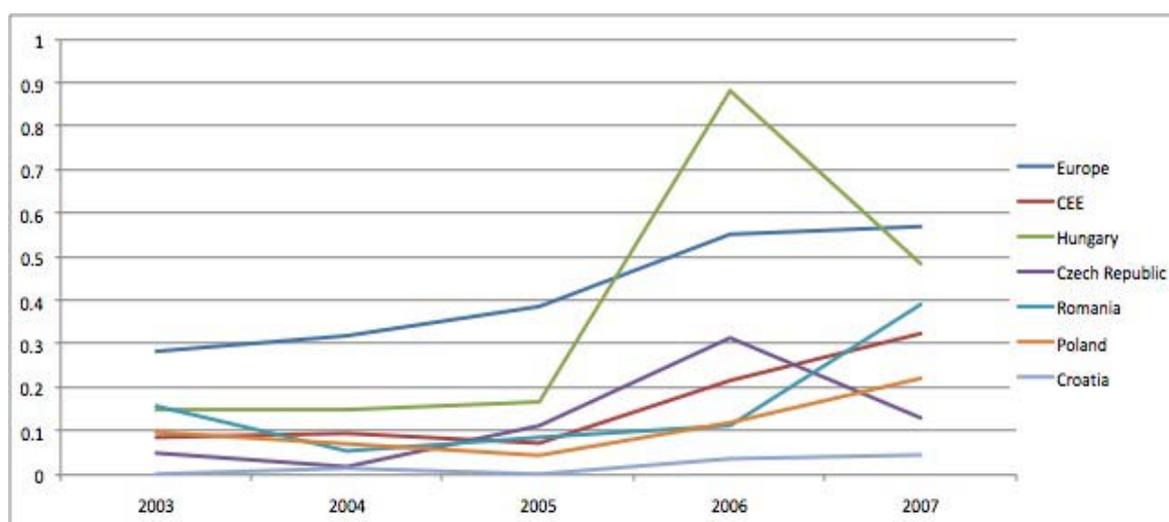
Croatia's most conspicuous weakness in terms of economic freedom is its outsized government. This appears in other areas: heavy regulations on business, labour, and even rights to property. Furthermore, there are insufficient tax incentives, inability of pension funds to invest in companies not quoted on the organized market, and restrictions concerning investment possibilities of insurance companies. The court system is liable to corruption, political interference, and inefficient bureaucracy. Moreover, there are significant unofficial restrictions on foreign investments. Concerning investment freedom, foreigners may invest in nearly every sector of the economy, but the problem of complex bureaucracy, very slow legal system, and subsidies to state-owned enterprises remain. Regarding property rights many observers view the judicial system as most affected by corruption. The court system is inefficient, and business disputes drag on courts for years. The government is working on the judicial reform, but much remains to be done.

Unenviable situation of Croatia sends the wrong message to foreign and local investors that are interested in investing capital in it, and therefore Croatia still belongs to those European countries where tax and legal environments are inconvenient for venture capital investments. Also, this situation is likely to continue since Croatian entrepreneurs are not sufficiently educated to recognize potentials of the venture capital financing and most of them believe that this kind of financing is not a necessity fearing of potential investors influence on their business policies.

Comparative analysis of venture capital and private equity funds in CEE and Croatia

When comparing Croatia to the rest of the CEE countries, from Table 1 it can be seen that Croatia lags behind the CEE countries concerning private equity investments as a percentage of GDP. Although there was a slight increase in 2004 after a long period of stagnation and low activities in 2005, investments fell dramatically to the level of 0.002%, far below the CEE average. Similar scenario was experienced by Bulgaria, Czech Republic, Lithuania, Estonia and Slovenia. Hungary and Slovakia were the only countries that followed an upward trend without great deviations.

Graph 2. Private equity investments as a percentage of GDP in Europe, leading CEE countries and Croatia, 2003–2007



Source: Authors' calculation based on the data collected from EVCA

Nevertheless, things turned positive for Croatia in 2006, when it faced heavy increase in comparison to 2005, which continued onwards. The very same trend was followed by Slovenia, Bulgaria and the Baltic countries that went through an upsurge in 2007. Although investments as a percentage of GDP in Croatia are still below the levels of the CEE countries observed and Europe as a whole, except for Slovakia, it is evident that the gap is shrinking (see Graph 2).

Comparing the total investment activity of private equity funds in Croatia and the CEE countries, Table 2 clearly states that all observed countries are in a far better position than Croatia. Only Bulgaria, Latvia, Lithuania, Estonia and Slovenia had a lower investment activity in the first couple of years of the decade, but from 2003 all of them have recorded an immense increase in the total investment activity, leaving Croatia far behind. Therefore, it can be said that great changes occurred in the CEE countries that entered the EU in 2004. The Baltic countries experienced an increase even 50 times higher compared to 2003. This could be explained by various factors. One of them is certainly an extremely low rank of the index of economic freedom (seen Table 6) that puts Croatia in the position of mostly unfree countries. Also, there is a fact that all of the observed countries were candidates for the EU accession and from 2004 full members, which in turn had a definitive impact on the strong growth of the overall investment activity and therefore on the private equity as well. Hence, Croatia's EU accession may in turn able the private equity market to flourish.

Conclusion

Croatian entrepreneurs still do not understand the importance of innovative SMEs and their potential for further growth. Many of them still have fear of entrepreneurship and do not accept advises of in-

ternational experts. Only minority will try to seek international customers, which indicates a need for the development of international competitiveness, and corresponds to the IEF results, where Croatia is rated as a country with relatively high barriers to foreign investments. Therefore, Croatia should lower the barriers to foreign investments, difficulties in licensing and registration, and provide incentives to innovative and R&D activities in order to improve its overall entrepreneurial activity.

Also, a big problem relates to the underdevelopment of the capital market. According to the EBRD, Croatia's stock market capitalization is not satisfying, as well as the liquidity of the market. Therefore, the provision of quality trading instruments is important, along with the strategy for further privatisation. Many companies in Croatia are still nationalized. Hence, there is a large potential for their future privatisation through IPOs, which can be a great investment opportunity for private equity investors that, in turn, could improve the situation on the stock market through the quality and amount of stocks traded.

Therefore, in order to upgrade venture capital and the private equity market, Croatia should intensively work on the improvement of the judiciary system and financial markets, because they are the ones that determine the trust of investors and their perception of the country's risk level while making investment decisions. Since the possibility of financing projects is still mostly bank-oriented, Croatia should alter the law regulation that puts legal constraints to domestic investors such as pension funds, insurance companies and other investment funds to take part in the private equity or venture capital financing. Also, the promotion of innovative entrepreneurial culture and the removal of barriers to foreign investments should provide an overall better investment environment.

References

- Beck et al. (2005): Law and Firms' Access to Finance
- Bottazzi, L., Da Rin, M., Hellman (2003): The Changing Face of the European Venture Capital – Facts and Analysis
- Business Innovation Centre of Croatia, www.bicro.hr
- Campbell, R. A., Kraussl, R. (2006): A survey of the venture industry in the Central and Eastern Europe
- CEPOR (2003): What makes Croatia a non-entrepreneurial country, Global Entrepreneurship Monitor Croatia 2002
- Deloitte (2003): Private Equity Central Europe Survey
- European Venture Capital and Private Equity Association (2005): Yearbook, www.evca.com
- European Venture Capital and Private Equity Association (2007): Yearbook, www.evca.com
- Grupe, C. (2004): Is there a market for Venture Capital in Croatia?
- Index of Economic Freedom, www.heritage.org
- La Porta et al. (1997): Legal Determinants of External Finance, *Journal of Finance*
- Leleux, B., Surlemont, B. (2003): Public versus Private Venture Capital: Seeding or Crowding out? – A Pan-European Analysis
- Levine, R. (2003): Napoleon, Bourses and Growth – with a Focus on Latin America
- Mason, C. M., Harrison, R. T. (1997): Business Angel Networks and the Development of the Informal Venture Capital Market in the UK – Is There Still a Role for the Public Sector?
- McGee, R. W. (2006): Venture capital in European transition economies – A scoring system
- Mihaljek, D. (2001): Towards a Long-term Strategy of the Economic Development of Croatia: Where to Begin, What to Do and How to Do It?
- Punkthuanthong, K., Thiengtham, D., Walker, T. (2006): Why venture capital markets are well developed in some countries but comparatively small in others – Evidence from Europe
- Račić, D. et al. (2004): Innovation in Croatian Enterprises
- Čipčić Bragadin, S. (2007): Financiranje poduzeća rizičnim kapitalom
- Zakon o investicijskim fondovima, NN – 150/05, www.nn.hr
- <http://www.poslovnih.hr>

World Economy Crisis, Financial Hurricane or Structural Breakdown

Ismail Musabegović¹

ABSTRACT – On Monday, September 15, 2008, financial hurricane hit Wall Street. The wealth started melting rapidly in all layers of American society. The biggest consequences effected investment bank Lehman Bros, whose share value had dropped for 94%, and Merrill Lynch which was bought by the Bank of America Corp. The US government tried to revive lost confidence of the investors by launching individual financial interventions to financial institutions. First signs of “credit crunch”, which is the official term for financial crisis, occurred more than year ago. Some authors call this crisis, mortgage credit crisis. There are several causes which lead to financial crisis. The causes can be grouped as follows: US Foreign Policy, Monetary Policy of Federal Reserve, Deregulation – lack of regulation, and Quasi-financial instruments – risk management. America immediately tried to help stumbled financial institutions with individual financial “injections”, and for relatively short time spent approximately USD 600 billion. The effect of this help had limited action and did not stop negative trend. US government was forced to take another step and form intervention fond in the amount of additional USD 700 billion. At the end, my opinion is that this financial crisis does not represent financial hurricane, but deep structural breakdown in world economy.

KEY WORDS: financial market, crises, investment bank, risk management, regulation

Introduction

Once the world financial crises occur, it is often easy subsequently to explain principal causes. The big problem is that the damage was already made, billions of dollars simply evaporated and as a result of stock market crises one of the main outcomes will be economic recession. In order to recover the economy many years are needed².

In my article, in Pregled dated May 29, 2006, I have indicated several important signals that we can expect the adjustment in the world stock markets, which will have elements of financial downfall with far-reaching consequences in global economy. The most important consequence, certainly, is recession. Economic recession, above all, implies significant GDP fall, resulting from difficult operating conditions, output depression and unemployment enhancement. Globally, the most developed countries will first bear the burden and then the problem would expand to developing countries and countries in transition.

Financial hurricane on Wall Street

On Monday, September 15, 2008, financial hurricane hit Wall Street, financial center of the world. In New York, where 500 thousand people work in financial institutions, fear and uncertainty dominated from the lowest structures, through multimillionaires, to world royal families. The wealth started melting rapidly in all layers of American society.

¹ Ismail Musabegović, Belgrade Banking Academy, Belgrade

² Musabegovic, I. (May 2006), Is economy shock expected? , *Pregled*, p. 17

The bad news, which was basically a trigger of negative trend, was bankruptcy announcement of investment bank Lehman Bros³, whose share value had dropped for 94%. Only few days before, the bank had market value nearly USD 46 billion, and on Monday, September 15, 2008 its market value was nearly USD 145 million. On the same day, Bank of America Corp. bought Merrill Lynch, one of the five largest American investment banks, for USD 50 billion, which was equal to half of its market value in the preceding week. Also, on the same day it was announced that AIG (American International Group), the largest insurance company in the world, was on the edge of collapse. Previously, in the beginning of 2008, Bear Stearns also one of the five largest investment banks, had announced bankruptcy.

All these events as well as others reinforced fear in all leading financial institutions in America. On the same day the wave of bankruptcy expanded to other world financial centers. The anxiety also arose among the governments of the developed countries.

At the same time, Goldman Sachs, one of the leading investment banks, received financial aid in the amount of USD 5 billion from famous world investor Warren Buffett. The US government tried to revive lost confidence of the investors by launching individual financial interventions to financial institutions. The same strategy was followed by the governments of the other developed countries, especially The Great Britain, France, Germany and Japan.

US administration's individual aids and uncoordinated activities of European governments, as well as European Central Bank, additionally disturbed the investors, who had started to sell their securities. Financial stampede started and majority of shares significantly dropped in their value in all financial markets in the world. For a relatively short time leading world share indexes lost more than 30% of their market value.

The beginning

First signs of "credit crunch", which is the official term for financial crisis, occurred more than year ago. Some authors call this crisis, mortgage credit crisis. The obvious indicator for emergence of economic problems was the collapse of two strongest mortgage banks in US, Fannie Mai and Freddie Mac. These two banks had the largest share in the real-estate market in America. Their role, simply said, was to direct the resources, debited from the state, to loans for real-estate market. The US government prevented collapse of these two banks by nationalizing them. This move pointed out that there might be significant increase in budget deficit, which already threatened the economic stability. At that moment the new problem occurred. It is possible that holders of Treasury bonds would not want to finance budget deficit anymore, because of the expected interest rate decrease, which will reduce yield of investment. Interest rate decrease is expected to represent economic stimulant in order to ease the economic difficulties. The countries, like China, Russia and oil producer countries will be able to demand higher interest rates or they will deleverage assets, which will be direct impact to American economy and to the dollar value. In short term, dollar value will increase, due to demand for currency as a result of selling pressure of securities.

All this leads to the further fall of share's value in all world stock markets. Until the end of 2008 further market falls are expected for new 20-30%. The panic, which had started on September 15, 2008, after the leading share index Dow Jones dropped for 504 points, led to credit contraction. Credit contraction resulted in threat to liquidity of overall financial system. In relatively short period of time regular daily banking transactions were aborted. The reason for this interruption was mistrust between banks and fear that some of the banks in their credit portfolios have "toxic" securities, which can generate problems, which can lead to bank bankruptcy. The countries immediately reacted through their central banks, and started "pumping" the money in the financial system, in order to maintain regular daily activities in economic sector.

³ Lehman Brothers was no. 4 investment bank in USA, with nearly 25 thousand employees and operating in all financial centers in the world. Author's remark

This economy shock has consequences in all segments of global society. Negative influence will be reflected on each individual, institution and country in all continents in the globe. However, depending on many factors, this influence will have different intensity. It is certain that global slowdown in economic growth represents one of the major consequences of this financial crisis.

There are several causes which lead to financial crisis. Crisis begun in US and very quickly spread to the entire world. The causes can be grouped as follows:

- US Foreign Policy
- Monetary Policy of Federal Reserve
- Deregulation – lack of regulation
- Quasi-financial instruments – risk management.

During the last ten years US conducted foreign policy from the point of power supremacy, rather than reaching the solution by diplomatic negotiations. From the economic point of view, US government chose very expensive method in international relations with minimal political effects and very destructive economic consequences. Economically speaking, the US government significantly financed its own military engagement in the world. Each year hundreds billions of dollars from the budget were spent on unproductive activities, which, generally, represent ballast for the economy, except for the benefit of small number of companies in military industry sector. It is very important to emphasize that such outflow from the budget is nonrenewable. Simply, larger part in economy sector of America was damaged irretrievably because of financing military solutions in foreign policy.

In late 1990's several financial crisis occurred in the world (Mexico 1994, Asia 1997, Russia 1998), but not one had affected US directly. In the beginning of 2000 certain fractures in American economic system started perceiving. The events from September 11, 2001, had only strengthened the position of military part in US administration. Economic problems marginalized for which some external factors were quoted as causes. At the same time, Federal Reserve, which is responsible for monetary policy, in order to overcome difficult conditions in economy, started to lower key interest rates. Key interest rates occasionally were raised, in order to prevent potential inflation, as a permanent danger caused by extensive budget deficit. Second significant consequence is weakening of American currency. The result of this monetary policy was creation of "easy money" prepared for high-risk loans.

First victims of the latest financial crisis were investment banks. I have to mention that investment banking, after the Wall Street Crash of 1929, was completely separated from commercial banking by Glass-Steagalli Act of 1933. During the period 1933-1999, totally 66 years, financial system functioned like separated segments of investment and commercial banking. Investment banking was engaged in public and private market transactions for corporations, state and investors. The mentioned transactions included mergers, acquisitions, underwritings and issuing of equity and debt securities. Investment banks consulted and advised their clients in issuing necessary financial instruments, whether providing liquidity or development financing. Besides, investment banks dealt with other activities related to securities, like trading, securitization, collateralization, financial engineering, broker-dealer operations and investment management.

Gramm-Leach-Bliley Act from 1999 enabled investment banks to deal with the commercial banks activities, and commercial banks to deal with investment banking activities. At first sight, that is entirely objective and advisable solution, because it leads to forming large financial institutions, which can provide their clients with full services. However, joining together two banking systems, commercial and investment banking, where commercial is highly regulated, significant segment of activities not controlled by regulatory bodies was formed. The lack of proper regulations in these giant financial institutions was quickly displayed through bankruptcy of large companies, like ENRON and WORLDCOM.

"Easy money", artificially boosted positive investment climate and greed of the financial institutions management, creating room for specific financial products highly exposed to risk. Securitization and financial derivatives, traded by high leverages, enabled forming of virtual liquidity of different securities. Industry sector, which was the first to profit from this situation, was construction, more precisely real-estate companies in US. The lack of regulatory rules enabled financial institutions to approve

housing loans to those, who according to commercial banks criteria were not qualified. This kind of loans was called “ninja” loans, which means that the user does not have regular job, asset nor credit reputation. These loans, later, through the process of securitization, convert into mortgage-backed securities and were sold to the investors. As a result of large money supply real-estate prices increased sharply. Falsely initiated price increase in real-estate market enlarged enthusiasm in other sectors of economy (steel, cement, home appliances...). Mortgage loans, as seen by investors, were relatively safe investment, considering that collateral was real property. In America up to September 2008, 53 millions mortgages were approved, from which 10% were risky as estimated.

In order to explain the problem we have to distinguish two kinds of mortgage loans. First kind makes prime mortgages, where, commonly, deposit or participation of 20% is conditioned. When property market value increases, considering that the property was bought by means from this credit, the bank offers to its client new credit, without participation, collateralized by new, higher market value of the same property. These credits are credits designed for the purchase of new property and are called second mortgage or subprime mortgage. It is clear that spiral of these credits additionally falsely increases the demand for properties and their prices quickly go up. The whole system of financing the property falsely is “pumping” till the point of breaking. This point is initiated by realizing that production price of properties is multiply lower than market price. At this moment the system is crashing, property prices go down vertiginously, and negative chain effect occurs in overall economy.

Relatively low interest rates create for investors the climate to search for securities which could bring higher yield. One of potential areas for investment is bonds of developing countries or lower rank companies, which are offered at relatively high yearly interest rates. Investment in these securities is connected with high exposure to risk. In order to partly hedge the risk of credit default, investment banks offered to investors additional instrument as kind of investing insurance - CDS (credit default swap). CDS represents financial derivative which, basically, acts like insurance policy. The CDS price is given as partial value of high interest rates for high-risk bonds, by which the investor disclaims his part in interest rate in favor of swap dealer. Regulatory bodies were not controlling these financial derivatives, because it was supposed that only big “sophisticated” investors use them. CDS were formed by private contracts, usually between hedge fund, investor and swap dealer. CDS, as financial instrument, became very popular among the investors, especially banks and insurance companies. The problem occurred when bankruptcy among swap dealers started. By this time the investors became aware that bonds in their portfolios, which were high-risk bonds, were not insured, i.e. protected against credit default risk. Once more American financial system was disrupted.

While investment optimism dominated in financial markets, real economy confronted with ever bigger operating problems. Difficult conditions in economy led to profit decreasing and employments shrinking. More people were disabled to service their credits and first cracks appeared in credit system. The panic expanded rapidly and share value of leading investment banks started to fall, making domino effect on other financial markets. Spiral of negative effects dispersed rapidly and global financial system entered into serious crisis. As I have mentioned earlier, the mistrust between banks expanded because of their fear of holding “toxic” securities. Now many banks had to pay back the loans, where the real properties, which represented collateral, practically, lost notable part in their value. With the decrease of property value came the value decrease of other securities. World financial system seriously was damaged and regular financial activity between banks completely was aborted.

The reaction

In October 2008 followed the panic and uncoordinated action of the governments of developed countries. America immediately tried to help stumbled financial institutions with individual financial “injections”, and for relatively short time spent approximately USD 600 billion. The effect of this help had limited action and did not stop negative trend. US government was forced to take another step and form intervention fund in the amount of additional USD 700 billion. This financial package was based on the nationalization of individual financial institutions. This approach in solving financial crisis shakes fundamentals of liberal capitalism and market economy. Europe followed the American exam-

ple with its financial package in the amount of EUR 2000 billion. Efforts of the governments of European countries to coordinate their action were not completely successful. Practically, each government had the possibility to individually undertake measures to respond to coming crisis. Powerful countries, like Japan, Russia and China, also individually undertook the measures to block the effects of world financial crisis.

We will not analyze the details of individual actions of the countries, but I have to mention the measures which China undertook, as something which will have influence on the global economy. China announced own package of stimulant for Chinese economy in the amount of RMB 4000 billions, which is approximately USD 586 billion. The undertaken measures of Chinese government were directed, principally, at extensive infrastructure projects, aid for poor farmers and decrease of export taxes. I believe that these measures will lead to maintaining relatively high rate of GDP growth, which will further reflect growing of GDP in range of 8% and 10% yearly. These measures lead to domestic market strengthening, maintaining current level of employment and increase of Chinese economy self-sufficiency. China will still grow, because of its monetary policy in relation with depressed domestic currency, and US trade surplus, which is approximately USD 20 billion per month. Aside this, China will continuously be one of the largest creditors of American government with holding the American Treasury bonds in the amount of USD 1000 billion.

The world financial crisis will have several phases. Each phase will pass through series of economic shocks. The crisis had started with the real-estate market crisis. This shock passed to financial sector which caused collapse of current financial structure. The next shock will be in real economy sector, in which the automotive industry will be affected first. Automotive industry, led by GM and Ford in America, will face reduced demand, which will cause production decrease, which will lead to new employment shrinking. Employment decrease in automotive factories will cause further lay offs in all cooperative factories of automotive industry. This kind of development further will affect employment decrease in car dealer's network which is connected to automotive industry. Chain reaction can further reflect on gas stations network and even on small car washes. Everything that happens in US quickly will expand to all countries and regions in the world.

Conclusion

I believe that, practically, none of the economy sectors would be spared from negative consequences. According to some estimation, the needed time for stabilizing the world economy will be between 3 and 9 quarters, and economy recovery will take between 3 and 5 years. The whole process would imply the new arrangement between 20 developed countries, which would create entirely new frame for world economy.

At the end, I conclude that this financial crisis does not represent financial hurricane, but deep structural breakdown in world economy. The recovery will be long and will require coordinated action of developed countries. Restructuring of world financial and economic system will represent the process directed at several areas. First of all, we have to expect changes in US Foreign Policy, changes in reforming international financial institutions, changes in concepts of risk management, with particular attention on preventing individual moral hazard, as well as on additional measures to regulate the market of financial derivatives.

References

- Erić, D, (2003), *Finansijska tržišta i instrumenti*, Čigoja štampa, Beograd
Malović, M, (2006), *Međunarodne finansijske krize*, Centar za izdavačku delatnost Ekonomskog fakulteta, Beograd
Musabegović, I, (2007), *Transnacionalne korporacije i globalni finansijski tokovi*, Beogradska bankarska akademija, Beograd

Role and Comparative Efficiency of European Banks in Serbia's Financial Sector¹

Anastasia Ri, Kamilya Suleymanova², Aleksandar Zdravković³

ABSTRACT – *This paper examines the cost efficiency of Serbian banks by the Stochastic Frontier Approach method for the 2003-2007 years and 33 banks sample. The results obtained are analysed in terms of the ownership structure of the studied banking system. A special attention is paid on the importance and cost-efficiency of foreign banks examined. It is found that state-owned banks are generally less performing in terms of cost-efficiency while European banks, playing the more and more important role and having an increasing share of the market, tend to be more efficient.*

KEY WORDS: *cost efficiency, banking sector, Serbia, stochastic frontier approach*

Introduction

The soundness and efficiency of banks are especially interesting to study in the current context of a financial crisis. In the present paper we would like to study the cost efficiency of the banking sector in Serbia by Stochastic Frontier Approach method considering the last changes in ownership structure, the growing role and the share of foreign banks in this system.

While speaking about Serbia we always have to remember the difficult path to stabilisation that this country has experienced and the present political issues. We have also to underline that in Serbia, and more generally in the Balkan countries, the banking sector is the major actor of the financial system⁴. Thus its overall efficiency is very important especially in regard of modern conjuncture and the global financial crisis in addition to the generally acknowledged role of banks to provide financial support for economic development and growth⁵. The particular reason for the investigation of European banks efficiency lies within of coarse continuing integration of the Serbian financial system into the European one and the proved dramatic increase of foreign participation in the banking sector. We must also take into consideration the general European influence upon the financial sector of Balkan countries: many different programs of partnership and aid are running, especially what concerns us – the banking regulation and standards. This tends to improve the overall efficiency of Serbian banking sector.

There is a number of recent studies investigating the relationship between relative cost efficiency of banks and their ownership in different countries, and in particular in transition economies (see, for example, Asaftei and Kumbhakar (2008), Fries and Taci (2005), Hasan and Marton (2003), Kraft et al. (2006), Kasman and Yildirim (2006), Weil (2003), etc.) Nevertheless, to our knowledge, none of such

¹ This paper is a part of researching project no.159004, financed by the Ministry of Science and Technological Development of Republic of Serbia, named: "The Integration of Serbian Economy into the EU - Planning and Financing of Regional and Rural Development and Enterprise Development Policy"

This paper is one of results of the research project of *Hubert Curien Partnership* program « Pavle Savic » (Serbian-French technology cooperation for years 2008/2009) titled *FINANCIAL SYSTEMS INTEGRATION OF BALKAN COUNTRIES IN THE EUROPEAN FINANCIAL SYSTEM* realized in the research cooperation between University of Nice-Sophia Antipolis, CEMAFI (France) and Institute of Economic Sciences, Belgrade (Serbia).

² Anastasia Ri, Kamilya Suleymanova, University of Nice-Sophia Antipolis

³ Aleksandar Zdravković, Institute of Economic Sciences Belgrade

⁴ Müller-Jentsch D. (2007); EBRD (2004), p. 23

⁵ A large number of studies focus on the relationship between financial sector development and growth, poverty and inequality alleviation and economic development in general. For an exhaustive review of such studies see Demirguc-Kunt A., Levine R. (2008)

studies examines the Serbian banking system case. A single-country study has, as known, an advantage on cross-country analyses as it avoids environmental heterogeneity problem. Our sample covers all Serbian banks existing today for the purpose of understanding the role of foreign participation and, in particular, the importance and relative efficiency of European banks in Serbian banking sector.

The rest of the paper is organized as follows. In Section 2, the evolution and the last reforms of the banking sector in Serbia are described. In Section 3, we give a short description about the overall efficiency of Serbian banks. In Section 4, we present our econometric model and data choices. Finally, in Section 5, we report the results of the bank efficiency scores and compare them with the ownership structure of the banking sector to draw conclusions.

The evolution of Serbian banking system

Commercial banking sector in former Yugoslavia, unlike in the majority of other socialistic countries, was separated from central bank. In the period from middle sixties to late nineties, the banking system was based on quasi-market principles including some positive features like autonomy in decision making and leading of business policy. However, banking activities were subjected to interests of loaners instead to owners, implying low business efficiency and profitability.

After the overall reforms of Yugoslavian economy in 1989, the ownership of Yugoslavian banks was transferred from society⁶ to firms. The government decided to convert deposits of large socially-owned firms to shares, organizing the banks as closely held companies. The process of transformation of existing large banks was followed with the establishment of new small banks in private ownership, often with doubtful credibility due to a soft supervision. Unfortunately, principles of banking business remained the same as they were before ownership transformation. After the disintegration of Yugoslavia, Serbian economy felt into a state of chaos, due to war, embargo and hyperinflation. Hyperinflation hardly damaged Serbian banking sector; households' savings in dinars, which in 1990 participated with 53% in banking credit potentials, was melted and loans to real sector became mostly disvalued.

After the monetary stabilization in 1994, changes in ownership structure of banks was related to restricting of intensive increase in demand of real sector for loans. The fear of the mistakes from the past fostered the Serbian government to impose new rules of borrowing to offset default risk on new loans and increasing demand for them. It forced the loaners to become shareholders by automatic conversion of 20% of loan to shares of lending bank. However, banking management was still substantially driven by political decisions rather than profitability principles. Until the reforms in 2001, Serbian banks remained insolvent, inefficient and non-profitable; i.e. percentage of interest paying asset in total asset of Serbian banks was only about 6% in 20007.

After the political changes in 2000, the new Serbian government defined and adopted Strategy of banking system restructuring in 2001. This strategy was followed with enhancement of regulatory requirements for work licenses, which forced small banks to merge with other banks. Reforms were implemented in few steps. Firstly, banks were imposed to detailed financial analysis in order to determine their solvency. Secondly, insolvent banks were closed, including four big state-owned banks which market share was over 56%. All these resulted in sharp fall in number of banks - from 86 in 2000 to 50 in 2002. This number could be even smaller, but during the 2001 five foreign banks got greenfield working licenses.

Next step in reforms started with adopting of the Strategy of banks privatization. The implementation of this Strategy was supported by a new legislation related to regulation liabilities to households due to old savings in foreign currency and liabilities to Paris and London Clubs. Government decided to convert all of those liabilities into public debt. As the result, Republic of Serbia became temporary owner

⁶ Socially-owned property was established in Yugoslavia as a substitute to state-owned property in order to move control of commercial business from government to workers

⁷ Annual Report for 2000, National Bank of Serbia

in 16 banks (major owner in 11). According to Strategy, Republic of Serbia was supposed to sell its shares to the public. Also, issue of greenfield licences was interrupted.

Today, seven years after the beginning of reforms, we can characterize them as mostly successful. Some of the positive aspects include: closing of insolvent banks, increase of foreign ownership, introducing of new banking products and technologies as the consequence of foreign banking penetration, increase in number of employees, restoring of households' and firms' confidence, increase in competition, positive financial results of sector as a whole etc. Movements of some important indicators during the last five years are presented in table 1:

Table 1. General indicators of Serbian Banking

	dec 2003	dec 2004	dec 2005	dec 2006	dec 2007
Number of banks	47	43	40	37	35
Number of foreign banks	11	11	17	22	21
Number of employees	22,310	23,491	25,680	28,092	30,246
Total asset (million RSD)	367,486	516,869	775,413	1,169,271	1,561,822
Return on asset ⁸ (%)			1.13	1.70	1.70
Return on equity (%)			6.46	9.67	8.54
Interest rate spread (b.p.)	12.07	10.99	10.70	10.82	7.05

Source: National Bank of Serbia

However, the process of restructuring of Serbian banking system is still going on. The short to medium term priorities in Serbia include the completion of the privatization process for banks and insurance companies, a further reduction of bad loans, implementation of the central bank's Supervisory Development Plan and the establishment of a collateral registry to encourage corporate lending. Longer term challenges include further pension reforms, the development of non-banking financial services and greater availability of finance for the private sector.

Overall efficiency of Serbian banks

Positive effects of Serbian banking reforms significantly improved the efficiency of banking services market. Operational, informational and allocational efficiencies were simultaneously improved by increase in competition, introduction of new products, technologies and know-how, imposing of transparency, narrowing of interest rate spread, interruption of inefficient lending policy, etc. On the other side, the direction of changes in operational efficiency of banks as business systems is not so clear, according to different efficiency measures that can be applied. One of the most common measure of banking efficiency is the efficiency ratio, which can be calculated in few different ways:

- Non-interest expense divided by total revenue less interest expense
- Non-interest expense divided by net interest income before provision for loan losses
- Non-interest expense divided by revenue
- Operating expenses divided by net income from fees and interests

For all versions of the ratio, an increase means the company is losing a larger percentage of its income to expenses. If the efficiency ratio is getting lower, it is good for the bank and its shareholders. The fourth version of this ratio⁹ is adopted as official indicator of banking operational efficiency by NBS. Efficiency ratio values for the last five years are presented in table 2.

⁸ In 2003 and 2004 banking sector booked loss

⁹ Actually, NBS calculate this ratio reversibly and present it as operational expenses to net income from fees and interest cover ratio.

Table 2. Efficiency ratio of Serbian banking sector

	2003	2004	2005	2006	2007
Operating expenses ¹⁰ (in million RSD)	25,111	31,979	43,005	60,778	72,106
Net income from fees and interests (in million RSD)	31,074	37,837	53,123	70,423	90,854
Efficiency ratio	0.81	0.85	0.81	0.86	0.79

Source: National Bank of Serbia and author's calculations

We can see from the table that values varied over time without strict support of downward trend. According to the NBS, high values of efficiency ratio are consequences of strong operational expansion during the previous years: "Despite strong operational expansion, banks managed to curtail growth in operational expenses so that income from purely banking operations amounted to 126% of operational expenses"¹¹.

Some other indicators, presented by Matic (2007), correspond to stagnation and even decreasing of banks' efficiency. She found that the ratio of total operating revenues to total assets fell from 0.19 in 2005 to 0.13 in 2007, while the ratio of net interest income to total operating assets fell from 0.05 to 0.04 for the same period. "Efficiency of total assets' use was largely influenced for sure by high rates of credit potentials' immobilization due to the required reserves", she concluded¹².

In the two next sections, we propose our estimation of the cost function of Serbian banks in order to evaluate the comparative efficiency of foreign owned banks with state-owned and private domestic banks in Serbia.

Econometric model and data

The objective of a bank, like of any firm, is to produce more outputs using less inputs. The frontier analysis represents a good instrument to estimate the relative efficiency of banks. Different economic efficiency concepts (based on profit or cost function) could be applied to banking data.¹³ In this paper, bank efficiency is examined by studying a cost function as the data on output prices needed to estimating a profit function is not available. Here, cost efficiency is a measure of how close a bank's cost is to what a best-practice bank's cost would be for producing the same output bundle under the same conditions.

The next important step is the choice of the Frontier efficiency method. There is no consensus on the "best" method to determine the cost efficiency. Both types of methods: parametric frontier methods (Stochastic Frontier Approach (SFA), Thick Frontier Approach (TFA), and Distribution Frontier Approach (DFA)) and non-parametric models (Data Envelopment Analysis (DEA) and Free Disposal Hull (FDH)) have their advantages and disadvantages.

The method to estimate the bank's efficiency used in this paper is the Stochastic Frontier Approach (SFA) chosen primarily for its wide use in application to the banking data in transition countries (see for example Asaftei and Kumbhakar (2008), Fries and Taci (2005), Hasan and Marton (2003), Kraft et al. (2006), etc.). The SFA consists in estimating of a cost function by imposing a restrictive functional form and by assuming that the random error is divided into two elements: the first one, the inefficiency term (u_{it}), is non-negative and follows asymmetric distribution and captures inefficiencies due to poor management, and the second one, the random term (v_{it}), follows symmetric distribution and reflects a "bad luck" phenomenon beyond the control of management:

$$\ln C_{it} = f(w, y) + u_{it} + v_{it} \quad (1)$$

¹⁰ According to NBS, operating expenses consist in cost of wages and some other operational cost included in income statement position 'other operational expenses'.

¹¹ Report on Financial System 2007, National Bank of Serbia

¹² Matic, V. (2008), Serbian banking sector in 2007

¹³ See Berger and Mester (1997) for the cost and profit efficiency concepts comparison.

where C_{it} denotes total costs, f represents functional form, w is the vector of input prices, y is the vector of output quantities.

In our study, the translog functional form (2) was adopted due to the short time series and its simplicity and large use among other works, even if we are aware that Fourier-flexible functional form could be used instead and seems to be more suitable for banking data.

$$\begin{aligned} \ln C_{it} = & \alpha_0 + \sum_{m=1}^M \alpha_m \ln Y_{mit} + \sum_{n=1}^N \beta_n \ln W_{nit} + \frac{1}{2} \sum_{m=1}^M \sum_{p=1}^P \alpha_{mp} \ln Y_{mit} \ln Y_{pit} \\ & + \frac{1}{2} \sum_{n=1}^N \sum_{r=1}^R \beta_{nr} \ln W_{nit} \ln W_{rit} + \sum_{m=1}^M \sum_{n=1}^N \phi_{nm} \ln Y_{mit} \ln W_{nit} + u_{it} + v_{it} \end{aligned} \quad (2)$$

In the banking efficiency literature there is no agreement on the nature of banking inputs and outputs. We adopt here the intermediation approach¹⁴ according to which banks use deposits or deposit costs and other operating costs (inputs) to create loans and other earning assets (outputs). Besides, the variables choice is largely influenced by data availability. For instance, as we do not dispose of data on employees' number, we use a commonly used approximation to estimate labor costs and other operating costs (the ratio of operating expenses to total assets). Table 3 lists the variables associated with the translog cost function specified here before.

Table 3. Definitions and descriptions of variables

Variable	Definition	Description
Dependent Variable		
C_{it}	Total costs	Interest, Fees and Commission Expenses + Other Operating Expenses
Output Quantities		
Y_{it}	Total loans	Loans to banks + Loans to clients
Input Prices		
$W1_{it}$	Operating cost ratio	Other operating expenses / Total Assets
$W2_{it}$	Funding cost ratio	Interest, Fees and Commission Expenses / (Liabilities to banks + Liabilities to Clients + Securities)

The data used in this paper come from National Bank of Serbia; they consist in banks balance sheets and income statements with the full cover of five years activity. All variables are deflated to 2003 prices using the retail prices index.

Our sample consists of 33 Serbian banks with their activity between 2003 and 2007 (National Bank of Greece was merged with Vojvodjanska banka in 2008, while Opportunity banka a.d. Novi Sad is excluded from the sample as disposing only one year data). This period was chosen because we consider that the highly volatile structure of the Serbian banking sector started to stabilize: we can see that the number of banks decreased significantly from 104 in 1998 then 87 in 2001 and to 38 in beginning 2006. Changes in the ownership structure continue and this fact represents a good opportunity to study the relative efficiency of different forms of Serbian banks.

Table 4. Number of banks by ownership category

At the end of the year:	2003	2004	2005	2006	2007
Total number of actives banks	47	43	40	37	35
In majority state ownership	17	14	11	8	8
In majority ownership of domestic private person	19	18	12	7	6
In majority foreign ownership	11	11	17	22	21

Source: National Bank of Serbia

¹⁴ The intermediation approach was proposed by Sealey and Lindley (1977) and is used by a number of recent efficiency studies (for example, by Berger and Mester (1977)).

During the considered years, the ownership structure of Serbian banking sector remarkably changed: from the clear domination of state-owned banks to the domination of foreign-owned banks. It is known¹⁵ that the competition in the Serbian banking sector during this period was working well, but it still needs to be preserved and/or regulated because of current consolidation trend.

As one should make an assumption on the distribution form of inefficiency term (u_{it}), we compare two possibilities: half-normal distribution and truncated normal distribution. The Log likelihood ratio (LR) statistics leads us to accept the null hypothesis that the half-normal distribution is adequate as well as whether efficiency assumed to be time-invariant or time-varying. Indeed, here after we are using the results of our translog specification assuming a half-normal distribution of inefficiency term.

To obtain our results we use the high quoted T. Coelli software Frontier 4.1 with it's guide Coelli (2005). The program's outcomes are inefficiency scores for each bank. A perfectly efficient bank has a cost efficiency estimate equal to one. For a given bank, more important is the deviation from one, less efficient this bank is. Compared to the ownership structure, these scores will allow us to draw conclusions, first, as to if the ownership has an impact on the bank efficiency and, second, as to if the foreign, which are mostly European, banks are more efficient than the public ones or the private Serbian banks.

Analysis of efficiency results

One of the first results obtained from the estimation of banks' cost efficiencies is that state-owned banks are globally less efficient than private domestic and private foreign-owned banks. These results are robust independently of database sample. The gap between the efficiency of private domestic and foreign banks is rather narrow. The explanation we can give for it is that most of domestic banks benefited from the foreign expertise and knowledge, for example, from European partnership programs. Moreover, the number of domestic private banks dropped more than by half to the end of analysed period which makes the conclusion difficult to draw.

The average cost inefficiency of Serbian banks for the whole accounted period is estimated to be 28.21% above the best-practice score. During the period the average cost-efficiency of Serbian banks was instable, as we mentioned above.

Table 5. Cost inefficiency estimates by categories of ownership

Categories of ownership	Cost inefficiency estimates (%)
State-owned ¹⁶	35.14
Domestic Private	28.28
Foreign	24.72
– by country of origin (number of banks; part of total assets of banking sector):	
– Hungary (1; 2,7%)	10.86
– Greece ¹⁷ (5; 22%)	18.19
– France (2; 6%)	20.14
– Cyprus (1; 1,1%)	24.25
– Austria (4; 23%)	26.25
– Germany (2; 5%)	27.46
– Italia (3; 185)	33.27
– Belgium (1; 0,7%)	33.33
– Slovenia (1; 1,4%)	35.14

Source: author's calculations, National Bank of Serbia, Bankscope database

¹⁵ Müller-Jentsch D. (2007)

¹⁶ We consider as state-owned banks whereby the Republic of Serbia is the largest, direct or indirect, shareholder.

¹⁷ We consider AIK banka a.d. Nis to be of Greek origin as Agricultural Bank of Greece has the largest part in its capital (20,83%).

Table 5 illustrates our estimation of the cost inefficiency structure by categories of ownership. It appears from the obtained estimates that state-owned banks in terms of cost efficiency seem to be less performing.

Analysing the foreign participation in Serbian banking sector, first of all, we find that all foreign banks are European with a numerous and important in terms of market share Greek, Austrian and Italian presence. Table 5 demonstrates the cost inefficiencies estimators of foreign banks ranged by their average score. As anticipated, European banks show, in terms of cost efficiency, a relatively better performance.

These results are to be taken with caution. We calculated score as simple average, but regarding the prevalent share of foreign banks (81% in 2007) in total assets, effective influence of foreign banks on overall efficiency could be underestimated. Also, the banking system of Serbia is still in a stabilizing process and had experienced several banking reforms and ownership reorganizations. For example, some foreign participants entered Serbian market in difficult conditions when they needed to reorganize the purchased actives.

Conclusion

Stochastic Frontier Approach and analysis of the ownership structure, with mentioned caution, authorize us to come to the conclusion of the important role played by European banks in Serbian banking sector. The importance of this role can be appreciated at two levels: firstly, because of their big share of domestic market, and secondly, because of their influence over general concurrence due to their relative better cost efficiency. State banks seem to be less efficient than private banks what corresponds to theoretical predictions.

In the present work, we have used one of possible and rather simple specification due to data specificity. It is our first attempt to apply the cost efficiency frontier method to the case of Serbian banks in order to evaluate the relative efficiency of European actors compare to national ones. To complete this work the next step would be to proceed to a comparative analysis of cost efficiency of banks in other countries of Balkan region. It would be interesting to examine the impact of European banks on the Balkan's banking systems in the long run. The principle issue is to analyse whether the presence of European banks is beneficial to the overall efficiency and soundness of the domestic banking system.

References

- Asaftei G., Kumbakhar S.C. (2008), "Regulation and Efficiency in Transition: the case of Romanian Banks", *Journal of Regulatory Economics*, Springer, Vol. 33(3), pp. 253-282.
- Berger A., Humphrey D. (1997), "Efficiency of Financial Institutions: International Survey and Directions for Future Research", *European Journal of Operational Research* 98 (1997), pp. 175-212.
- Bonin J., Hasan I., Wachtel P. (2005), "Bank Performance, Efficiency and Ownership in Transition Countries", *Journal of Banking and finance*, No. 29, pp. 31-53.
- Bos J.W.B., Kool C.J.M (2006), "Bank efficiency: The role of bank strategy and local market conditions", *Journal of Banking & Finance*, 30 (2006), pp. 1953-1974.
- Coelli T., O'Donnell Ch. J., Praseda Rao D.S., Battese G.E., (2005), *An introduction to efficiency and productivity analysis*, 2^o Ed. Springer Science+Business Media
- Demirguc-Kunt A., Levine R. (2008), "Finance, Financial Sector Policies, and Long-Run Growth", *World Bank WPS 4469*.
- Drašković B. (2005), "Transition of banking and real sector in Serbia", Collection from scientific gathering "*Privatization of banks in Serbia*", Belgrade
- EBRD (2004), "Spotlight on South-Eastern Europe: An Overview of Private Sector Activity and Investment", London.
- Filipović S. (2005), "Reforms in commercial banking sector", Part of research results of Ministry of Sciences project 1324, Belgrade

- Fries S., Taci A. (2005), "Cost Efficiency of Banks in Transition: Evidence from 289 banks in 15 post-communist countries", *Journal of Banking and Finance*, No. 29, pp. 55-81.
- Girardone C., Nankervis J., Velentza E-F. (2006), "Efficiency, Ownership and Financial Structure in European Banking: A Cross-Country Comparison", *University of Essex Discussion Paper*, No. 06-06.
- Hasan I., Morton K. (2003), "Development and efficiency of the banking sector in a transitional economy: Hungarian experience", *Journal of Banking & Finance*, 27 (2003), pp. 2249-2271.
- Kasman A. (2005), "Efficiency and Scale Economies in Transition Economies: Evidence from Poland and the Czech Republic", *Emerging Markets Finance and Trade*, vol. 41, no. 2, March-April 2005, pp. 60-81.
- Kasman A., Yildirim C. (2006), "Cost and profit efficiencies in transition banking: the case of new EU members", *Applied Economics*, 2006, 38, pp. 1079-1090.
- Kraft E., Hofler R., Payne J. (2006), "Privatization, Foreign Bank Entry and Bank Efficiency in Croatia: a Fourier-flexible function stochastic cost frontier analysis", *Applied Economics*, 38, pp. 2075-2088.
- Lozano-Vivas A., Pastor J.T, Pastor J.M. (2002), "An Efficiency Comparison of European Banking Systems Operating under Different Environmental Conditions", *Journal of Productivity Analysis*, 18, 59-77, 2002, pp. 59-77.
- Matić, V. (2008), Serbian banking sector in 2007, from the website: www.ubs-asb.com/s/Download/Bankarski_sektor_2007.pdf
- Müller-Jentsch D., (2007), *Financial Sector Restructuring and Regional Integration in the Western Balkans*, Office for South East Europe, European Commission - World Bank
- Sealey C.W., Lindley J.T. (1977), "Inputs, Outputs, and a Theory of Production and Cost at Depository Financial Institutions", *Journal of Finance*, 32(4), pp.1251-1266.
- Stavarec D. (2006), "Banking Efficiency in the Context of European Integration", *Eastern European Economics*, vol. 44, no. 4, July-August 2006, pp. 5-31.
- Stubos G., Tsikripis I, (2004), Banking Sector Developments in South-eastern Europe, Working Paper 4.4 Global Development Network Southeast Europe (GDN-SEE).
- Tortosa-Ausina E. (2002), "Bank Cost Efficiency and Output Specification", *Journal of Productivity Analysis*, No. 18 (2002), pp. 199-222.
- Valverde S., Humphrey D., del Paso R. (2007), "Opening The Black Box: Finding The Source Of Cost Inefficiency", *Journal of Productivity Analysis*, Jun2007, Vol. 27 Issue 3, pp. 209-220.
- Weill L. (2003), "Banking efficiency in transition economies: The role of foreign ownership", *Economics of Transition*, Volume 11 (3) 2003, pp. 569-592.
- National Bank of Serbia, Annual Report, 2000
- National Bank of Serbia, Report on Financial System, 2006
- National Bank of Serbia, Report on Financial System, 2007
- National Bank of Serbia, Report on Banking Sector, 2003
- National Bank of Serbia, Banking Supervision, Fourth Quarter Report, 2004
- National Bank of Serbia, Banking Supervision, Fourth Quarter Report, 2005
- National Bank of Serbia, Banking Supervision, Fourth Quarter Report, 2006
- National Bank of Serbia, Banking Supervision, Fourth Quarter Report, 2007
- National Bank of Serbia, Banking Supervision, First Quarter Report, 2008
- www.investopedia.com
- www.nbs.rs

Stock Exchange Indexes on World Market – Influences on Financial Markets of Western Balkan Countries

Adnan Rovčanin¹, Sejfudin Zahirović, Jasmina Okičić²

ABSTRACT – In this paper the authors research the correlation level of financial markets of “huge” world economies and economical systems of transitional countries. Special emphasis has been placed on the correlation level of the stock exchange index DJIA and the indexes of Western Balkan countries (CROBEX, BELEX15, SBI20, SASX-10, MBI10 and MOSTE). A high correlation level of the above stated indexes (markets) has been confirmed.

KEY WORDS: stock exchange, stock exchange index, correlation, financial market, securities, prices of securities

Introduction

Contemporary market economies are highly monetary economies where money operations as well as money surrogates operations are dominant business. Financial system, without any doubt, presents a vital part of every economy. The importance of financial system for economical growth, and for the total social development, is best confirmed by the fact that countries with strong and stable financial systems develop faster, while the countries with undeveloped and rigid financial system experience frequent crises. Therefore, it is not too much to say that a financial system presents the lever of economical growth and development of every country.

The fact is that international and globalisation processes have made that movements on world financial market proceed according to the law of “domino effect”. In other words, there is a high correlation level of movements on world financial markets. Therefore, it is almost impossible to talk about financial systems of particular countries.

The subject of this research is to determine intensity of (negative) movements on financial markets of developed countries on financial movements and markets of “small” countries. We are to observe the influence of financial crisis in the USA on the rest of the world.

Financial crisis in the USA – causes and consequences

Negative trend on financial markets, which has first overcome the USA market, has rapidly spread to other countries in the world, causing “deep” disturbance of financial and total economical system of other countries. Taking into consideration the importance of financial system for economy of every country, it is not unexpected that the crisis of financial system in the USA, which culminated with the crisis of mortgage loans, has turned into crisis of total economical system, causing recession and unemployment. Since the USA present to a large extent “world centre of financial power”, the crisis in the USA has caused huge problems in European countries.

It is for sure that the crisis in the USA reflects on both financial and total economical movements in the countries of former Yugoslavia. The year of 2007 was very turbulent on Balkans stock exchanges. Optimism which reigned at the beginning of the year was replaced by “indescribable pessimism”.

¹ Adnan Rovčanin, Faculty of Economics, University of Sarajevo

² Sejfudin Zahirović, Jasmina Okičić, Faculty of Economics, University of Tuzla

The level of correlation between Dow Jones Industrial Average index and indexes on stock exchanges in Bosnia and Herzegovina, Croatia, Serbia, Montenegro, Slovenia and Macedonia is researched in the paper. The six indexes have been observed: SASX-10, CROBEX, BELEX15, SBI20, MBI10, MOSTE, and the same have been compared to DOW JONES INDUSTRIAL AVERAGE (DJIA).

On the bases of research results, it will not be hard to make a conclusion about the intensity of financial crises in the USA on other countries, in other words on the countries of former Yugoslavia, which are the subject of the research.

Stock exchange indexes – representative of stock exchange movements

Stock exchange indexes present one of the most important indicators of financial market development, and economy in total. They indicate price changes of securities and as such they have a wide application in analysis of stock exchange business and making decisions about buying and selling stocks. The use of indexes is diverse, and they are used:

- As a measure of short-term changes in market movements
- When making investment decisions
- For historical analysis
- As a performance measure of securities portfolio
- As a basis for making derivation decisions
- As a platform while constructing index funds³

Every index is evaluated in a different way. The basic questions which are asked when constructing an index are:

- Which is the needed size of the sample?
- How will stocks in index basket be weighted?
- Will index represent market in total, or just one of its segments?
- Will index be constructed as arithmetical or geometrical average?
- Frequency of estimating index value
- Credibility of index constructors
- Which stocks are included in index basket?

Stock exchange indexes should be expressed in units which are easily understood and which can provide answers to relevant questions.

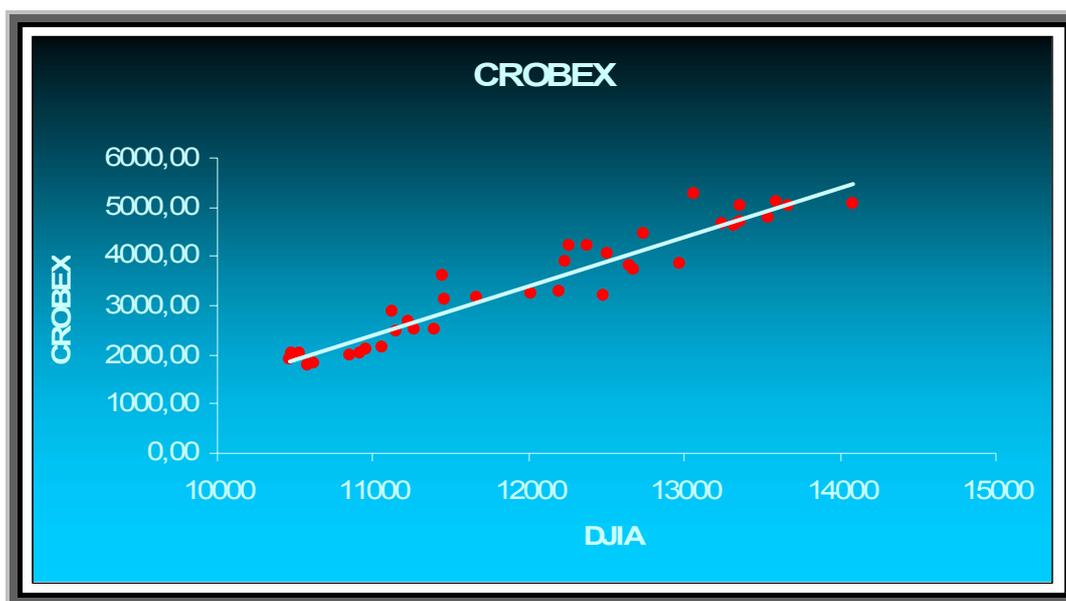
Correlation of DJIA and stock exchange indexes of former Yugoslavian countries

DJIA and CROBEX

We observe correlation of DJIA and CROBEX. Variable x (independent variable) is to present DJIA, while variable y (dependent variable) is the index of Zagreb stock exchange, CROBEX.

Dispersion diagram is constructed on the basis of disposable values of these two indexes.

³ <http://www.ekof.bg.ac.yu/> (accessed 13.08.2008.)

Figure 1. Dispersion diagram of DJIA and CROBEX

The following is noticeable from the above dispersion diagram:

- Correlation between the observed variables is positive and high, since the straight line which goes through the dispersion “cloud” increases ($r > 0$) and follows the points on the graph quite well.
- Even increase of variable X is followed by even increase of variable Y, in other words it is justified to use linear model of regression
- Since the straight line has positive slope, regression coefficient is positive.

Output-table of regression analysis:

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	-8653,25	625,458989	-13,83503801	9,36966E-16	-9922,99813	-7383,5
DJIA	1,003721	0,051742917	19,39822928	2,62184E-20	0,898677257	1,108765

Only some data from Output-table are important for determent of linear regression equation, and they are: Coefficients: Intercept (-8653, 248885) is the value of constant article a, and coefficient with the variable DJIA (1, 003720961) value of regression coefficient b. Therefore, equation of linear regression model is:

$$\hat{y} = 1,003720961x - 8653,248885$$

Regression coefficient b indicates an average change of independent variable (y) when dependent variable (x) increases by one (a unit of measurement). Therefore, if the value of DJIA increases for one index point, the value of index CROBEX will increase by 1,003720961 index points.

The question that follows is: “How precisely can the value of dependent variable be predicted for a certain value of independent variable?” Evaluation of model representative quality is based on analysis of residual departing real values (y_i) from expected values (\hat{y}_i) of dependent variable.

As indicators of representative quality of linear regression model, the following are analysed: variation regression, standard regression deviation, regression variation coefficient, determination coefficient.

Output-table of regression analysis, with suitable values of above listed measures of representative quality, looks like this:

Regression Statistics	
Multiple R	0,956505182
R Square	0,914902163
Adjusted R Square	0,912470796
Standard Error	336,1460369
Observations	37

ANOVA

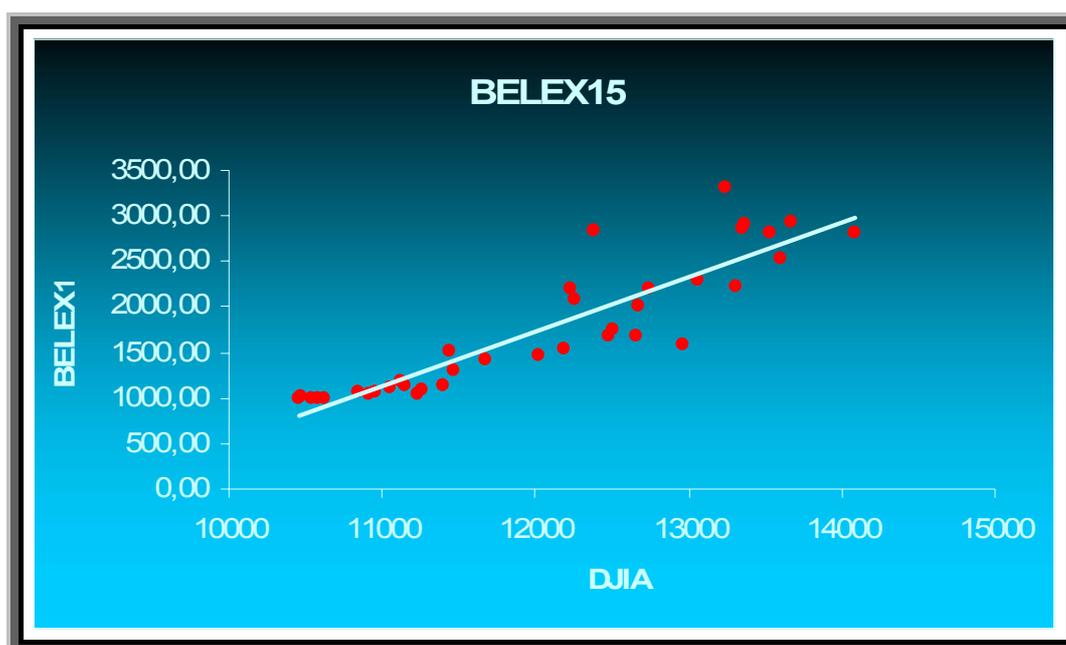
	df	SS	MS	F	Significance F
Regression	1	42518718,54	42518718,54	376,2912991	2,62184E-20
Residual	35	3954795,533	112994,1581		
Total	36	46473514,07			

Therefore, the value of 95,65% implies that there is a strong correlation between the observed values of DJIA index and CROBEX index. Determination coefficient is 0,914902163 (R square), which means that the linear model which has been chosen (where the independent variable is index Dow Jones value) explains 91,49% movements of index CROBEX value.

DJIA and BELEX15

In this case the dispersion diagram looks like this:

Figure 2. Dispersion diagram of DJIA and BELEX15



It is possible to conclude from the previous diagram that there is a positive correlation between DJIA and the index BELEX15. In other words, when the value of DJIA increases the value of index BELEX15 increases, too.

Output-table of regression analysis:

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	-5496,688348	586,7511493	-9,368006103	4,54821E-11	-6687,8565	-4305,52
DJIA	0,602055947	0,048540698	12,40311684	2,28212E-14	0,503513092	0,7005988

The needed coefficients a and b can be read from the output-table, and they are: Coefficients: Intercept (-5496, 688348) is the value of constant article a, and coefficient with the variable DJIA (0, 602055947) is the value of regression coefficient b. Therefore, equation of linear regression model is:

$$\hat{y} = 0,602055947x - 5496,688348$$

It is noticeable from the given equation that if DJIA is zeros the value of index BELEX15 is negative, in other words it decreases by 5496,688348 index points. If situation is different, and the value of DJIA increases by one index point, the value of index BELEX15 increases by 0,602055947 index points.

Output-table of regression analysis crisis:

Regression Statistics	
Multiple R	0,902582555
R Square	0,814655269
Adjusted R Square	0,809359705
Standard Error	315,3429352
Observations	37

ANOVA

	df	SS	MS	F	Significance F
Regression	1	15297761,34	15297761,34	153,8373074	2,28212E-14
Residual	35	3480440,837	99441,16678		
Total	36	18778202,17			

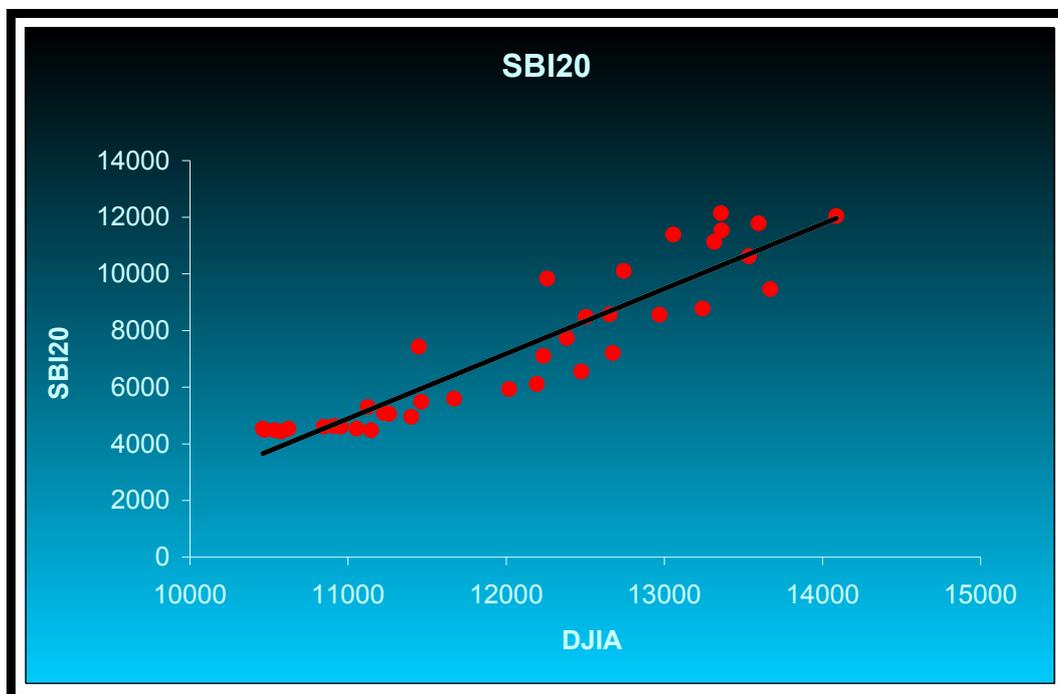
Correlation coefficient (Multiple R) is 0,902 or 91% which implies that there is a noticeable linear correlation between DJIA index (independent variable x) and BELEX15 (dependent variable y). Determination coefficient (R Square) in this case is 0, 8146, which means that the linear model, where independent variable is DJIA index, explains 81% of BELEX15 index variation.

The presented ANOVA table provides data about the importance of achieved regression model. It is possible to read out the value of empirical F-ratio which is 153, 8373074 (F), as well as its p-value (*Significance F*) 2, 28212E-14, which in mathematical form is $2, 28212 \cdot 10^{-14} = 0, 000000000228212$. On the basis of this value it is possible to conclude that the independent variable (in this case DJAI index) significantly influences variation of dependent variable (Belgrade stock exchange index BELEX15) with the risk level of $p < 0,01$. Therefore, the chosen linear regression model is statistically relevant.

DJIA and SBI20

Dispersion diagram in this case looks like this:

Figure 3. Dispersion diagram of DJIA and SBI20



According to the form of diagram, it is possible to conclude that it is justified to choose a linear regression model, which will be proved later. After choosing a model, it is necessary to formulate the equation of the given model. Values of a and b coefficient, which are necessary for formulating the equation are presented in the following output-table of regression analysis.

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	-20256,5253	1922,367836	-10,5373	2,12E-12	-24159,13941	-16353,911
DJIA	2,28703482	0,159033479	14,38084	2,95E-16	1,964179701	2,60988995

Coefficients: Intercept (-20256, 5253) is the value of the constant article a, which presents the value which Ljubljana stock exchange index SB120 has when the value of DJIA index is 0. Coefficient with variable DJIA (2, 28703482) is the value of regression coefficient b, which presents the value that the index SB120 increases by when the value of DJIA increases by one index point. Therefore, equation of linear regression model, where DJIA is independent variable (x) and SBI20 is dependent (y), is:

$$\hat{y} = 2,28703482x - 20256,5253$$

Output-table:

Regression Statistics	
Multiple R	0,924801
R Square	0,855257
Adjusted R Square	0,851122
Standard Error	1033,155
Observations	37

ANOVA

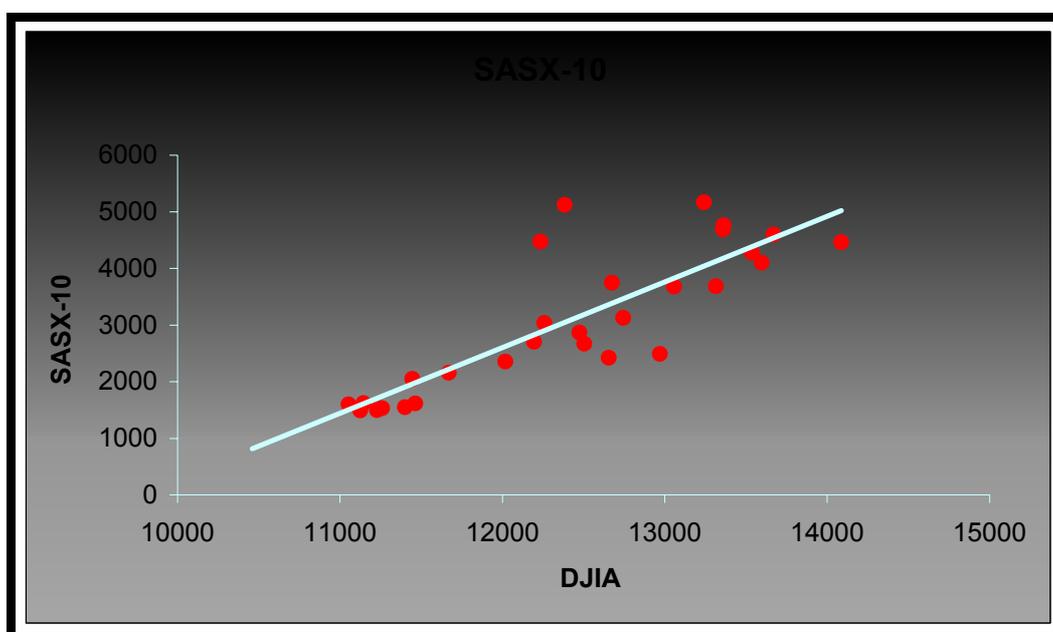
	df	SS	MS	F	Significance F
Regression	1	220749503	2,21E+08	206,8085	2,94597E-16
Residual	35	37359352,51	1067410		
Total	36	258108855,5			

Correlation coefficient (Multiple R) is 0,924 or 93% which implies that there is a remarkable linear correlation between DJIA index (independent variable x) and SBI20 index (dependent variable y). Determination coefficient (R Square) in this case is 0,8552 which means that the linear model, where the independent variable is DJIA index, explains 81% of SBI20 index variation.

DJIA and SASX-10

Dispersion diagram of DJIA and SASX-10 looks like this:

Figure 4. dispersion diagram of DJIA and SASEX-10



If we observe the previous dispersion diagram, we can choose linear regression model. To be certain that the chosen model is also the model that explains the existence of correlation between DJIA index and SASX-10 index well, it is necessary to evaluate the representative quality of the regression model. All of the necessary data for formulating the equation of the model can be seen in the following table, in the column Coefficients.

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	-14763,55049	1309,629071	-11,27307786	3,37E-13	-17422,23883	-12104,86214
DJIA	1,427165091	0,10834288	13,17267085	3,99E-15	1,207217354	1,647112829

Therefore, equation of linear regression model

$$\hat{y} = 1,427165091x - 14763,55049$$

Output-table of regression analysis:

Regression Statistics	
Multiple R	0,912222448
R Square	0,832149795
Adjusted R Square	0,827354075
Standard Error	703,8457032
Observations	37

ANOVA

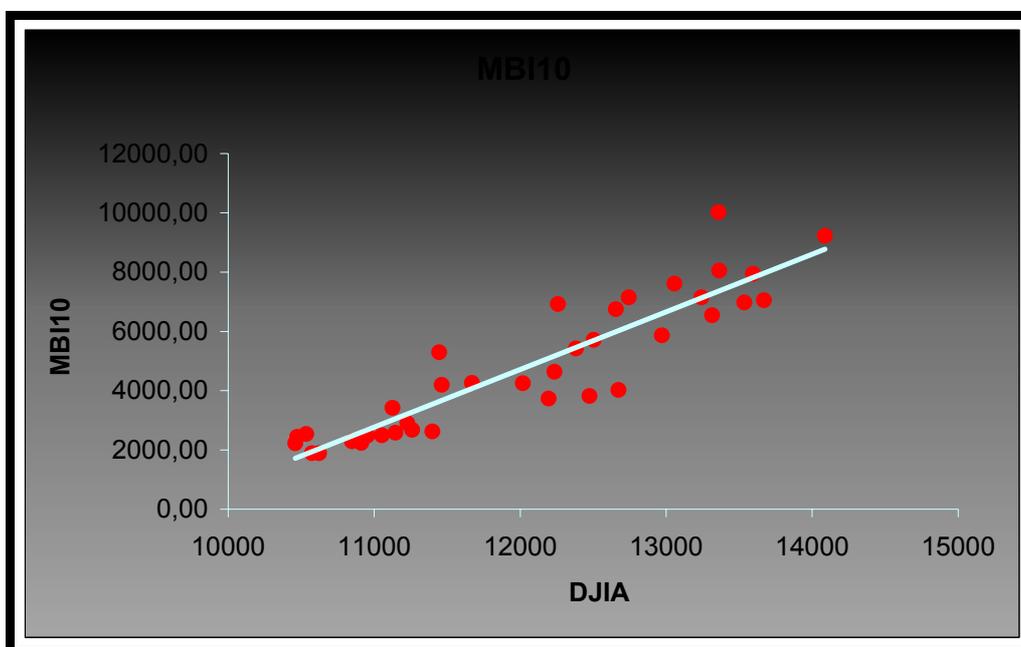
	df	SS	MS	F	Significance F
Regression	1	85961227,38	85961227,38	173,5193	3,98564E-15
Residual	35	17338957,09	495398,774		
Total	36	103300184,5			

Correlation coefficient (Multiple R) is 0,912 or 91% which implies that there is a remarkable linear correlation between DJIA index (independent variable x) and SASX-10 index (dependent variable y). Determination coefficient (R Square) in this case is 0,832 which means that the linear model, where independent variable is DJIA index, explains 83% of SASX-10 index variation

DJIA and MBI10

Dispersion diagram for DJIA and MBI10 looks like this:

Figure 5. Dispersion diagram of DJIA and MBI10



On the basis of previously presented diagram it is possible to evaluate the correlation form between the observed variables and to construct a suitable model. Therefore, there is a positive correlation between DJIA and MBI10 index, which can be explained using linear regression model. The following table presents the data for formulating the equation of linear model.

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	-18609,1148	1760,862797	-10,5682	1,96E-12	-22183,8563	-15034,37
DJIA	1,943519361	0,145672504	13,3417	2,74E-15	1,647788458	2,2392503

The equation is:

$$\hat{y} = 1,943519361x - 18609,1148$$

The table of regression analysis:

Regression Statistics	
Multiple R	0,914156
R Square	0,835682
Adjusted R Square	0,830987
Standard Error	946,3563
Observations	37

ANOVA

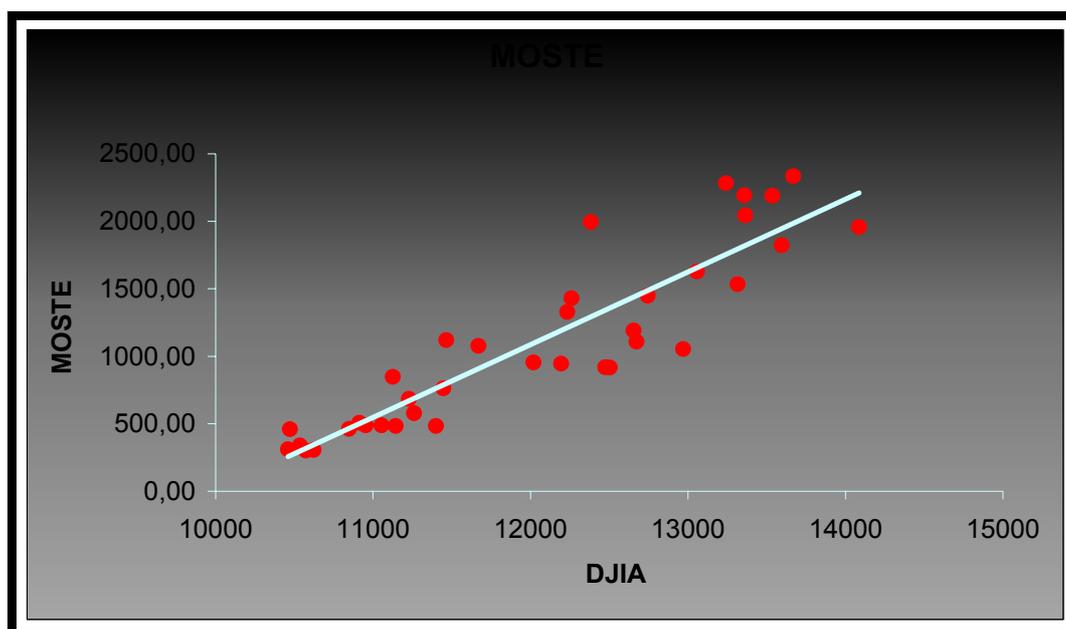
	Df	SS	MS	F	Significance F
Regression	1	1,59E+08	1,59E+08	178,0011	2,74166E-15
Residual	35	31345658	895590,2		
Total	36	1,91E+08			

After establishing the equation, it is necessary to estimate the representative quality of the chosen model. The table *Regression Statistics* provides the necessary data for evaluation of the model as it follows: correlation coefficient (Multiple R) is 0,914 or 91% which implies that there is a noticeable linear correlation between DJIA index (independent variable x) and MBI10 index (dependent variable y).

DJIA and MOSTE

In this case, dispersion graph looks like this:

Figure 6: Dispersion diagram of DJIA and MOSTE



After defining the regression form, it is necessary to define equation parameters of regression direction. The parameters can be read in the out-put table of regression analysis. The table looks like this:

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	-5368,670056	512,0815129	-10,484	2,43E-12	-6408,250789	-4329,089324
DJIA	0,537875593	0,042363435	12,69669	1,16E-14	0,451873249	0,623877937

Therefore, the equation is:

$$\hat{y} = 0,537875593x - 5368,670056$$

Output table:

Regression Statistics	
Multiple R	0,90643
R Square	0,821616
Adjusted R Square	0,816519
Standard Error	275,2126
Observations	37

ANOVA

	Df	SS	MS	F	Significance F
Regression	1	12210062	12210062	161,2061	1,16327E-14
Residual	35	2650968	75741,95		
Total	36	14861030			

The given tables are necessary to estimate the representative quality and importance of the chosen regression model. The table *Regression Statistics* provides the following information: multiple correlation coefficient R (Multiple R) is 0,906 or 91% which implies that there is a remarkable linear correlation between DJIA index (independent variable x) and MOSTE index (dependent variable y). Determination coefficient (R Square) is 0,822 which means that 82% of MOSTE index variation is explained using the linear model where the independent variable is DJIA index.

Conclusion

On the basis of the research of correlation of “big” financial markets and financial markets of transitional countries, it is not difficult to conclude that the overall movements in world economy make “small” countries, no matter if they want to or do not want to, accept what is imposed by the developed countries.

Practical apply of regression and correlation analysis, has provided establishing the intensity of correlation of big financial markets and markets of transitional countries, monitoring the stock exchange indexes DJIA and stock exchange indexes of Western Balkan countries. On the basis of research results, the highest level of correlation between DJIA and CROBEX can be easily noticed. A high level of correlation exists as well between DJIA and the other observed indexes of former Yugoslavia countries.

References

- Baletić Zvonimir - editor, 1995, „Economical lexicon“, first edition, Leksikografski zavod „Miroslav Krleža“, Masmedia, Zagreb.
- Brzaković Tomislav, 2007, „Capital markets – theory and practice“, ČUGURA Print, Beograd.
- Jednak Jovo, 2007, „Financial markets“, third edition, Belgrade business school, Beograd.
- Orsag Silvije, 2003, „Securities“, Revicon, Sarajevo.
- Papić Milan, 2005, „Applied statistics in MS excel – for economists, scientists and ignorant people“, ZORO, Zagreb.
- Petz Boris, 1994, „Statistics for practice“, Zagreb.
- Rovčanin Adnan, 2007, „financial management“, fourth edition, Faculty of economics, University of Sarajevo, Sarajevo.
- Sanders Anthony, Millon Cornett Marcia, 2006, „Financial markets and institutions“, second edition, MASMEDIA, Zagreb.
- Somun-Kapetanović Rabija, 2006, „Statistics in economy and management“, Faculty of economics, University of Sarajevo, Sarajevo.
- <http://www.yahoo.com/finance>
- <http://www.sase.ba>
- <http://www.belex.co.yu>
- <http://www.mse.org.mk>
- <http://www.ljse.si>
- <http://www.ekof.bg.ac.yu>
- <http://www.bizniscg.info>
- <http://www.zse.hr>
- <http://www.mtsmondo.com>
- <http://www.montenegroberza.com>

Public Debt and the Financial Integration of the Balkan Countries in the Financial European System¹

Marius Samizafy²

ABSTRACT – This paper aims at examining the level of financial integration of Albania, Bosnia and Serbia in the European system from the public debt perspective. It also analyzes to what extent the public debt accession criteria helps in the assessment of the impacts of such integration on the European financial stability. Our main results show that the effective use of the Euro from 2001 improves the European financial integration of these countries, however, the US\$ remains their prevailing public indebtedness currency (original sin) between 1991 and 2006. In addition, an analysis of two financial instability factors highlights that, even though the Balkan potential candidate countries meet the debt to GDP ratio, they do not satisfy the conditions of solvency and sustainability and are subject to default. This is due to insufficient public revenues, smaller economic growth rate relative to public debt dynamics (debt overhang) and lower public debt efficiency.

KEY WORDS: public indebtedness, country solvency, sustainability, original sin, debt overhang, financial integration, European Union, Balkan countries

Introduction

In the prospect of a future membership in the European Union, potential candidate countries must engage in the process of meeting the accession criteria along with the *Stabilization and Association Process*³. In addition, they should also try to satisfy the membership criteria to put forth their willingness to integrate the European Union system more rapidly. One of the main criteria addresses government finance management given the important role that the public sector might have in the economy. The government finance criteria involve two conditions to be met by each member country in order to avoid distorting the stability of the European Union financial system: on the one hand, public deficit should not exceed 3% of GDP and, on the other hand, public debt must be inferior to 60% of GDP⁴. Both indicators could be used to measure the financial integration of all member countries from a public viewpoint (Baele L. and alii, 2004). However, the economic literature on the European construction focuses more on the public deficit criteria to the detriment of the public debt criteria, despite its importance in the analysis of the domestic and/or the regional economic performance of a potential applicant country. A number of emerging or transition economies⁵, such as the Western Balkan countries, could be considered in this category. Therefore, it would be interesting to study their case. This paper examines the implications of the Balkan potential candidate countries in the public financial integration of the European Union through two main questions:

¹ This paper is one of the results of the research of *Hubert Curien Partnership* program “Pavle Savic” (Serbian-French technology cooperation for 2008/2009) titled *FINANCIAL SYSTEM INTEGRATION OF THE BALKAN COUNTRIES IN THE EUROPEAN FINANCIAL SYSTEM* realized in the research cooperation between the University of Nice –Sophia Antipolis, CEMAFI (France) and the Institute of Economics Sciences, Belgrade (Serbia)

² Marius Samizafy, University of Nice-Sophia Antipolis

³ Agreements for mutual commitments between the EU (offering tariff-free access, financial and technical assistance) and potential candidate countries (engaging in political, economic, trade, or human rights reforms).

⁴ According to the Maastricht convergence criteria, the ratio of gross government debt to GDP must not exceed 60% at the end of the preceding fiscal year. Even if the target cannot be achieved due to the specific conditions, the ratio must have sufficiently diminished and must be approaching the reference value at a satisfactory pace.

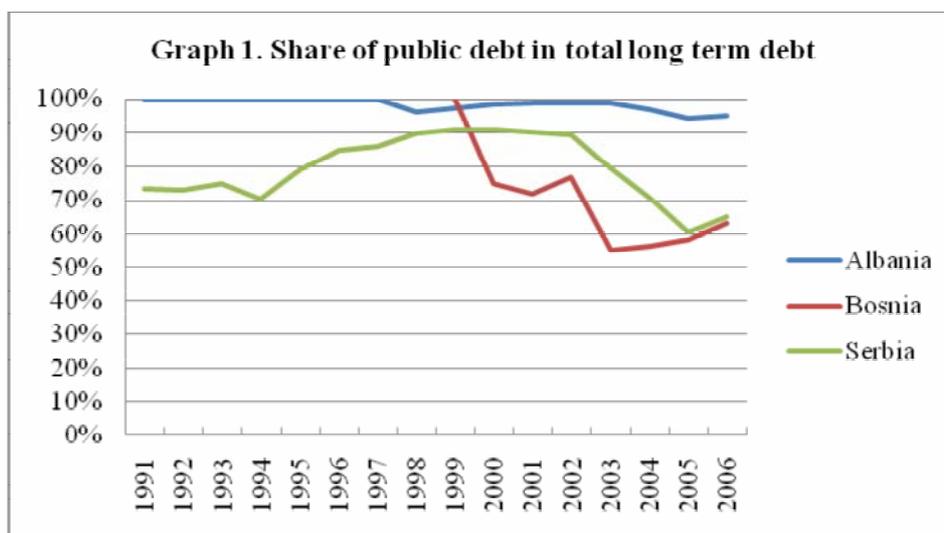
⁵ According to the World Bank, economies with low-to-middle per capita income.

- What is the level of public financial integration of the Balkan potential candidate countries in compliance with the public debt membership criteria in the European Union financial system?
- To what extent does the public debt accession/membership criteria help assess the impact of the public financial integration of the Balkan potential candidate countries on the stability of the European Union financial system?

The rest of the paper is organized as follows: Section 2 examines the effort of BPCC to integrate the financial system of the European Union from a public indebtedness profile based on the analysis of its currency composition. Section 3 puts forth the limits of the debt/GDP ratio to assess the possible negative impacts of this public financial integration of the BPCC on the European Union financial system stability by underlining the role of country default in fragilizing the broader financial system it belongs to through sovereign insolvency and public debt unsustainability. Section 4 concludes.

Public indebtedness profile and financial integration

A country is in the process of integrating the public financial system of a regional grouping when it adopts measures to eliminate the various barriers that have existed for cross-border transactions with other partner countries and when it puts into application a number of structural and operational reforms to modernize its public finance system such as harmonizing its financial and fiscal regulations in compliance with other member countries (García-Herrero A. and Wooldridge P., 2007). This catching-up process could also be reflected in the effort of the government to promote the regional preference clause by primarily transacting with other European countries. Regarding public debt, we would assume that a country is financially integrated in the public finance system of the European Union if its public indebtedness is mainly contracted in European currencies, if its creditors belong in majority to the European Union system and if it uses European-like instruments for public debt risk management. In order to assess the integration effort of the Balkan potential candidate countries in the European Union public financial system, it is interesting to find out whether they have gradually directed their public indebtedness transactions towards the European Union financial system. For this regard, let us examine their public indebtedness profile by currency/creditors decomposition (in line with Claessen S., 1988).



Sources: World Development Indicators, Global Development Finance, Government Finance Statistics

We conduct our analysis based on the assumption that public debt (public debt and publicly guaranteed debt) accounts for 98%, 69% and 79% of total long term debt in Albania, Bosnia and Serbia respectively⁶.

⁶ Calculations are based on figures from various databases of the World Bank and the International Monetary Fund.

Table 1. Public indebtedness by currency - Albania (%)

ALBANIA		1991-2000		2001-2006		
Currency	Average share in total debt	Absolute growth rate	Annual average growth rate	Average share in total debt	Absolute growth rate	Annual average growth rate
European	24.35	-92.13	-21.51	27.64	61.21	10.78
US\$	50.89	3.55	31.85	61.67	-25.50	-4.41
Others	5.34	243.80	32.21	10.69	112.25	16.00
N/A	19.42					

Sources: own calculations

The Albanian government mainly borrows from the dollar zones and more than half of its public debt is denominated in US\$, which accounts for around 60% of total public debt. However, despite a sharp decline of about 90% in the public debts contracted with European currencies between 1991 and 2000, the use of the new single currency in the European Union has a positive effect on the borrowing behavior of the Albanian authorities towards public indebtedness from 2001. Public debt denominated in Euro records an annual average growth rate of around 10% for the 2001-2006 period.

Table 2. Public indebtedness by currency- Bosnia (%)

BOSNIA		1999-2000			2001-2006	
Currency	Average share in total debt	Absolute growth rate	Annual average growth rate	Average share in total debt	Absolute growth rate	Annual average growth rate
European	12.96	19.00	19.00	36.16	18.01	3.48
US\$	27.55	0.64	0.64	37.41	18.48	6.31
Others	29.25	12.29	12.29	26.43	-36.27	-5.75
N/A	30.24					

Sources: own calculations

Similar public indebtedness patterns could be noticed in Bosnia⁷ from 2001 because the share of public debt denominated in European currencies increases from 13% to 36% on average. Moreover, the US\$ remains the main borrowing currency with an annual average growth rate of about 6% between 2001 and 2006, way beyond other foreign currencies, the share of which decreases from 29% to 26% in the total public indebtedness.

Table 3. Public indebtedness by currency- Serbia (%)

SERBIA		1991-2000			2001-2006	
Currency	Average share in total debt	Absolute growth rate	Annual average growth rate	Average share in total debt	Absolute growth rate	Annual average growth rate
European	19.59	3.56	1.22	28.51	61.25	10.38
US\$	19.45	0.66	6.17	52.94	-94.36	20.44
Others	54.45	-11.29	-1.05	18.55	112.25	-20.82
N/A	6.51					

Sources: own calculations

⁷ Data for Bosnia are unavailable before 1999.

The public indebtedness pattern of Serbia is slightly different because it borrows mainly in other foreign currencies for the 1991-2000 period, with a proportion in the total public debt of around 55%. Public debts denominated in US\$ and in European currencies account each for about 19%. In spite of an increase of the public indebtedness in Euro from 2001, Serbia primarily owes debts in US\$, which records an annual average growth rate of around 20% between 2001 and 2006.

In sum, public debt in the potential candidate countries is mainly denominated in US\$⁸ (Hausmann R. and Panizza U., 2003), even though there is an effort to hold government bonds denominated in European currencies and in Euro. The share of euro-denominated public debt has increased constantly from 1991 and records a global growth rate of about 30% in comparison with dollar-denominated public debt which remains on top with an average global proportion of around 50% of total public debt within 20 years. On average, the Western Balkan countries show a gradual integration in the public financial system of the European Union by increasing the share of their public borrowing from other European countries.

In order to better assess the financial integration of a country in a regional system, it would also be interesting to examine its public indebtedness profile by creditor composition (in line with the public debt management strategies recommended by the World Bank). Such an analysis will not be addressed in this paper due to data unavailability.

In addition, we could also assess the financial integration of a country into a regional system in consideration of a convergence in the operational and institutional framework of its public debt risk management (Velandia A., 2002). Public debt risk management takes into account the way the government forecasts and covers the financial risks related to public indebtedness, more specifically, the interest rate risk and the exchange rate risk. A country would be financially integrated with the European Union in this field if it adopts a similar behavior as the other European Union member countries and if it uses financial derivatives from the European Union financial markets. We are unable to analyze in-depth this aspect of public financial integration (i.e. public debt risk management) in the Balkan countries due to data and information unavailability.

Whether a country is partially or totally integrated in a regional financial system, it is likely to influence the stability of this system, which explains why acceding to the European Union necessitates meeting a number of qualitative and quantitative criteria. As far as public financial integration is concerned, the accession criteria concern a public debt threshold inferior to 60% of GDP. In the next section, we will examine to what extent this criteria could be used to assess the impact of the integration of the potential candidate countries in the public financial system of the European Union.

Financial integration and financial system instability factors

In this section, we will try to explain why the public debt accession criteria are insufficient to assess the impacts of potential candidate countries financial integration on the European Union financial system stability. Then, we will propose other indicators to be taken into consideration for this purpose.

The public debt to GDP ratio seems insufficient to assess the potential impacts of potential candidate countries financial integration on the European Union financial system stability because it does not take into consideration two main factors of financial system instability, which are country insolvency and public debt unsustainability. If a country is insolvent, it is likely to be unable to repay its debts, and if the country contracts new debts to repay its older debts while it is insolvent, its public debt is likely to become unsustainable. Such a situation might deteriorate the insolvency of the country and lead to default (Alessina and ali, 1992). When a country defaults, it is likely to suffer a financial crisis and given its level of integration in the regional system, it might impact negatively the stability of the whole system by a domino effect on other member countries depending on their degree of vulnerability.

⁸ Such a indebtedness behavior is described in the economic literature as a financial original sin, which consists for a government to mainly borrow in foreign currencies.

Country solvency analysis

Country solvency reflects the capacity of a country to face its debts with its own revenues. If it owes more than it can repay, the country is insolvent. We use a public debt to tax revenues ratio and a public debt service to remaining tax revenues ratio because they better reflect the debt burden that the country has to deal with. We choose to use tax revenues⁹ instead of GDP because they reflect the proper financial resources of the country to measure solvency, denoted S . Regarding the second ratio, public debt service represents the amount of public debt to be repaid, with the related interests, by a country per year, and tax revenues should account in this case for the remaining share of tax revenues allocated to public debt servicing¹⁰ after payment of public expenditures. However, for simplification, we only consider general government final consumption expenditures to determine these remaining tax revenues.

A country solvency can be calculated with the following indicators:

$$S_t = \frac{PD_t}{TR_t}$$

$$S_t = \frac{PDS_t}{TRR_t}$$

or

$$\left\{ \begin{array}{l} PD : \text{public debt} \\ TR : \text{tax revenues} \end{array} \right.$$

$$\left\{ \begin{array}{l} PDS : \text{public debt service} \\ TRR : \text{remaining share of the tax revenues} \\ \quad \text{allocated to public debt service} \end{array} \right.$$

We would assume that $S < 1$ means that the country is solvent (the higher S^{11} is, more the country is solvent) and $S > 1$ denoted that the country is insolvent.

Table 4. Country solvency analysis (1991-2006)

Country	Annual average		
	PD/GDP	PD/TR	PDS/TRR
Albania	0.17	1.25	-0.19
Bosnia	0.31	1.55	-2.44
Serbia	0.41	1.77	-0.82

Sources: own calculations

Table 4 shows that all three countries meet the accession public debt criteria because their respective public debt is inferior to 60% of GDP. For instance, Albania has a debt to GDP of around 17% on average in 20 years, which grants it a comfortable public indebtedness position from default. However, if we consider the public debt to tax revenues ratio and the public debt service to tax revenues after payment of public expenditures ratios, all countries are likely to enter the vicious circle of sovereign default because they do not meet the solvency criteria defined above. Indeed, their PD/TR ratio is on average superior to 1, which means that they face severe financial stringencies and are likely to be unable to cover their public debt burden. Tax revenue shortages might come from various factors such as inefficient tax system, uncompetitive economy as well as inefficient allocation of public debt resources. For instance, even if the country attracts foreign direct investments, a weak absorption capacity of its productive sectors would offset the expected positive effects of such inflows. Moreover, given that the remaining tax revenues after payment of public expenditures is negative in the three

⁹ Eventually, we will use the gross disposable income when tax revenues are unavailable.

¹⁰ Total tax revenues could be used first to finance public operating and investment expenditures before public debt repayment

¹¹ $S = 1$ is not a sustainability threshold level because the use of public debt stock is more relevant for this purpose. Such a public debt threshold could be calculated analogously with an investment project profitability and a break-even point analyses.

countries, we would assume that they are insolvent because they do need other sources of financial backing to repay their debts.

In addition, it should be noticed that an analysis based on another decomposition of public debt servicing by currency would be interesting in order to take into consideration the role of the exchange rate and foreign international reserves in the solvency of a country. If public debt denominated in foreign currency grows faster than tax income, primary surplus and foreign reserves, the country is likely to be unable to meet its deadlines. The new solvency equation would be as follows:

$$S_t = \frac{PDSLM_t + (PDSFC_t - FER_t)}{TRR_t}$$

$$\left\{ \begin{array}{l} PDSLM : \text{public debt service in local money} \\ PDSFC : \text{public debt service in foreign currency} \\ FER : \text{foreign exchange reserves} \\ TRR : \text{tax revenues remaining after payment of public expenditures} \end{array} \right.$$

Data unavailability on an accurate currency decomposition of the public debt service in the Balkan potential candidate countries restrains us from conducting such analysis.

Public debt sustainability analysis

Public debt sustainability (Yilmaz A., 2007; Roubini N., 2001) constitutes an important factor that is likely to influence the stability of the financial system to which a country belongs. It is mutually reinforcing with country solvency. Public debt is sustainable if the country can contract new debts without exposing itself to the eventuality of being in the incapacity to repay (insolvency or default risk). This is partly due to the credibility and creditworthiness of the country as well as to the efficiency of public indebtedness. An efficiency¹² analysis of the public indebtedness consists of assessing its impacts on the past and future economic performances of the country.

We assume that public indebtedness is efficient if, on the one hand, it generates an economic growth rate greater than the positive variations of public debt servicing (which is a past performance analysis) and, on the other hand, the net present value of remaining and/or projected public debts is positive (which is a future performance analysis).

Past performance efficiency analysis

To analyze the elasticity of GDP to public debt, we would assume that if GDP growth rate is superior to public debt growth rate, public indebtedness is efficient. Reversely, public indebtedness is inefficient and thus unsustainable¹³.

Table 5. Sustainability analysis from public debt past efficiency

Annual average (%)	Growth rate		1US\$ PD Δ on GDP	1% PD Δ on GDP
	GDP	PD		
Albania	18.23	22.63	-4.82	-0.39
Bosnia	14.04	4.04	1.59	0.41
Serbia	-0.33	-2.05	-120.10	-46.01

Sources: own calculations

¹² We assume that public debt efficiency can be assessed by the national income it helps to generate. It reflects therefore the elasticity of GDP to public debt as well as profitability of public debt to be repaid.

¹³ We do not take into consideration in our calculations: arrears, new debts or debt forgiveness/cancellation.

Table 5 shows that the public debt of Albania is inefficient because if it increases by 1US\$, it entails a decrease of around 5% in GDP. In addition, if Albanian public debt increases by 1%, GDP falls by 0.4%. This may be explained by a faster growth of public debt, 23% on average per year for 1991-2006, relative to GDP with 18% growth rate for the same period. In contrast, public debt seems efficient in Bosnia because it impacts positively on GDP. An increase of 1% in public debt helps increase GDP by 0.4%. However, such performance is not really comparable to the other Balkan potential candidate countries because it concerns a shorter period (1999-2006). Reversely, public indebtedness is more inefficient in Serbia because if it increases by 1 US\$, it decreases GDP by around 120US\$.

To sum up, the past efficiency of public indebtedness in the Balkan potential candidate countries is questionable because it mainly affects negatively their economic performance. What about its future efficiency?

Future performance efficiency analysis

To analyze the future performance efficiency of public indebtedness, we can analogously use the profitability analysis of an investment project by using public debt-related terms in the equation. The traditional measures of debt sustainability are based on a similar method by considering the net present value (NPV) of the debt. The International Monetary Fund suggests, for example, the following indicators:

Table 6. Debt Burden Thresholds¹⁴

Policy	NPV of debt in percent of			Debt service in percent of	
	Exports	GDP	Revenue	Exports	Revenue
Weak Policy	100	30	200	15	25
Medium Policy	150	40	250	20	30
Strong Policy	200	50	300	25	35

Sources: *International Monetary Fund*

In line with the IMF, we propose the following sustainability formulation of public indebtedness with regards to its future economic efficiency.

$$NPV(PD_t) = \sum_{t=1}^n \left(\frac{Y(PD_t) - PDS_t}{(1-r)^t} \right) - PD_t$$

$$\left\{ \begin{array}{l} PD: \text{ public debt stock (} \square \text{ initial investment)} \\ Y(PD): \text{ share of GDP generated by public indebtedness (} \square \text{ earnings)} \\ PDS: \text{ public debt service (} \square \text{ expenses)} \\ r: \text{ average interest rate of public debt (} \square \text{ weighted average cost of capital)} \end{array} \right.$$

In our analysis, we would consider disbursements of total long term debts for future public debt and a GDP/PD elasticity for $Y(PD)$. Moreover, we will assume that if $NPV(PD) \geq 0$, public indebtedness is efficient and thus sustainable. In contrast, if $NPV(PD) < 0$, public debt is unsustainable.

¹⁴ Joint IMF-World Bank DSF-Debt Sustainability Framework for low-income countries.

Table 7. Sustainability analysis from public debt future efficiency

		Average NPV	Sustainability
Albania	-	97,387,849	Non sustainable
Bosnia	-	174,422,829	Non sustainable
Serbia	-	55,510,881	Non sustainable

Sources: own calculations

Table 7 shows that none of the three countries satisfies the sustainability criteria regarding their respective public debt future performance. The net present value of their future disbursements is negative, which means that their public indebtedness does not help in generating a sufficient return to face debt principal repayments and interest payments for 2007-2016.

In sum, no Balkan potential candidate countries meets the solvency and the sustainability criteria that might help to lessen the negative impacts of the public financial integration of the Balkan potential candidate countries in the European Union financial system, even though they satisfy the public debt accession criteria.

Conclusion

The financial integration of Albania, Bosnia and Serbia in the European Union financial system has improved significantly since 2001 with the effective use of the Euro as a single transaction currency among European Union member countries. Their public debt denominated in Euro almost levels up with the US\$ and to date, Balkan potential candidate countries are more financially integrated in the world financial system as far as public indebtedness is concerned. However, present trends seem to promote a deeper European integration.

The impacts of Balkan potential candidate countries integration in the stability of the European Union public financial system remain unclear. In this paper, we put forth an argument that the public debt accession criteria is an insufficient instrument for this purpose because it does not take into account two main factors that are likely to generate the instability of a financial system: country insolvency and public debt unsustainability. Our empirical studies show that even though Balkan potential candidate countries meet the public debt accession criteria, they are in the path of being unable to face their public debt repayments and are likely to default. They do not generate sufficient tax revenues and record a GDP growth rate smaller than public debt dynamics. Moreover, an increase, both in absolute and relative terms, in public debt affects GDP negatively. Finally, the net present value of their future public debt disbursements is negative, which intensifies the default risk that is more likely to shock-wave the European Union financial system.

Future research would analyze in more details the impact of the integration of potential applicant countries in the European Union financial system and define more appropriate country solvency and public debt sustainability thresholds.

References

- Alessina A. and ali. (1992), "Default risk", *Economic Policy*
- Baele L. and ali.(2004): "Measuring financial integration in the Euro area", *ECB Occasional Papers*, n° 14.
- Claessens S. (1988), "The optimal currency composition of external debt", development economics, *The World Bank*, WPS 14.
- Coricelli F. and Ercolani V. (2002), "Cyclical and structural deficits on the road to accession: fiscal rules for an enlarged European Union", Centre for Economic Policy Research (CEPR)- *Discussion Paper* n° 3672.

- Gali J. and Perotti R. (2003), "Fiscal policy and monetary integration in Europe", CREI, Universitat Pompeu Fabra and CEPR; European University Institute and CEPR.
- García-Herrero A. and Wooldridge P (2007), "Global and regional financial integration: progress in emerging markets", *Quarterly Review BIS*.
- Hausmann R. and Panizza U. (2003), "On the determinants of original sin: an empirical investigation", Regional and international implications of the financial instability in Latin America, *Journal of International Money and Finance*, Vol. 22, Issue 7, pp. 957-990.
- Leachman L. L. and Thorpe M. (1998), "Intertemporal solvency in the small open economy of Australia", *Economic Record*, Vol. 74, 1998.
- Masson P. (1998), "Contagion: Monsoonal effects, spillovers and jumps between multiple equilibria", *IMF Working Paper n° 98/142*.
- Roubini N. (2001), "Debt sustainability: How to assess whether a country is insolvent", Stern School of Business, New York University.
- Velandia A. (2002), "A risk quantification model for public debt management", *World Bank*.
- Yilmaz A. (2007), "Debt sustainability in emerging markets: A critical appraisal", *DESA Working Paper n° 61, ST/ESA/2007/DWP/61*.

The Importance of Required Reserves for Banks Liquidity Maintenance¹

Slavica Stevanović, Grozdana Belopavlović²

ABSTRACT - The basic principles of banking performance are principle of safety, of liquidity and of profitability. The application of these principles is obligatory for the banks in relation to their influence for stable and efficient banking performance. The primary and secondary banks' reserves serve for liquidity maintenance, as one of the conditions for successful bank performing. One of the main indicators of banks liquidity are compulsory reserves deposited at central bank. The reserve requirement rate are differential and determined by central bank in dependence of the bases on which they are calculated. The required reserve on banks deposit potential represents the important foothold of monetary politics with remarkable influence on financial flows through banks.

KEY WORDS: principles, liquidity, banks' required reserves, bank

Basic principles of banking performance

Concerning the legal person business activities, it must be distinguished that those activities are led by determined requirements and principles enabling the highest business results, stable performance and financial risk protection. The principles of correct performance, permanently present at economy activities subjects are profitability, safety, liquidity, over-indebt protection, flexibility and independence. Among the mentioned principles of banking performance three are the most significant, and respected by all over the banking world and without which the banking activities can not be possible. Those three factors are the principle of safety, of liquidity and of profitability. The mentioned principles characterize banking activities and oblige the bank to apply them in order to avoid insecure, non liquid and non rentable performance. Each deviation of the main principles could distract equilibrium and efficiency of banking sector, as well as the country economy efficiency. The bank management aims to find balance in relation to profitability, security and liquidity, which are *condition sine qua non* for realization of good performance and lower risk level.

The safety principle is characterized by the bank certainty that the business partners in contracted terms will realize the accorded responsibilities. In that sense it is realized the monitoring of credit capabilities, liquidity, cost-effectiveness, and credibility of banks business partners. Business relations are established with partners that in all senses respect the good businessman performance principle. The safety principle is particularly distinguished in customer selection and approved credit insurance. When mentioning the safety of banks creditors, the safety factors are bank profitability in function of primary safety and bank capital in the role of secondary creditors' safety. Deposit insurance contributes to the banking sector stability in Serbia giving the population the guaranty that the deposited resources are protected in banks, even in case that the National Bank of Serbia withdraw the license for work and adopt the decision on condition fulfillment for initiating the bankruptcy procedure over a bank.

The market economy, respects the liquidity principle as a key factor of standard performance. The essence of the liquidity principle is the legal person obligation to be capable in every moment to exe-

¹ The paper is a part of researches made for project "Joining Serbian Economy into European Union – planning and financing the regional and rural development and enterprise development policy", Register number 159004, financed by the Ministry of Science and Technological Development of the Republic of Serbia

² Slavica Stevanović, Grozdana Belopavlović, Institute of Economic Sciences, Belgrade

cute due payments to the creditors. Banks have to maintain permanently its liquidity, day liquidity included, what is the main sustainability precondition on financial market. Bank liquidity position could define the very balance structure depending on percentage of primary reserve liquidity as the most liquid asset position, the securities of various due terms, as well as the less liquid parts like credits and stable assets. However, on the bank liquidity position affects also the liabilities liquidity, where some positions are more liquid, which means that creditors can require the deposit or credit returning in short term, while some bank balance sheet are less liquid because of longer due terms. However, liquidity is related to off-balance sheet than can be activated and have repercussion on bank liquidity decreasing, likewise approved but not drawn on credit lines, given guaranties, etc. On static aspect, the liquidity is monitoring by assets, liabilities and off-balance sheet items analyses on certain date. A dynamic liquidity analysis is more adequate because it observes the dynamics of money inflow and outflow. The harmonization of money inflow and outflow in monitored period determines the liquidity position, while the liquidity deposit level is not of key importance.

Banks have a goal to maximize the shareholders assets value with acceptable risk level. The main goal positioned on this way requires new possibilities to increase income, business efficiency and more effective planning and control. The basic profitability measures are: Return on Assets, as indicator of management bank assets efficiency; and Return on Equity, as income measure that bank holders realize on assets invested in bank. In modern flows of banking activities development, the priority is given to the stability principle in relation to profitability principle. It is more useful to operate with stable and liquid performance with insured profit, than to create maximum possible profit on behalf of stability and liquidity.

Bank liquidity management

The main bank managers' tasks are liquidity, assets and capital adequacy management.³ In order to have enough cash to cover the liabilities towards its deponents, the bank has to maintain the liquidity providing enough liquid assets. The banks that have enough reserves surplus over the level of required reserves, the reserves out flow by deponents do not have to provoque the changes in balance state structure. The banks that do not have enough reserves are facing the problem of cash assets lack necessary for the settlement towards their deponents. The debt at other banks can cover the reserves lack, but in the same time it creates the liabilities volume increase based on received credits and expenditure increase on interest behalf. Cash assets lack, the Banks overcome by selling the securities from its portfolio, but it creates the bank's transaction cost increase. The most expensive way that bank assure the resources necessary for deposit out flow, is to decrease the placement in form of credits. Previously mentioned problems and expenditures created by its solving, are the reasons why the banks keep the deposit surplus, although the credits and securities provide the bank greater profit.

The demand for liquidity and the offer of liquid assets in determined moment are often unbalanced, which creates the deficit, or, liquid money surplus. For majority of banks the demand for liquidity is coming because of clients deposit retirement, credit requests by clients that bank desires to keep, repayment of previous obligations, business and tax expenses payment, cash dividends payment to shareholders. In order to fulfill the mentioned liquidity demand, the banks provide the liquid money from a number of potential sources. The most important one is banks clients' deposits. The other sources could be clients' debts repayment and selling securities from banks portfolio, ensuring the fresh means for satisfying new liquidity necessities. The means could be ensured by debiting in foreign countries, too.⁴ Regarding liquidity, the various demand and offer sources together define bank net liquidity position in sequence of time.

Commercial bank reserves serve for insurance of its liquidity or as an instrument of monetary and credit policy to regulate banks credit activities and quantity of circulating capital. The prerequisite for normal bank activities is liquidity maintenance, which comprises the capacity to settle claims on its

³ Mishkin S. F. (2006) *The Economics of Money, Banking, and Financial Markets*, pg. 208

⁴ Rose, P., Hudgins, S. (2005), *Banking Management and Financial Services*, pg. 348

due date. The liquidity maintenance is important bank performance requirement, comprising the capacity to settle due payments on its due term. The repayment of credits, taking of assets from own accounts opened at bank, or pay-off to customers on behalf of money retirement based on approved credit, payments to deponents on behalf of deposit retirement, are some of liabilities that bank has to settle on customers request. "The bank is liquid when, keeping necessary liquidity reserves, can without obstacles act it credit activities and pay all its due liabilities on time"⁵. The liquidity rate showing the level of deposit covering placement, and required reserve are quantitative indicators of liquidity impaction on financial power, state and excellence of bank performance.

Required reserves as banks liquidity reserves

Required reserve are deposit reserves that banks divide and are obliged to keep on its account at central bank. Together with cash and deposits at correspondent banks, the necessary reserves are primary bank liquidity reserves. Primary liquidity reserves are used in case the outflow money is bigger than inflow one. However, it is essential to define the optimal level of required reserve in order to avoid the creation of non used resources, which in case of placement would contribute to bank transactions profitability. Regarding required reserve the central bank has the responsibility to cover banks liquid necessities, in accordance with disposed reserves. The bank can decide to place its assets into short term securities issued by the state, central bank or great corporations. Being easily converted into cash, the mentioned short term securities are used as secondary liquidity reserves that fulfill bank liquid necessities.

The banks' required reserves have two main roles. The first one is of prudential characteristics, because through regulation of liquidity it assists to financial system stability, while the other one acts as the transmission instrument of monetary policy measures on economic activity and inflation, through regulating the credit offer. The economic theory the most often mentions two essential required reserves acting guidelines on economic activity and inflation, mainly by credit offer extension and foreign assets in-flow control. Concerning the credit channel theory, the required reserve affects on economic activity and banks' credit potential because the required reserve rate increase results in banks' credit offer decrease, and its consequence is the economic activity deceleration and, finally, inflation decrease. On the other side, the fact is that required reserves rate increase impacts on capital in-flow decrease, particularly on the one of speculative character.⁶

The changes of deposit percentage and other assets kept as required reserves could have the great influence on credit expansion in banks and other deposit institutions. The reserves increase requirement signifies that banks have to set aside more cash resources on every deposit. In the same time, it means the less credit banks' potential, or less disposed assets for approving the new credits. On the other side, the greater reserves requirement could affect the interest rate increase owing to decrease of cash assets volume on disposal for credit approval. The required reserves amount decline activates the cash assets liberation and now, the resources they can be invested in more profitable business activities. The reduction of required reserves setting aside enables the banks to increase their credit potential, and the consequence is the interest rates declination.

The essential goal of cash assets position management is to maintain the required reserves on stipulated level, with no reserves surplus, and as well as, without great reserves deficiency. The quantity of cash assets, which banks have to keep as required reserves, depends on each bank's deposits volume and composition. When the bank's amount of required deposit is defined, the next step is to compare this amount to the real daily average required reserves degree. In case that the real required reserves are greater than stipulated, the bank has the reserves surplus. In that situation the bank's management has to react quickly and invest the reserves surplus. Each reserves surplus extending over required reserves degree results as expenditure regarding the possibilities of income realization based on profit-

⁵ Đukić et al. (2004), Banking, pg. 259

⁶ www.ubs-asb.com/s/Bankarstvo/2008/14.htm

able bank's activities. If the defined amount of required reserves is greater than real required reserves amount on daily average bases, the bank has the reserves deficiency.

The level of required reserve is stipulated by the National Bank of Serbia in form of reserve requirement rate. In accordance with the Decision on Banks' Required Reserves at the National Bank of Serbia, there are prescribed different reserve requirement rate, depending on basis they are calculated on.

Table 1. Reserve requirement rate at NBS

	In use on:		
	1/2007	11/2007	10/2008
Rate on:			
Basis in dinars	10	10	10
Except:			
Term deposits over 1 month		5	5
Liabilities indexed by currency clause	45	45	45
Basis in foreign exchange			
Except:			
New foreign exchange savings	40	40	40
Subordinated capital	20	20	/
Leasing foreign exchange	100	100	/*
Credits from abroad	45	45	/

Source: National Bank of Serbia; authors own

* Reserve requirement on money leasing companies from abroad

Banks' required reserves are calculated on deposits liabilities in Serbian dinars, credits and securities, as well as on all other liabilities in dinars. On the other side, the required reserves are calculated on liabilities in foreign currency deposits, credits, securities and all other foreign money liabilities, including subordinated liabilities in foreign currency, and foreign currency resources received from abroad according to transactions that bank execute in name and on behalf of third person⁷. Required reserves accounting is realized on every 17th in month on the amount of average daily accounting state of assets in dinars and foreign currency for the previous month. The accounting period is from 18th to 17th in current month.

Required reserves in dinar are calculated on liabilities based on deposits in dinars, short term securities and other liabilities in dinars by 10% rate. The stipulation of necessary reserves lower rate level in relation to previous years (21% in 2004, 20%, and then 18% from 2005. to 2006, when the rate is decreased on 15%) was aiming to stimulate banks to collect accumulation sources in dinars. The required reserves rate on basis in dinars composed by liabilities in dinars based on deposits termed more than one month is decreased on 5%, in 2007.

On liabilities per foreign exchange deposits, short term securities the foreign exchange required reserves are calculated on 45% rate. The increase for 2% in relation to March 2006 and 7% in relation to the end of 2005 is aimed to delimitate the banks indebteding abroad. For deposits in dinars indexed by foreign currency clause, it is adopted the 45% rate of foreign exchange required reserves, because they are equalized, for foreign currency clause, as deposits in foreign money.

From April 2006, on inflow from abroad based on deposits and commercial banks credits it was applied the 60% foreign currency reserves rate, in case of two years repayment period. This National Bank of Serbia measure ought to contribute to deceleration of commercial banks credit activities based on abroad debits. By the new National Bank of Serbia Decision on Banks' Required Reserves from December 2006 and stipulated necessary reserves rate of 60% on short term credits, is withdrawn. The National Bank of Serbia cancelled the required reserves on banks credits from abroad, retroactive too, since October 1, 2008, while this rate till now was 45%. By taking the mentioned measures the banks will provide more circulating currency and better credit conditions.

⁷ Decision on Banks' Required Reserves Held at the National Bank of Serbia.

The step-by-step required reserves rate decreasing based on new foreign exchange savings⁸, measures will ultimately decrease the banks debts abroad and stimulate the credit activities based on domestic accumulation, through even more intensive foreign exchange savings collection. The required reserves rate on foreign exchange population deposits is 40% and keeps staying stable in 2008.

The Law on financial leasing, adopted by the National Bank of Serbia, stipulates the decree that obliges leasing companies to keep reserves on special bank account and calculate reserves on loans, other borrowing and supplementary payments from abroad, aiming to decrease the debit rate in foreign countries. From 2006, the required reserves on foreign exchange leasing assets was 100%, but the National Bank of Serbia, adopting new measures in October 2008, withdrew the required reserves on currency that leasing companies borrow from abroad. Also, the banks will be disburdened from the extraction of 20% required reserve on subordinated liabilities that was adopted since March 2006. The basic goal of these measures is to facilitate the refinancing abroad, as well as to assure the untroubled credit insurance for national companies' financing product activities.

The National Bank of Serbia changed the very structure of foreign exchange required reserves. Instead of previous dividing of 90% in Euro and 10% in dinars, from October 2008 the calculated necessary reserves in euros are 80% and 20% in dinars, providing better foreign currency bank liquidity.

The National Bank of Serbia statements quarterly demonstrates daily bank liquidity. On 30.06.2008 in the Republic of Serbia the total assets on giro - account was amounting 73.447.906 thousands dinar, while the calculated required reserves were 65.907.570 thousands dinar. As the indicators of liquidity were quoted credits for liquidity maintenance, and deposit of liquid assets surplus, at the National Bank of Serbia, which represent the permanent bank benefit. In the second quarter of 2008, the credit for liquidity no bank has used, in comparison to the first quarter of 2008 when the credit value for liquidity on behalf of securities deposit have amounted 950.000 thousand dinar.

Conclusion

The financial institutions survival and prosperity depends, among other, from public trust. The lack of trust can ruin the bank liquidity by unexpected deposit withdrawal by banks deponents. The liquidity maintenance is profitability prerequisite, but liquidity accomplishing presents the limit factor in expected profitability achieving.

The required reserve rate represents the important instrument of credit regulating, and bank liquidity regulating instrument. The change of required reserve rate influences on decrease, or extension of commercial banks credit potential, and on the other side, on creation of additional banks liquidity. The new measures of the National Bank of Serbia from October 2008 related to required reserves withdrawal on certain basis parts will disburden the banks, but hardly insure the same credit volume as before, owing to more expensive money factor in foreign countries.

References

- Đukić, Đ., Bjelica, V., Ristić, Ž. (2004) Banking, Faculty of Economics, Belgrade
- Katunarić, A. (1988) The Bank – the principles and practice of banking operation, Centre for Information and Publicity, Zagreb
- Koch W.T., MacDonald S.S. (2006) Bank management, 6th edition, Thomson Learning
- Mishkin S. F. (2006) The Economics of Money, Banking, and Financial Markets, Data status, Belgrade
- Palić M. and Tasić N. (2008) Stopa obavezne rezerve kao instrument monetarne politike, publication: Bankarstvo, number 7/8
- Rose, P., Hudgins, S. (2005) Bank Management and Financial Services, Data status, Belgrade
<http://www.nbs.yu>

⁸ New foreign exchange savings referred to saving partitions payed in after 30.06.2001.

Various Innovating Instruments of Financial Markets Recommended in Case of a Fall in the Underlying Asset Price

Vincent Šoltés, Michal Šoltés¹

ABSTRACT – Innovation of investing instruments has been one of the main characteristics of financial markets recently. As financial crisis resulted in significant decrease of stock as well as commodities markets, instruments which are profitable at price down of underlying assets became more popular. The aim of this contribution is to state some new investing certificates suitable at price down of underlying assets. These innovating instruments are listed and analysed according to the risk profile those with the highest risk through those with the less risk profile finishing with guaranteed products. This paper was prepared within the VEGA project No.1/0810/08 “The trends of the derivatives markets’ development in the Slovak republic in the context of the Slovak republic entry to the Euro zone.

KEY WORDS: investing instruments, certificates, underlying assets

Introduction

The US mortgage crisis followed by the financial crisis has already hit Europe as well because of globalised markets. Even if the bottom line has not been officially declared yet, the impact on the price movement, in stock markets in particular, has been disastrous. Take, for example, Germany’s DAX Index from December 2007 to October 2008. It slumped from 8035 to 4020 points, i.e. a dramatic 50% drop. Even more significant has been the index decline of recently joined EU member states. For instance, Romanian ROTX index nosedived over the same period from 21,000 to 4960 points, i.e. by more than 76% and CECE index from 3050 to 1200 points, i.e. by 60%. Russian RDX index declined substantially over the period mentioned above, from 2300 to 703 points, i.e. by nearly 70%.

Considering the fact that the above-mentioned crises will trigger a significant slowdown of economic growth, if not a recession, in fact all over the world, it might be said that the recent massive price slump has affected commodities as well. For instance, oil prices since hitting a record of \$147 a barrel have fallen back sharply to \$62 a barrel, i.e. by nearly 58%.

Although no one can predict with any certainty movements in financial markets, we can realistically expect increased market volatility, price fall or stagnation rather than rise.

The purpose of this paper is to state various innovating instruments of financial markets which are appropriate in case of price down or stagnation of underlying assets. These innovations will be listed with regard to risks involved.

Linear short certificates

Linear Short certificates track the underlying assets in an inverse manner. If the value of the underlying asset drops, the value of the Short certificate rises, or, conversely, their price falls when the underlying asset value rises. This increase or decrease is linear. Thus the leverage is -1 and there are no other limitations. Therefore, these products are considered to be an average risk investment.

These Linear Short certificates represented an ideal investment opportunity at the end of 2007 in particular as well as in May 2008.

¹ Vincent Šoltés, Michal Šoltés, Technical University of Košice, Faculty of Economics

Table 1 shows the outcome of the investment by means of Linear Short certificates on DAX, CECE and BRENT OIL underlying assets depending on the investment date whereas the resale date is 24 October 2008. The Short certificates were issued by an Austrian bank-Raiffeisen Centrobank.

Table 1 Linear Short Certificates

Certificate	Underlying Asset	Purchase Date	Sale Date	Total Return %	Return in % p.a.
AT0000A05644	DAX	15.5.2008	24.10.2008	62	141
AT0000A06QY8	CECE	15.5.2008	24.10.2008	98	220
AT0000A07SD6	BRENT OIL	15.7.2008	24.10.2008	165	594

Source: Own calculations referring to www.rcb.at

Table 1 indicates that there existed (and still exist) investment instruments by means of which due to the panicky share sell-off, substantial profits might have been earned from relatively safe underlying assets at relatively low risk. However, taking into account a significant decline of given assets, profit opportunities by purchasing the above-mentioned Linear Short certificates are considerably limited even disputable.

Short Turbo certificates

The so-called Short Turbo certificates are an ideal choice for risk-hungry investors and those who are convinced that the value of the underlying asset will go down. These instruments are, however, characterised by a very high risk and are equipped with a financial value S_{STRIKE} called strike. In case of Short Turbo certificates, it is always above S value of the underlying asset. If p denotes subscription ratio and N_E denotes issuer costs, then the theoretical value of the Short Turbo certificate can be determined according to (see [3])

$$k_{ST} = (S_{STRIKE} - S)p + N_E \quad (1)$$

It is clear that the closer the underlying asset value gets to the strike value, the cheaper the certificate is. On the other hand it is riskier because once the underlying asset value reaches the strike, certificate trading is over and the investor loses his entire investment. Sometimes there is a barrier B below the strike value which if reached, trading is over. The investor gets just a small part of the amount invested.

Table 2 indicates the outcome of the investment by means of Short Turbo certificates on DAX, CECE, RDX and BRENT CRUDE OIL underlying assets depending on the investment date whereas the sale date is again 24 October 2008. As in the previous case, these certificates were issued by Raiffeisen Centrobank.

Table 2.Short Turbo Certificates

Certificate	Underlying	Strike	Barrier	Purchase Date	Sale Date	Total Return %	Return in % p.a.
AT0000A07KD3	DAX	8350	8250	15.5.2008	24.10.2008	233	441
AT0000A07KD3	DAX	8350	8250	22.10.2008	24.10.2008	700	700
AT0000A07MN8	CECE	3450	3350	15.5.2008	24.10.2008	193	366
AT0000A07MN8	CECE	3450	3350	5.11.2007	24.10.2008	459	473
AT0000A084D0	RDX	2700	2625	15.5.2008	24.10.2008	280	531
AT0000A084D0	RDX	2700	2625	13.12.2007	24.10.2008	583	699
AT0000A0AT69	BRENT CRUDE OIL	147.79	145.29	27.8.2008	24.10.2008	231	1386
AT0000A0AT36	BRENT CRUDE OIL	165.27	162.77	27.8.2008	24.10.2008	159	896

Source: Own calculations referring to www.rcb.at

As can be seen from Table 1 and 2, profits earned by means of Short Turbo certificates are considerably high in comparison with Linear Short certificates. On the other hand, one must bear in mind that DAX index was at 7820 points on 22 October 2007, i.e. 430 points from the barrier. Thus, if it had kept rising, and if it had reached the 8250-point barrier, the investor would have lost almost the entire amount of investment. That was extremely risky investment.

Discount Classic certificates

The so-called discount certificates are fairly popular with investors. There are several kinds of discount certificates but what they all have in common is that they are sold at a discount. The simplest are the so-called Discount Classic certificates which will be dealt with in the next section.

In return for this cheaper investment, the potential gain is limited to a predefined level C called a cap. If we multiply this value C by a subscription ratio p , we get the maximum rate that the issuer pays to the investor at maturity of the Discount certificate, but only if the value of the underlying asset S is at least C on its maturity date. Otherwise, the value pS will be paid out. The function of profits earned from Discount classic is defined as (see [3])

$$P(S) = \begin{cases} n(pS - k_0) & \text{if } S < C \\ n(pC - k_0) & \text{if } S \geq C, \end{cases} \quad (2)$$

whereas k_0 is the purchase rate.

If the investor expects the value of the underlying asset to be lower (higher) on its maturity date, he chooses a Discount Classic certificate with the cap being lower (higher) than the value of the underlying asset S_0 . If he expects the value of the underlying asset to remain unchanged, he goes for the certificate with the cap equal to the value of the underlying asset. The maximum return at $p \cdot C - k_0$ level will be earned if the value of the underlying is at least C on its maturity date.

When considering investment in Discount Classic certificates, one should calculate the maximum possible return as well as the amount by which the value of the underlying asset must rise (eventually even fall) by the maturity date to get the maximum return. These parameters can be calculated according to

$$P_{max} = \left(\frac{C \cdot p}{k_0} - 1 \right) \cdot 100\%, \quad (3)$$

$$OC = \left(\frac{C}{S_0} - 1 \right) \cdot 100\%. \quad (4)$$

When choosing a Discount Classic certificate on a given underlying asset, the following decisive factors must be taken into account: the expected value of the underlying asset at certificate maturity, maximum return, cap distance and investor's attitude to risk.

Table 3 shows Discount Classic certificates issued by Commerzbank on the DAX underlying asset with maturity on 15 December 2010 whereas the rate k_0 is of 31 October 2008. The value of DAX index by the end of this trading day was $S_0=5057$ points. By means of the above relations (3) and (4), we have calculated the values P_{max} and OC for different certificates varying according to the cap value. Subscription ratio $p=0.01$.

Table 3. Discount Classic certificates on DAX with maturity on 15.12.2010

Certificate	Cap C	Rate 31.10.2008 k_0	Maximum yield P_{\max}	Cap Dis-tance OC	Maximum yield p.a.
DE000CB2261	2000	17.61	13.57	-60.45	6.38
DE000CB2262	2500	21.55	16.00	-50.56	7.53
DE000CB2263	3000	25.26	18.76	-40.67	8.83
DE000CB2264	3500	28,26	21.86	-30.79	10.28
DE000CB2265	4000	31.93	25.53	-20.90	12.01
DE000CB2266	4500	34.88	29.01	-11.01	13.65
DE000CB2267	5000	37.53	33.22	-1.13	15.63
DE000CB2130	5500	39.91	37.81	+8.76	17.79
DE000CB2131	6000	42.00	42.85	+18.64	20.16
DE000CB2132	6500	43.79	48.43	+28.53	22.79
DE000CB2133	7000	45.22	54.79	+38.42	25.78
DE0004BLH	7500	46.37	61.74	+48.31	29.05
DE0004BLJ	8000	47.26	69.27	+58.19	32.59
DE0004BLK	8500	48.03	76.97	+68.08	36.22
DE0004BLL	9000	48.43	85.83	+77.97	40.39
DE0004HGM	9500	48.93	94.15	+87.85	44.30
DE0004HGN	10,000	49.05	103.87	+97.74	48.88
DE0005HXM	10,400	50.29	106.80	+105.65	50.26

Source: Own calculations referring to www.zertifikate.commerzbank.de

Let us suppose that the investor wants to invest EUR10,000.

If he expects a recession to last for at least two years and the share index to reach around 3000 points by 15 December 2010, then he will buy 396 DE000CB2263 certificates with the cap being 3000 at the rate of 25.26. The function of profits earned from this investment is:

$$P_1(S) = \begin{cases} 396(0.01 \cdot S - 25.26) & \text{ak } S < 3000 \\ 396(0.01 \cdot 3000 - 25.26) = 1877.04 & \text{ak } S \geq 3000. \end{cases}$$

Should the value of DAX index reach at least 3000 points on 15 December 2010, the investor will get a return of 18.76%, i.e. 8.83% p.a. Such investment poses just a slight risk as the value of DAX index may fall by approx. 40% and the investor will still receive the maximum return.

If the investor expects a recession to last but the value of DAX index is around 5000 points on 15 December 2010, he will then buy 267 DE000CB2267 certificates with the cap being 5000 for 37.53 per piece, i.e. EUR10,020.51.

The function of profits earned from this investment is

$$P_2(S) = \begin{cases} 267(0.01 \cdot S - 37.53) & \text{ak } S < 5000 \\ 267(0.01 \cdot 5000 - 37.53) = 3329.49 & \text{ak } S \geq 5000. \end{cases}$$

Provided the index actually hits at least 5000 points on 15 Dec 2010, the investor will achieve a return of 33.22%, i.e. 15.61% p.a.; and all this, in spite of the fact that the value of index will actually be at its current level. However, if the index drops and its value is for instance 3000 points, the investor will suffer a loss of 20% on his investment.

If the investor assumes that DAX hits approx.8000 points on 15 December 2010, he will buy 210 DE000CB4BLJ certificates with the cap being 8000 for 47.26. The function of profits in this case is

$$P_3(S) = \begin{cases} 210(0.01 \cdot S - 47.26) & \text{ak } S < 8000 \\ 210(0.01 \cdot 8000 - 47.26) = 6875.4 & \text{ak } S \geq 8000. \end{cases}$$

This investment is considerably riskier since in order to achieve the maximum return of 69.27%, the value of DAX index must rise by 15 December 2010 by more than 58% (approx. to the level the index reached a year ago). Provided that the index value remained at its current level, the investor would suffer a relatively small loss of nearly 6%. However, if the index fell to 3000 points, loss would be more than 36%.

Let us create a portfolio which will consist of 132 certificates with the cap being 3000, 89 certificates with the cap being 5000 and 70 certificates with the cap being 8000 (we have invested approx. one third in each certificate). Thus, the total amount invested is EUR9982.69.

Then the function of profits earned from this investment is

$$P_4(S) = \begin{cases} 2.91 \cdot S - 9982.69 & \text{if } S < 3000 \\ 1.59 \cdot S - 6022.69 & \text{if } 3000 \leq S < 5000 \\ 0.70 \cdot S - 1572.69 & \text{if } 5000 \leq S < 8000 \\ 4027.31 & \text{if } S \geq 8000. \end{cases}$$

Table 4 shows profit and loss values generated by the above-mentioned investments at the presupposed values of DAX index on 15 Dec.2010.

Table 4. Investment outcomes

DAX value on 15.12.2010	Profit or loss in EUR for particular investments			
	P ₁ (S)	P ₂ (S)	P ₃ (S)	P ₄ (S)
3000	+1877.04	-2010.51	-3624.60	-1252.69
3753	+1877.04	0	-2043.30	-55.42
3788	+1877.04	+93.45	-1969.8	+0.23
4000	+1877.04	+659.49	-1524.60	+337.31
4726	+1877.04	+2597.91	0	+1491.65
5000	+1877.04	+3329.40	+575.4	+1927.31
6000	+1877.04	+3329.40	+2675.4	+2627.31
7000	+1877.04	+3329.40	+4775.4	+3327.31
8000	+1877.04	+3329.40	+6875.4	+4027.31
more than 8000	+1877.04	+3329.40	+6875.4	+4027.31

Source: *Own calculations*

Table 4 indicates that by diversifying we have set up a portfolio which is, out of four considered investments, the second least risky in case of a significant fall, the second best performing in case of stagnation and the second best performing in case of substantial rise of DAX index at maturity.

Table 3 explains why discount certificates are that popular with investors. As they are issued with the cap value ranging from 2000 to 10,400 points, each investor either the most conservative or the most aggressive can find a discount certificate for his, in this case, approximately two-year investment.

Provided the investor is considering a short-term investment, let's say approx. half a year, Discount Classic certificates are again the right choice for him.

Table 5 shows a set of Discount Classic certificates issued by Commerzbank on the underlying asset DAX but the maturity date is 16 April 2009.

Table 5. Discount Classic certificates on DAX with maturity 16.4.2009

Certificate	Cap C	Rate 31.10.2008 k_0	Maximum Yield P_{\max}	Cap Dis- tance OC	Maximum Yield p.a.
DE000CB17PT	2000	19.44	2.88	-60.45	6.28
DE000CB17PY	2500	24.02	4.08	50.56	8.91
DE000CB17QD	3000	28.43	5.52	-40.67	12.05
DE000CB17QJ	3500	32.66	7.16	-30.78	15.64
DE000CB17QD	4000	36.56	9.41	-20.90	20.54
DE000CB17QU	4500	40.12	12.16	-11.01	26.55
DE000CB9TOC	5000	43.25	15.60	-1.13	36.07
DE000CB9EGA	5500	45.81	20.06	+8.76	43.80
DE000CB9EGF	6000	47.72	25.73	+18.65	56.18
DE000CB9EGL	6500	48.88	32.98	+28.53	72.00
DE000CB9EGR	7000	49.55	41.27	+38.42	90.11
DE000CB9EGU	7300	49.77	46.67	+44.35	101.90
DE000CB9EGW	7500	49.87	50.39	+48.31	110.02
DE000CB9EHB	8000	50.03	59.90	+58.19	130.79

Source: Own calculations referring to www.zertifikate.commerzbanke.de

Supposing that DAX is from 3000 to 7000 points on 16 Apr 2009, we could then create a portfolio by purchasing, e.g. 117 certificates with the cap being 3000, 77 certificates with the cap being 5000 and 67 certificates with the cap being 7000 (we have invested approx. one third of the total amount invested 9976.41 EUR in each certificate).

Then the function of profits earned from the total amount invested is

$$P_5(S) = \begin{cases} 2.61 \cdot S - 9976.41 & \text{if } S < 3000 \\ 1.44 \cdot S - 6466.41 & \text{if } 3000 \leq S < 5000 \\ 0.67 \cdot S - 2616.41 & \text{if } 5000 \leq S < 7000 \\ 2073.59 & \text{if } S \geq 7000. \end{cases}$$

Table 6 shows profit (loss) values of the created portfolio at the presupposed values of DAX index at maturity.

Table 6. Profits from the portfolio at maturity of certificates

DAX value	Profit in EUR	Return in %	Return in % p.a.
3000	-2146.41	-21.51	-48.97
3500	-1426.41	-14.29	-31.21
4000	-706.41	-7.08	-15.46
4500	+13.59	+0.13	+0.29
5000	733.59	+7.35	16.05
5500	1068.59	+10.71	23.38
6000	1403.59	+14.07	30.72
6500	1738.59	+17.42	38.05
7000	2073.59	+20.78	45.38
7500	2073.59	+20.78	45.38

Source: Own calculations

Conclusion

This paper deals with various innovating instruments of financial markets which are profitable just when the value of the underlying asset falls (Linear Short certificates, Short Turbo certificates). Additionally, Discount Classic certificates are analysed. Regarding a wide spread of the cap value, they actually are always a wise investment whatever the expected scenario of the underlying asset price movement is.

References

- Svoboda, M. (2005) Jak ovládnout finanční trhy, CP Books. Brno, ISBN 80-251-0763-9.
- Svoboda, M. (2008) Zertifikate Inteligentní, roč. 7, č. 19, ISSN 1213-8622.
- Šoltés, M., Šoltés, V. (2008) Investičné certifikáty vhodné pri predpokladanom poklese ceny podkladového aktíva. Finančný sprostredkovateľ a poradca, č. 1, s. 19-21, ISBN 1337-5938.
- Šoltés, M., Šoltés, V. (2007) Analýza garantovaných a airbag certifikátov. Biatec, roč. 15, č. 1, s. 24-25, ISSN 1335-0900.

Integration of Financial System of Republic Serbia into Financial System of EU- Banking: Trends and Challenges ¹

Nataša Tanjević²

***ABSTRACT** – This work contains a brief assessment of financial sector in Serbia, (banking as dominant one) including implications of global crisis and both regulatory and institutional scope which is in the process of harmonization with EU regulations.*

***KEY WORDS:** integration, financial system, banking*

Introduction

World economic crisis which is getting bigger every day provides a special insight into entire social and political reality of Serbia, and especially in financial sector which was the first under stroke – and at the same time this sector makes capillary system of still, not enough developed domestic economy. Complexity of domestic problems almost makes impossible for any kind of narrow analysis within one economic sphere to be performed, but it focuses on following a complete process of macro and micro factors that will determine the position of our country in the final instance – standard of living. Of course, apart from domestic people, society in wider sense, business community as well looks into future, hoping for positive changes of business conditions. It is not at all easy task of local reforms in many areas, and it is even made more difficult by global crisis which implies macroeconomic instability without any indication about its duration.

World crisis and Serbia

Crisis began in the middle of 2007 when it was determined that huge amount of unrecoverable claims that had been approved by American banks to second class subprime mortgage loans.

Using the securing technique the banks have grouped these claims into pools and based on that and through independent go-betweens issued easily marketable securities. In this way they have transferred these claims from their own balance sheet to off balance sheet, and thanks to expansion of new investment and hedging instruments they have dispersed risk to numerous interested investors. At the same time, due to non existence of known history of used hedging instruments makes more difficult estimation of their risk and price (the moment when quality of claims that is behind those instruments is brought into question.) Seeing how danger appears and that unrecoverable secondary claims will return risk into banks' balance sheet, general crisis of trust arose among participants in financial market and solvency deterioration of entire financial system. Timely identification of risk originate claims is made more difficult, and apparent dispersion of risk onto numerous participants on the market is provided. Due to enormous exposure of European banks towards market of these securities, crisis soon moved to Europe, in the first place to Germany and United Kingdom. It is said enough about proportion of crisis by largely used institutions of last lender resort, it presents action of saving the banks with crisis by central banks. As inevitable consequence followed mistrust among financial institutions

¹ The paper is a part of researches made for project “Joining Serbian Economy into European Union – planning and financing the regional and rural development and enterprise development policy”, Register number 159004, financed by the Ministry of Science and Technological Development of the Republic of Serbia

² Nataša Tanjević, The College of Tourism, Belgrade

and increasing of interest rates Euribor and Libor. It is pointless to say about all consequences for banking sector and economic growth (above all USA, Western Europe and Japan). While the most developed countries of the world consider ways for functioning of global economy in the future and possibility of establishing global regulator (defined as International Monetary Fond), Serbia is trying to preserve its financial system networked in her transitional structure.

Already mentioned crisis, in several ways has influenced current state on Serbian financial market. Firstly, interest rates for all kinds of indebtedness, increased – taking unfavorable loans abroad reflects on increase of interest rates in Serbia itself, while weight of indebtedness is transferred to final users of loans- economy and residents. On the other hand, effect of the world stocks indexes crash reflected on Serbian stock. Investors who quickly sold shares of Serbian companies for dinars, by selling shares bought more quantity of foreign currency and thus caused sudden fall of domestic currency. Likewise, consequences on volume and time money indebtedness of legal entities from Serbia are inevitable, both for new indebtedness as well as for roll over of already founded loan lines. Apart from this, parallel with increasing pressure of inflation, tendency of slowing the growth of GDP and increasing deficit amount of balance of current transactions. Political instability slowed down foreign direct investment and increased indebtedness abroad.

Characteristics of financial system

Financial system of Serbia is still bankcentric having in mind that detention of speedy growth from previous period is more than obvious, due to powerful loan expansion. This expansion has influenced operational development (increase in number of employees and organizational units), followed by recapitalization sector and growth of its deposit base. Except all these things, financial system has been characterized by improved performance of non banking financial institutions. Nevertheless, non banking institutions had relatively low share in financial system of Serbia. (under supervision of the National bank of Serbia).

Basic indicators of financial system development (in dinars, in %)				
	2007.	Index³	2006.	Index
Number of financial institutions	79	113	70	96
Banks	35	95	37	93
Insurance companies	20	118	17	89
Leasing companies	17	113	15	107
Management agencies Voluntary pension Fund	7	700	1	-
Balance amount, billion RSD	1.732	134	1.293	148
Balance /BDP	69,6%	114	60,8%	122
Balance sum per capita	231.964	133	173.772	148
Total credits, billion RSD	858	149	577	135
Basic indicators of financial system development (in dinars, in %)				
Total deposits, billion RSD	960	144	666	137
Total insurance premium billion RSD	45	118	38	110
Financial leasing debts, billion RSD	76	131	58	123
Property Voluntary pension fund, billion Rsd	3	1500	0,2	-
Concentration , HH index				
Banking sector	578	94	614	92
Insurance sector	1523	82	1.857	103
Financial leasing sector	1.505	90	1.671	90
Sector Voluntary pension fund	3.309	33	10.000	-
Number of employee	40.617	112	35.356	109
Banking sector	30.246	108	28.103	109
Insurance Sector	9.697	123	7.876	108
Financial leasing sector	478	123	388	118
Sector Voluntary pension Fund	196	270	73	-

³ Index column marks the degree of change in relation to previous year in percentage

Herfindahl – Hirschman’s index (HH index) presents sum of square share specific quantity (for example: balance sheet sum, deposit, loan) of all market participants in the sector. Unless value of calculated index is less than 1.000, it is considered that on the market is not present concentration, if value index is between 1.000 and 1.800 on the market is expressed "reasonable concentration", and if value of HH is above 1.800, it is considered that exist „high concentration“.

Source: the National bank of Serbia

It is general estimation that due to well capitalization of banking sector and its expressed liquidity that banking sector was risk resistant. However, intensive loan expansion towards residents, most of all, as long- term currency indexed loans with variable interest rate indirectly exposed banks to loan risk. Thus, stability risks of this sector are concentrated on loan activity directed to residents. Therefore, it is obvious that banks in the following period will emphasize liquidity maintenance and focus on deposit activity.

Regulatory scope- state and other problems

Current law on banks instituted after many changes and amendments in the period 1993-2005 (six times) is complied with international standards and directives of EU, including provisions of Basel II. The majority of banks on our market are banks with main office in EU that have to work in accordance with Basel II. It should be emphasized that rules of this act have to be implemented in our legislation in processes of admission in the EU. (for example, in case of Croatia this document became binding during 2008, because of expected admission in 2009). In Subordinate legislation regulations established by the National bank of Serbia in more details are regulated the most important legal constitutions from area classification of bank balance sheet assets and off balance sheet items, capital adequacy , risk management,(including closer defining compliance risk of banking business), giving preliminary approval for founding banks as well as accordance in processes of acquiring and performing control by the National bank of Serbia over other banks, external bank audit and control of banking group on consolidated base. Likewise, in order to remove risks which can appear as consequence of bank’s coordination lack with decisions by which is regulated money laundry prevention as well as prevention of financing terrorism, procedure “ know your client” is obligatory for the banks.

Based on Law on banks regulator established following decisions:

1. Decision on capital adequacy of banks “RS Official Gazette” No 57/2006, 116/2006, 56/2007.
2. Decision on the classification of bank balance sheet assets and off balance sheet items, “RS Official Gazette” No 57/2006, 116/2006
3. Decision on Risk Management by banks “RS Official Gazette” No 57/2006, 86/2007.
4. Decision on external bank audit, “RS Official Gazette” No 41/2007
5. Decision on terms and conditions of identification, monitoring and management of bank compliance risk, “RS Official Gazette” No 86/2007, 89/2007
6. Decision on minimum contents of the “know your client” procedure “RS Official Gazette” No 57/2006.
7. Decision on the uniform manner of calculating and disclosing the effective interest rate on loans and deposits, “RS Official Gazette” No 57/2006.
8. Decision on implementing the provision of the law and banks relating to granting of a provisional permit and subsequent issuing of a full operating license to a bank as well as on implementing specific provisions relating to granting approvals of the National Bank of Serbia, “RS Official Gazette” No 51/2006, 129/2007.
9. Decision on detailed conditions and manner of conducting bank supervision by the National bank of Serbia, “RS Official Gazette” No 51/2006.
10. Decision on implementing provisions of the law on banks relating to consolidated supervision of a banking group, “RS Official Gazette” No 86/2007.
11. Decision on terms of granting approval to banks to act as insurance agents, “RS Official Gazette” No 57/2006.

12. Decision on terms and conditions of granting approval to banks for setting up or acquisition of subordinated companies, "RS Official Gazette" No 60/2007.
13. Decision on detailed conditions and manner in clients complaints handling, "RS Official Gazette" No 114/2006.

Decisions which came into force on 1. July 2008 are the following:

1. Decision on the classification of bank balance sheet assets and off balance sheet items, "RS Official Gazette" No 129/2007
2. Decision on Risk Management by banks "RS Official Gazette" No 129/2007
3. Decision on liquidity risk management, "RS Official Gazette" No 129/2007
4. Decision on capital adequacy of banks "RS Official Gazette" No 129/2007

Other relevant laws:

Apart from Law on banks, other relevant laws in banking sector are:

- Law on the National bank of Serbia, "RS Official Gazette" No 72/2003, 55/2004.
- Company Law, "RS Official Gazette" No 125/2004
- Basic direction of change of this law will be complied with Securities Market Law and other financial instruments.
- Law on general administrative procedure "RS Official Gazette" No 33/97 and 31/2001
- Law on payment operations ("RS Official Gazette" No 3/2002, 5/2003 and "RS Official Gazette" No 43/2004 and 62/2006)
- Foreign Exchange operations Act, "RS Official Gazette" No 62/2006 – by this decision basically it is allowed purchase of debtor's securities. However, sublegal acts which regulate payments on this base are insufficient and unfinished, so the role of banks as holders of payment operations with foreign countries and intermediary for trading with Securities is unclearly defined as well as reporting obligation of the National bank of Serbia.
- Securities Market Law, "RS Official Gazette" No 47/2006 – main lack of this act is incompleteness of rules for appliance of first public bidding Initial public offer. With regard to this, new scheme contains above other things : possibility for investors to enter and pay newly named and-or already existing securities, through public bidding; new definitions of Initial public offer in accordance with EU directives; issuer obligation to prepare leaflet for share leasing in such way that leaflet comprises of existing and newly issued securities; preliminary notification as substitute for preliminary leaflet. Beside this, draft of changes complies Commission status for Securities with its supervision measures with EU directives International organizations of securities commissions standards, deletes obligation of receiving approval from the National bank of Serbia for trading with foreign legal entity Securities and makes possible "networking" between shares seller and purchaser.

Regarding Securities market it is necessary to mention that it is being late with tax deduction in this area, which would certainly have a great influence on improving investment climate (reducing or canceling capital-gains tax, and tax on transfer of ownership of Securities).

It will certainly represent a challenge for banks (normative, organizational and financial), so far for Serbia nonobligatory (The Markets in Financial Instruments Directive – MIFID appliance of documents accepted by the European Parliament and Council by which united market and regulatory establishment for institutional services, for 30 countries of European economic area. Main areas regulated by Directive are: authorities, license regulation and validity.

Clients categorization; fulfillment of clients' orders; transparency before and after trade; the best handling etc.

Aim of this regulation is summed up- better protection of clients, transparency of trading with Securities, protection against manipulation on the market and abuse of privileged information. (this regulation deserves a special analysis)

- Bank and Insurance Company Bankruptcy and Liquidation Law, "RS Official Gazette" No 61/2005

- Deposit Insurance Law, "RS Official Gazette" No 61/2005
- Deposit insurance Agency Law, "RS Official Gazette" No 61/2005.
- The Law Against Money Laundering, "RS Official Gazette" No 107/2005 and 117/2005

Current solutions are not completely complied with relevant regulations of EU (so called Third Anti Money Laundering Directive). Beside that, appliance of this law and sublegal acts instituted on its base showed certain disadvantages of these regulations that have caused for the banks many difficulties due to insufficient coordination of relevant state entities. Draft of the new Law Against Money Laundering, and Terrorism Financing follows European solutions for already mentioned directive and above all through adopting new items (such as - "beneficial owner") processing of certain institutes of comparative law (trust), giving instructions for dealing with entities that do not have a form of economic enterprise, institutionalization of approach based on risk (risk based approach), higher level of integration of financial institutions and financial information services, etc.

- Foreign Trade Law, "RS Official Gazette" No 101/2005.
- Accounting and Auditing Law, "RS Official Gazette" No 46/2006
- Law on administrative disputes("SRJ Official Gazette, No 46/96)

Law on banks, based on its sublegal acts is partially complied with following legal acts of European Union: 77/780/EEC, 83/349/EEC, 87/62/EEC, 89/299/EEC, 89/647/EEC, 91/308/EEC, 86/635/EEC, 93/6/EEC, 92/121/EEC, 92/30/EEC, 95/26/EC, 98/33/EC, 2000/12/EC, 1606/2002/EC и 2086/2004/EC 2004/69/EC, 2006/48/EC, 2006/49/EC, 2006/43/EC, 1983/349/EC, 1978/660/EC, 1968/151/EC, 2005/60/EC, 2003/51/EC.

Based on Law on banks the following decisions were made:

- Decision on Risk Management by banks "RS Official Gazette" No 129/2007, Decision on capital adequacy of banks "RS Official Gazette" No 129/2007, Decision on implementing provisions of the law on banks relating to consolidated supervision of a banking group, "RS Official Gazette" No 129/2007. And Decision on liquidity risk management, "RS Official Gazette" No 129/2007 are partially complied with directives: 87/62/EEC, 2006/48/EC, 2006/49/EC, 98/33/EC, 2004/69/EC, 86/635/EEC, 83/349/EEC
- Decision on the classification of bank balance sheet assets and off balance sheet items, (new) partially complied with Directives 2006/48/EC, 1606/2002/EC and 2086/2004/EC. Decision on external bank audit, partially complied with Directives 2006/43/EC, 1983/349/EC, 1978/660/EC, 1968/151/EC, 1986/635/EC. Decision on minimum contents of the "know your client" procedure, partially complied with Directives 91/308/EEC and 2005/60/EC. - Decision on the uniform manner of calculating and disclosing the effective interest rate on loans and deposits ("RS Official Gazette" No 57/2006) partially complied with Directives 87/102/EEC and (90/88/EEC, 98/7/EC - amending 87/102/EEC).
- Decision on external bank audit, partially complied with Directives: 2006/43/EC, 2003/51/EC, 86/635/EEC, 83/349/EEC and 78/660/EEC, a Decision on detailed conditions and manner of conducting bank supervision by the National bank of Serbia partially complied with Directives 2000/12/EC and 2006/48/EC.

Institutional frame of banking system

The National bank of Serbia is authorized for enforcement of the Law on banks and institution of sublegal acts based on Law on banks. By the Law on the National bank of Serbia, ("RS Official Gazette" No 72/2003, 55/2004 and 85/2005) position, organization, authorities and functions of the National bank of Serbia are established as well as relation between the National bank of Serbia and other institutions of Republic Serbia, international organizations and other institutions. Independence of the National bank of Serbia in fulfillment of its functions is foreseen in the Constitution of Republic Serbia, and by the Law on the National bank of Serbia it is regulated that the National bank of Serbia is independent and autonomous in its work.

Basic aim of the National bank of Serbia is achieving and maintaining of price stability and maintenance of financial stability as well. The National bank of Serbia, among other things, issues work permissions and full operating license to the other banks, insurance companies, pension funds, leasing companies and controls their work.

The National bank of Serbia cooperates with foreign and domestic regulatory entities in order to perform and improve its control functions. In the process of supervision the National bank of Serbia, beside institutions in Republic of Serbia Cooperates with institutions in other countries which supervise, and the way of mutual cooperation is defined by an agreement between the National bank of Serbia and specific supervising institution. The National bank of Serbia is in process of signing memorandum about cooperation (Memorandum of Understanding) with supervising institutions of Belgium, Russia, France, Macedonia, Austria and Germany, while memorandums are already signed with the Central bank of Cypress, the bank of Greece, the Central bank of Montenegro, the bank of Slovenia, the Central bank of Bosnia and Herzegovina, the bank of Italy and Hungarian supervisory institution.

The National bank of Serbia has also signed two multilateral agreements between institutions which perform supervision in Eastern Europe.

Trends and challenges

Having in mind already mentioned, it is completely acceptable for short- term priorities⁴ are based on further development of regulatory scope of supervision of banking business, in order to adequately manage risks in the financial sector. Realization of this aim requires constant following of bank's work, as well as development of over limited cooperation based on supervision by signing the Memorandum about cooperation with authorized institutions of other countries. Moreover, one of priorities of the National bank of Serbia in the following period is strengthening of institutional capacities and improving capabilities of human resources.

In accordance with strategy of introduction of Basel II standards, which are applied in relevant directives (2006/48EC and 2006/49/EC), the National bank of Serbia plans to change the already existing sublegal regulations. Till the end of 2009, it is expected institution of new decisions about risk management, managing the bank's liquidity risk, disclosing, market risks, operational risks , high exposure, techniques of lessening loan risk, standard approach, external loan rating agencies (ECAIs), IRB approach, securing². According to the strategy, process of implementation of Basel II standards should be finished till the end of 2011. Introduction of additional capital requirements for market risks as well as other changes, regarding either capital calculation, or risk items, certainly will influence on objectification of capital indicators.

In the following three years privatization of remaining banks which are still owned by the Republic of Serbia is foreseen, meaning that in the end one bank will stay as majority ownership of state. In addition to this, in the next two years selling minority packages of shares which are owned by Republic of Serbia in business banks will be continued.

Conclusion

Although without legal obligation, Republic of Serbia for four year tends to harmonize through Action plans its national right with right of EU, to build administrative and institutional capacities for process of European integration. A big step forward to integration in EU is made by signing the agreement about stabilization and joining, although the same agreement will not have big positive effects on economy, considering the necessary costs of adjusting legal scope and economy for business within EU. In that sense it is important to mention that in wanted process is important to understand (and improve) much wider legal scope than financial, starting from Labour law, registration of economic

⁴ National EU Integration Programme

entities, infrastructure, and competition protection, intellectual property, tax and customs, planning and construction, environment protection etc.

Parallel with compliance of legal scopes in wider context, Serbia needs new strategy for attracting direct foreign investments, and especially bearing in mind the fact that process of privatization of state property has come to its end. To urgency of these steps points out the fact that financing companies in Serbia by issuing Securities does not exist (beside few recapitalizations of mature companies and banks on stock market), that neither company has by direct issue of shares nor by issue of bonds gathered capital, and that on market of Securities dominates trade with treasury notes of the National bank of Serbia (repo operations), that indebtedness abroad in the previous year has been doubled comparing to newly created debt towards domestic banks, and that support of state to companies is modest and ragged through several institutions (funds and agencies).

As it is already stated, indirect financing exposes banks to liquidity risk, and monetary government to dilemma: to support formally or informally banking sector or to leave banks to the market (by which we risk financial turbulence and solvency crisis of entire economy). According to so far measures of the National bank of Serbia before and after global crisis, it is quite obvious that regulator has chosen the first option (correction of obligatory reserve, loan conversion, early payment, correction of reference rate etc.). So, the structure of financial system and available option for investment financing will influence on the position of the company, but also it will influence on the behavior or regulator, that is state administration.

To sum up the review in financial (banking) sector in Serbia, and in context of finding models of opposing to recession trend of economic crisis, it is very important to underline once again the need for creating necessary conditions for attracting direct foreign investors (in the first place Greenfield and portfolio).

References

- Iorgova, S. and L. Ong, "The Capital Markets of Emerging Europe: Institutions, Instruments and Investors", IMF Working Paper No. 103, 2008.
- Veljović, K. i T. Ječmenica, "The quality of financial regulation, Kvartalni monitor No. 9, FREN i CEVES, 2007.
- National EU Integration Programme, www.seio.sr.gov.yu

Housing Actualities and Development of Housing Finance in Croatia

Mladen Mirko Tepuš¹

ABSTRACT – This paper is presenting needs and affordability limitations of housing and housing finance models in Croatia. Different housing and housing finance models have been developed in order to find accessible solutions that would enable average citizens to solve their housing problem. Four housing finance models currently existing in Croatia are analyzed in this paper (banking finance, contract savings for housing, the Fund for the Long-Term Financing of Residential Construction with Government Subsidy and the Publicly Subsidized Residential Construction Program – POS). The most important home loan lenders are universal banks (dominating the housing finance market), whereas more active lending activities of housing savings banks are still expected. The Fund for the Long-Term Financing of Residential Construction with Government Subsidy has never gotten under way, and the most recent government model – POS has raised strong interest of citizens. However, existing models have not provided an adequate solution to the housing and housing finance problem. This paper hints at potential problems with adequate funding of main creditors, restrictive trends of housing finance terms and growing interest rate at the same time. A solution that may improve the present situation and foster the development of the national housing and housing finance market is proposed in the form of developing a national secondary mortgage market.

KEY WORDS: housing, banks, home loan, primary and secondary loan market, Croatia

Introduction

The general urbanization level (ratio of town residents to the total population) stands at 51.09% and is expected to rise further. In line with the trend, the urbanization level is expected to reach 75-80% by 2015. The average population density is relatively low at 78.39 residents per sq km. The fact that towns represent the main hubs of employment is among the reasons that 16% of the total population lives in the metropolis. Out of the total housing units in 2003, 67.03% were in towns and 15.6% of the total population were day migrants (or commuters). Croatia's demographic picture based on the facts collected in the 2001 census can be described as less than satisfactory, senior citizens prevail in the population and the number of deaths exceeds the number of births (the population is shrinking).²

Housing supply and demand

The data available on the number of housing units, households and population might lead to a conclusion that there is no lack of housing. However, even a rough analysis shows an evident overpopulation of a number of dwellings (as several households sometimes inhabit the same dwelling) as well as a considerable shortage of housing in large centers/towns, low housing standard (the average housing area was just 27.6 sq m per person in 2001, etc.)³ and strong demand for social housing, while a number of dwellings are in need of renovation (e.g. 7.2% of inhabited dwellings lack sewage, 6.3% have

¹ Mladen Mirko Tepuš, Erste Card Club d.d. Zagreb

² According to the Ministry of Environmental Protection, Physical Planning and Construction 2003 Status Report for the Republic of Croatia, 23.7% of the population was young (between 0-19 years of age), mature population (between 20-59 years of age) represented 54.5%, while the old population (60+ years old) accounted for 21.3%.

³ After: Fröhlich, Z., Bežovan, G. and others, 2001, p. 10-13

no water supply and some 14% have no WC or bathroom). All this considering, the demand for the purchase and renovation of housing is expected to grow in the future, and so is the demand for home financing.

There is a shortage of urban housing stock, especially in four largest agglomerations. Estimated shortage for the Capital of Croatia - Zagreb is about 45.000 housing units.⁴ Dwelling stock that is still in hands of local authorities (social housing) is in very poor living condition. The part of urban dwelling stock which was previously owned by state and was mostly privatized with the beginning of transition has a problem with maintenance. A remarkable part of the privatized housing stock needs serious investments and renovation. Homeland war damage contributed to an erosion of the housing standard as 135,000 dwellings were destroyed between 1991 and 1994, worsening the living conditions of numerous displaced persons and refugees. A total of 25,609 units were completed in 2007, up 15.8% compared with 2006. The number of dwellings built each year still lags behind the pre-transition period (in the 1980s, 20-30,000 units were being built annually).

Recent survey on social issues (Target, 2004) with representative sample on national level indicated 20% of respondents needed more housing space; 27% cases had finished housing; 24.9% had finished doors and windows; walls and floors were finished in 21.2% of cases, while 14.5% indicated problem with humidity in flats.

The rented housing market is poorly organized and the exact number of tenants is difficult to determine as a large number of people who let housing do not report this officially in order to avoid paying tax. Around 37,000 households in Zagreb alone (or 13.5%) have the status of lessees (tenants), paying a monthly rent of 5-7 EUR per sq m⁵. Furthermore, large cities have a considerable number of dwellings with several rooms inhabited by the elderly, so this points to insufficient and inadequate programmes of care for senior citizens.

The first signs of stabilization in the region following the Homeland War brought about a considerable increase in housing prices. The average price per sq m of new-built dwellings in 2007 was between 12,308 kuna (in Zagreb area) and 9,803 kuna (in other towns), while the average monthly net wage totalled 4,841 kuna. A comparison of these amounts shows that an average citizen needed 2.5 – 2.0 monthly net wages for the purchase of a square meter of housing, i.e. financing the purchase of one's own flat or house from the regular income is impossible.

In the absence of one's own funding, housing may be bought and financed by borrowing on the financial market. However, a large number of average Croatian citizens cannot meet the current criteria of commercial banks – the main market creditors providing long-term housing loans immediately.

Housing finance market and system

Organized housing financing in Croatia is the business of commercial banks and housing savings banks - HSB (germ. *Bausparkassen*). Commercial banks often participate in home financing together with housing savings banks, and their products are included in various housing models (e.g. the government-subsidized POS model). Government Supported Long-Term Housing Financing Fond was introduced in 1997 but has stopped functioning after just one year of existence.

⁴ After: Bežovan, G., Tepuš, M. M., Fröhlich, Z., 2004.

⁵ Bežovan, G., Tepuš, M. M., Fröhlich, Z., 2004, p. 35.

Figure 1. Development of housing finance market in Croatia



Basic data on housing financing products of the main creditors are shown in the table below.

Table 1. Housing finance indicators and trends per creditors

INDICATORS		2004.	2005.	2006.	2007.
I. MACRO INDICATORS					
GDP (at current prices)	(million EUR)	28681	31263	34220	37497
GDP per capita	EUR	6461	7038	7707	8452
Real GDP y-o-y rate of growth	%	4,3	4,3	4,8	5,6
Unemployment rate	%	18,5	17,8	17	17
Average gross monthly wages	EUR	831	868	921	1008
Average yearly inflation rate	consumption price index	2,1	3,3	3,2	2,9
II. COMMERCIAL BANKS					
Assets	mlrd EUR	31,8	36,2	42,3	47,9
Loans	mlrd EUR	18,3	21,9	26,9	30,9
Retail loans	mlrd EUR	9,0	10,8	13,2	15,6
Home loans	mlrd EUR	3,0	3,8	5,1	6,3
Corporate loans / Retail loans in total loans	% of Σ loans	40,5 / 49,3	39,3 / 49,4	40,4 / 49,2	38,8 / 50,6
Coverage of total loans by provisions	% of Σ loans	4,6	3,7	3,0	2,6
Deposits	mlrd EUR	21,6	23,8	28,2	32,4
III. HOUSING SAVINGS BANKS					
Assets	mlrd EUR	0,7	0,8	0,9	n/a
Home loans	mlrd EUR	0,1	0,1	0,2	n/a
Deposits	mlrd EUR	0,7	0,8	0,8	n/a

Source: Croatian National Bank and calculations done by Author

Table 2. Typical Mortgage Products

Major products	Method of payment	Loan interest rates	Maturities	Borrowers	LTV	Others
Home loan of Commercial bank	Monthly instalments (amortization)	6.70-8.50% (adjustable)	mostly 15-20 years (possible up to 35 years)	Higher&middle - income households	up to 100%	Loan amount limited: wage less living cost minimum (app. 300 EUR; average loan amount 40,000-50,000 EUR; indexed to EURO; deposits are requested (5%); co-borrowers are allowed; guarantor (1) is requested; real estate as collateral (1:1.2); loan fees 0.5-1.5% of the loan
Home loan of Housing Savings Banks	Monthly instalments (amortization)	4.44-6.0% (fixed)	up to 20 years	Households	up to 100%	Controlled use of funds; co-borrowers allowed; guarantors are requested; real estate as collateral (1:1.5); deposit is requested (30-50%); indexed to EURO; loan fee 1%

The Banking Law and the CNB regulations form the basis of the regulatory system of housing financing while the other key national legal regulations that govern housing financing issues are the following: Civil Law, Land Registration Law, Law on Ownership and Other Material Rights, Deed of Assignment Act, Bankruptcy Law, General Tax Law, Income Tax Law, Execution Act, Penalty Interest Rate Act, Draft (Bill of Exchange) Act, Trial Proceedings Act, Notary Public Service Act, Foreign Currency Act and various CNB decisions or directives (e.g. those regulating a single way of expressing the effective credit and deposit interest rate, or a classification of bank credits and potential liabilities etc.).

Table 3. Regulator and Supervisor

	Name of organization	Establishment	Main functions
Primary mortgage market (Lending and credit market)	1. Croatian National Bank	Latest law in 2001.	Central bank; Supervision Authority for Banks, Housing Savings Banks and Payment System; Banking regulation
	2. Ministry of Finance	-	State Treasury, Supervision, Regulator
	3. Money-Laundering Prevention Office	1997	Anti Money-Laundering Authority - Supervisor for payment transactions
	4. Deposit Insurance and Bank Rehabilitation Agency	1994	Deposits insurance (up to 55,555 EUR) and bank rehabilitation
Secondary mortgage market (Funding market)	not existing	-	-

The business of commercial banks and housing savings banks is supervised by the CNB, along with the Ministry of Finance etc. (e.g. housing saving banks are also supervised by the State Auditor's Office).

Housing financing by commercial banks - Along with the process of transition the Republic of Croatia also embarked on a reform aimed at building an efficient, market-based financial system, transparent by international standards. The early banking regulations were drafted after those in Germany, while also taking into account quality solutions found in other countries. However, the inherited and current state of affairs at the time did not enable a complete "copying" of foreign models. The proposed legislation could not be such as to cause major "breakdowns" within the banking system, but at the time its provisions were supposed to influence banks to develop their business in line with the market rules.⁶ After the Bank and Savings Bank Act was adopted in October 1993, universal-type commercial banks began to be founded and they nowadays represent the most developed type of local deposit financial institutions. The development of commercial banks has gone through various stages, and Croatia also had two banking crises.

⁶ Leko V., 1999

There were 33 active commercial banks in Croatia at the end of 2007. Total commercial banks' assets at the end of 2007 reached 345.0 billion kuna and stood 13.3% higher compared to 2006, or 172.4% higher compared to 2000. The share of housing loans approved by commercial banks in their total assets amounted 13.0% at the end of 2007 while it amounted 9.2% at the end of 2004.

There is no organized trade in housing loans in Croatia, and banks engage in housing financing as portfolio lenders. Commercial bank encounter numerous problems related to housing loans, the most significant of which are an information asymmetry, i.e. insufficient information on retail clients (a credit register was established in 2004), and difficulties related to the valuation and use of collateral (property assessors, in bankers' opinion, are not focused enough on the market value; collection by seizure and sale of mortgaged property is difficult to implement and very often takes a long time).

It is evident from the share of housing loans in the total household credits that the absolute amount of these loans as well as their relative share in the portfolio of commercial banks is growing. The reasons for such developments lie in the following: stable growth of long-term savings deposits, fall of the interest rates charged by banks on housing loans, rise of living standards, loan security (loan service by retail clients has proven the best), improvements in property rights and judicial practice (e.g. fiduciary rights) etc.

Housing loans are currently offered on the local financial market at a nominal interest rate of between 6.70 and 8.50% (effective interest rates⁷) annually, and various credit worthiness criteria are applied.⁸ The main criteria for obtaining a housing loan are a borrower's income (salary size) and the quality of the company he/she works for (the stability of its business is assessed). Depending on these criteria additional requirements may also be made (a borrower's own participation; co-borrowers and/or guarantors with appropriate income; certain type and amount of collateral – most often a housing unit worth at least as much as the loan amount to be approved⁹, life insurance policy of the borrower tied over to the bank etc.).

Recently, some banks have issued housing loans indexed to the Swiss franc, thereby promoting lower interest rates (between 3.99 and 4.50% in 2004) and others have granted loans under a repayment-free model, with nothing but the interest repayable over the loan period while the respective share of matured principal is paid into an investment fund. Such products represent an innovation on the local housing loan market and their supply is limited.

Refinancing housing loans from more favourable resources has had negligible scope in Croatia so far, although housing loan contracts include the clauses that regulate this issue, mostly providing for the payment of a certain fee. However, such a state of affairs is definitely influenced by the widespread practice of Croatian banks which, prior to approving housing loans, require that borrowers open current accounts with them for the payment of their whole salary (or other regular income) and do not approve housing loans before a certain period has elapsed (usually three months). Therefore, the choice of a bank to apply to for a housing loan does not depend exclusively on loan terms. Nevertheless, there has been some liberalization of loan terms in that respect as well lately, and it is sure to continue in the future.

The characteristics of housing loans granted by commercial banks in Croatia are very similar, so we may speak about a certain standard of primary housing financing set by the banking industry which is applied throughout the country. For now, there have been no housing loans with the credit characteristics adjusted to particular groups of retail clients (so-called hybrid housing loans etc.) although there is scope for developing such products (e.g. for people who let private villas in the residential parts of towns and as well as numerous rooms and tourist apartments along the Adriatic coast etc.).

To finance housing loans, Croatian banks do not yet issue mortgage bonds (European model) or mortgage-backed securities (Anglo-Saxon model), nor do they raise funding for this particular purpose in

⁷ The Croatian National Bank has set the effective interest rate, i.e. the unique method of calculation of interest rates that the banks have to present to clients and public, since 1st January, 2002.

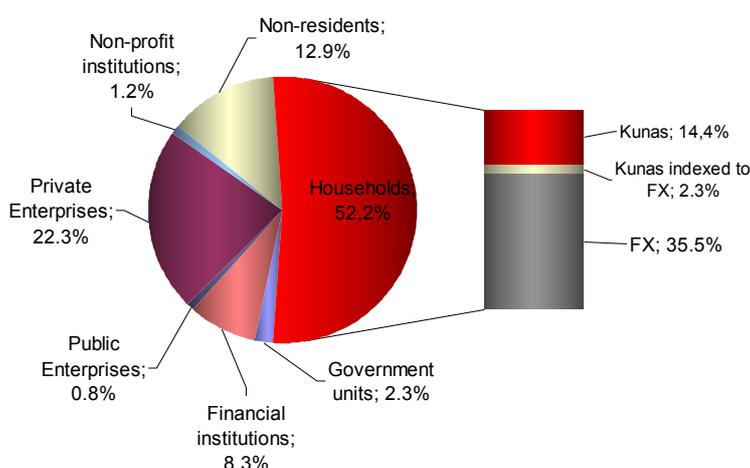
⁸ Almost all the home loans granted in Croatia are indexed to foreign currency (mostly euro).

⁹ The mortgaged property has to be insured against fire, natural disasters etc. in the minimum amount equal to the loan amount (hazard insurance).

any other manner. The main sources of their housing funding are deposits and their own capital, with the EBRD special-purpose credits/deposits and long-term syndicated loans used by some banks also worth mentioning. Because of actual monetary measures in force for commercial banks funding, main long term funding source that is coming from abroad (EBRD and syndicated credits), are treated in a way of becoming to expensive for acceptable placement on retail market. Because of the indirect prevention of further cross border long term funding further long term financing might become a system problem.¹⁰

Most savings at commercial banks are denominated in foreign currencies (foreign currency deposits account for 35.4% of the total liabilities in the aggregate balance sheet of commercial banks) and are mostly household deposits. Toward the end of 2007, household deposits made up 52.2% of the total deposits.

Figure 2. Distribution of Deposits as at end of 2007 by Sectors (in %)



When raising housing loans, retail clients are required to make a deposit of 10-20% (of the total loan amount) and some banks enable the deposit and loan processing fee to be subtracted from the disbursed loan amount. The deposit is most often tied over the loan period and bears no or very negligible interest. Recently, it has been possible to raise a deposit-free housing loan under partially changed loan terms, as banks may require a life insurance policy of the borrower, a larger number of guarantors and/or larger mortgage amount.

Contract Savings Model – Housing Savings Banks - Croatia, as a number of other countries at the beginning of the transition process, introduced a model to develop housing financing by engaging private citizens' own funds for the purpose of resolving their housing problems. It is a contract model of special-purpose savings with housing savings banks, similar to those in Germany and Austria (Ger. *Bausparkassen*).¹¹

To regulate and help develop the contract special-purpose housing savings and financing model, the Housing Saving and Government Incentive to the Housing Saving Act was passed and came into force on 1st January, 1998. It enabled the establishment of financial institutions that specialize in housing financing – housing savings banks. Soon after this Act came into force, housing savings banks began to be founded, expecting a good acceptance in the market and solid business results. Three housing savings banks were founded in the first year after the Act came into force, and two were founded later. During 2002 two housing savings banks merged as a result of their mother-banks merger. The housing savings banks with the Croatian National Bank license operating on end of 2004 were: 1. *PBZ stam-*

¹⁰ Tepuš, 2008

¹¹ The first housing savings banks in the transition countries of the region were founded in: Slovakia in 1992, Czech Republic in 1992 and Hungary in 1997.

*beno štedionica d.d.*¹², 2. *Prva stambena štedionica d.d.*, 3. *Raiffeisen stambena štedionica d.d.*, and 4. *Wüstenrot stambena štedionica d.d.*

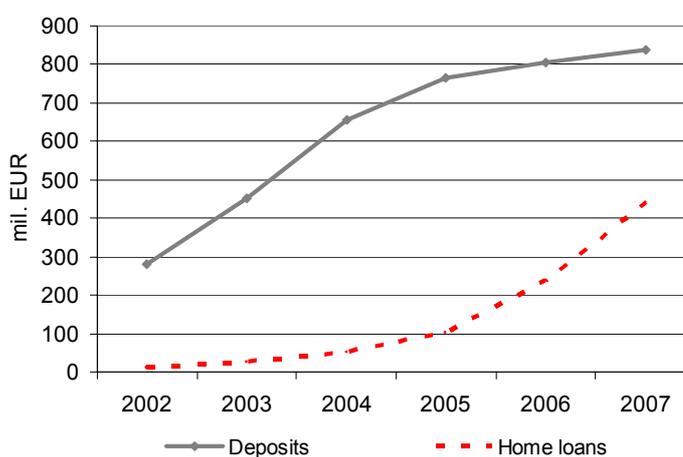
The Housing Saving and Government Incentive to the Housing Saving Act defined the terms under which housing savings banks may be established as well as their operations, the housing savings and housing loan terms, the terms, criteria and procedure of using state incentives for housing and penal provisions. Art. 20 Par. 2 Cl. 2 of the Act stipulates that a maximum agreed interest rate to be charged by a housing savings bank on a housing loan may not exceed the interest rate it pays on housing savings deposits by more than 3,0 percentage points.

The stimulation of housing savings by Croatian citizens is visible from direct incentives, i.e. budgetary funds allocated to all the housing savings banks in the amount equal to 15% of one's own payments into housing savings deposits over a previous calendar year. The basis to which 15% in state incentives is added is legally limited to 5,000 kuna (887 USD) at most, so a maximum amount of incentives a single housing depositor may get is 750 kuna (133 USD).¹³

An analysis of the operations of housing savings banks in Croatia since they were established reveals three distinct periods: a) the first did not allow for housing savings contracts with a protective monetary clause (which is often referred to as the "currency clause" in public), b) the second period since 8th July, 1999, when agreeing the clause was enabled, making it the main reason for a marked increase in the amount of savings deposited with housing savings banks in the following years, and c) the third period started from July 2005 with the state incentive reduction and de-regulation of Housing Savings Banks operation. By the end of 2004, housing savings banks had concluded more than 630,000 housing savings contracts with private citizens.

Figure 3 illustrates a rift between the housing savings accumulated by housing savings banks and the amount of housing loans they granted in the period under observation, with their respective trend. Since a significant portion of loans has not yet "come up" for granting, in the circumstances of strong demand for housing loans housing savings banks have been placing the funds for other purposes defined by the law.¹⁴ Before July 2005, under the Housing Saving and Government

Figure 3. Overview of Deposits and Home Loans in the Housing Savings Banks Model



¹² *PBZ stambena štedionica d.d.* began operating early in 2003.

¹³ The state incentives amounted 25% (1,250 HRK = 222 USD) of the same basis (5,000 HRK = 887 USD) before 2005.

¹⁴ The lending policy of housing savings banks is regulated by Art. 10 of the Housing Saving and Government Incentive to the Housing Saving Act, which stipulates that the funds may be used for financing clients' housing loans, investment into the financial market instruments with first-class guarantees (deposits), as well as for the purchase of first-class sovereign securities issues and other securities issued with state guarantees or bank guarantees and placements with safe credit institutions.

Incentive to the Housing Saving Act, housing savings banks were not allowed to engage in direct interim financing of housing depositors, but they have all developed a form of cooperation with commercial banks that enables them to offer a product with appropriate characteristics in the local market. Nevertheless, such a form of interim financing had imposed additional costs, while also hampering the development of this product and a whole area of housing savings banks' business policy. Therefore, instead of financing housing loans their credit potential was channelled into financing the government and its institutions through bond investment.

Socially-Supported Government Housing Construction Programme - A socially-supported government housing construction programme (known as "POS") is the Government's latest market incentive housing model, implemented in Croatia since 11th December, 2001, when the Socially-Supported Housing Construction Act was passed. This model is designed to resolve/improve the housing needs and conditions of households by engaging public funds (those of the government, towns and municipalities) and combining them with the funding of commercial banks and households. It is implemented through the construction of housing units organized so as to optimize the use of public and other funding for the coverage of costs, ensure its repayment and enable the financing of housing purchases on instalment schemes, under more favourable than market conditions as far as the interest rates and years of repayment are concerned. The socially-supported housing construction model envisages the construction of flats provided that their maximum sales price does not exceed 1,109.37 euros per sq meter of the net usable area. Local self-administration units determine the housing needs and interest for the purchase of flats in their respective areas, and are under obligation to provide adequate building site with utilities and other communal infrastructure for this purpose. Those units also set the terms, criteria and procedure for determining the order of priority for the purchase of flats under this model.

If the flats under the POS programme are purchased on an instalment scheme, the buyers have to provide 15 percent of the estimated value of the flat as their own share, 45 percent is financed by a bank loan, while the Ministry of Environmental Protection, Physical Planning and Construction and self-administration units finance the remaining 40% of the value of flats. Each person buying a flat on an instalment scheme has to meet the credit worthiness criteria set by the state Agency for Real Estate Affairs (APN) or a commercial bank providing the loan funds, and the flat being bought is used as collateral to guarantee the repayment of the entire debt including interest. After each such purchase the commercial bank loan is to be repaid first, followed by the remaining part owed to the Ministry and self-administration unit. The annual interest rate charged on the bank portion of the loan is 7.85% and is linked to the six-month EURIBOR, while the interest on the Ministry and self-administration unit's funding (40% of the flat's value) is not payable for the first 16 years and only a so-called compound interest at a 2% rate is calculated. Over the next 15 years, the loan is to be repaid at a 5% annual interest, and the total repayment time on an instalment scheme may not exceed 31 year starting from the time a purchase agreement is concluded. The monthly annuity is set as an even amount over the entire loan period, but it may not be smaller than 0.25% of the total purchase price of the flat. By end of March 2008, a total of 4,540 flats under the POS programme had been completed while 4,536 flats were sold.

Conclusion

On the basis of an analysis of the housing financing models presented in this paper one may conclude that Croatia has traditionally been dominated by a deposit-based housing financing model, with commercial banks appearing as the main creditors, although new models and products that have emerged in the past few years are also being developed. As part of the moves to help households resolve their housing problems, the State-Supported Long-Term Housing Financing Fund Act, the Housing Saving and Government Incentive to the Housing Saving Act and a Socially-Supported Housing Construction Programme were adopted. Croatian citizens have shown particular interest in the housing savings bank products and the Socially-Supported Housing Construction Programme, while a state-supported long-term housing financing fund did not take off in practice.

The ratio of housing loans to the Gross Domestic Product has been rising continually over the past few years, and it can be expected to continue rising in the future because of exposed housing needs of citizens and present urbanisation processes as well. Because of the restrictive monetary policy measures in place and current global financial crisis further funding of home loans might slow down further housing placements as well. Home loan are probably to become more restrictive in the soon future while interest rates are expected to rise as well.

Housing lending in Croatia is led by the several biggest banks per assets size and the granted loans are indexed to foreign currency mostly the euro. Nevertheless, the interest charged by commercial banks is for the most part variable, while housing savings banks grant loans at fixed interest rates.

The operations of housing savings banks in Croatia, as well as those in a number of other countries, depend primarily on state incentives (premium) paid into individual accounts of housing depositors. The Croatian housing savings model could develop further through a process of deregulation of the housing savings bank operations, which would enable direct financing of developers' (housing) projects, investments in real estate and provision of some other banking services.

The latest housing financing model (POS) bears a certain resemblance to the social housing programmes in Finland (as households are required to provide 15% of the funding) and France (since part of the responsibility for the programme is shared by the central and local government, with the local government units responsible for the urban and housing planning and preparing the sites for building). Still, the fact that it is heavily subsidized by the government, apart from its "political charge", is a major shortcoming of this model. Its development might be helped by structural changes to enable private sector investment and initiative, thereby reducing state funding for this model.

The rented housing market has not been part of the housing reform to date as far as the supply or the demand side is concerned, so regulating this segment might benefit all stakeholders.

The problems related to housing financing with the help of the models presented in this article have not been completely resolved. Therefore it seems justifiable to launch an initiative for designing a national model to envisage resorting to the capital market as a source of funding for housing financing. To that end it is necessary to set the standards or criteria for granting housing loans on the primary market, establish an efficient and comprehensive register of pledged property, while also spurring the development of a system of housing loan repayment insurance (not vital). Certain laws (depending on the model to be developed) would also need to be modified and amended to make sure that the issues such as who may trade in credit portfolios and in what circumstances, are properly and accurately regulated.

Licensing and establishment of legal agencies to take part in such a model would also have to be regulated, and Croatia would have to pass legislation governing national mortgage bonds (or mortgage-backed securities), and then set and supervise the minimum criteria that the securities issued on the basis of a mortgage pool have to meet.

References

- Croatian Bureau of Statistics: *Completed Buildings and Dwellings*, 2007, nr.: 3.1.9.
Croatian National Bank: *Banks Bulletin*, nr. 16, 2008
Bežovan, G. (1998.): *Tranzicija u stambenom sektoru i strateške točke razvoja stambene politike u Hrvatskoj*, Revija za socijalnu politiku, 1, str. 23-34
Bežovan, G., Tepuš, M. M., Fröhlich, Z. (2004): *The City of Zagreb Housing Strategy (draft)*
Fröhlich, Z., Bežovan, G. and others (2001): *Housing Development Strategy of the Republic of Croatia (draft)*
Kraft, E., Dolenc, H., Duliba, M., Faulend, M., Galac, T., Šošić, V. i Tepuš M. M. (2001): *Kreditna politika hrvatskih banaka*, Pregledi Hrvatske narodne banke, br. 5
Leko, V. (1999): *Financijske institucije i tržišta*, materijali za kolegij "Financijske institucije i tržišta", Ekonomski fakultet u Zagrebu, Mikrorad, Zagreb

- Ministarstvo zaštite okoliša, prostornog uređenja i graditeljstva (2004): *Izvešće o stanju u prostoru Republike Hrvatske 2003. (nacrt)*
- Tepuš, M. M. (2002.): *An Analysis of the Operation of Building Societies in the Republic of Croatia*, Surveys of Croatian National Bank, S - 6
- Tepuš, M. M. (2004): *Analysis of the Housing Finance Models of the Republic of Croatia*, Surveys of Croatian National Bank, S - 18
- Tepuš, M. M. (2005.): *Modeli stambenog financiranja – Housing Finance Models*, Albatros media, Zagreb
- Tepuš, M. M. (2008): *Banke (ni)su krive za hrvatski inozemni dug*, www.modelistambenogfinanciranja.com

Internationalization of the Shareholder Capital in Banks and Creation of the New Financial Products in Serbia

Milan Vujović¹, Hasan Hanić²

ABSTRACT – This paper analyzes the basic banking sector development processes viewed through development of the financial markets, stock-exchange operations and trading with the shares - particularly those originating from privatization --, as well as through protection of the rights and interests of minority shareholders. The special reference is made to internationalization of the shareholder capital in banks and creation of the new financial products in Serbia, primarily through intensifying the real and the banking sector's privatization process, development of the institutional investors and higher inflow of the foreign capital, respectively. With consistent implementation of the macroeconomic and institutional reforms in the country, the foreign investors' confidence in local economy is growing stronger and they direct the flow of their capital towards the referenced market. The overall assessment is that faster development of the financial markets, and particularly the equity markets and higher inflow of the foreign capital combined with wider assortment of new products will expand the options of a faster national socio-economic development and the extended presence of our country in the international capital flows.

KEY WORDS: banks, market, equity, financial market, privatization, investors, foreign capital, shares, exchange, stock-exchange transactions, new banking products

Transition processes in the banking sector

In course of the presently ongoing transition, the pluralism of political parties and the democratic changes in Serbia, which have been particularly intensified since the year 2000, a significant step has been made towards achieving human rights and freedoms, higher respect for the rules of law and operation legalities as well as towards creating of a more favorable socio-economic ambience in the country. The macroeconomic stability has been established, visible changes in the legal and economic system have been made and a number of the legal-state institutions have been built. Over 350 new laws supporting structural reforms have been passed together with a number of by-laws (decrees, guidelines, decisions, etc) that are more closely regulating some provisions of the Law. All of those served as basis for faster privatization of the companies and banks, liberalization of the foreign trade, increased responsibility of state institutions in managing public finances and, particularly, the fiscal policy, as well as for the improvements accomplished in the area of equity markets and stock-exchange operations.

Changes in the equity structure and development of the shareholding with creation of the securities' market and especially with creation of the stock exchange operations, stands as new incentive to development of the economic system and structuring of a market ambient in which the business professionalism, competition and an enterprising philosophy combined with modern management become a new moving force of the society's progress.³ This has led to increase of the privatization base and shareholders' activism, with the said base consisting of almost two thousand companies and banks

¹ Milan Vujović, Credy Bank a.d., Belgrade

² Hasan Hanić, Belgrade Banking Academy, Belgrade

³ Milan Vujović: »Privatization and Trade with the Banks' Shares«, The Collection of Scientific Papers, Privatization of the Banks in Serbia; editors Đ.Đukić and H.Hanić, Belgrade Banking Academy and the Institute of Economic Sciences, Belgrade, 2005, Pg. 123

with quoted shares. In addition, there have been significant changes in the trading structure, caused by increase in participation of the shares compared to participation of the bonds, treasury bills and other securities. The afore-mentioned created a basis and built a foundation for even faster reform that should be primarily directed to economic development and structural changes. This particularly applies to improvement of the business environment and creation of a social climate more favorable for building of an efficient and competitive economic structure. In all of this, key role should be the one of even bigger success of the privatization, company's restructuring and development of the small and medium-size companies and entrepreneurship, as well as legal protection of the property, contracts and investors.

All of those changes greatly influenced positive results recorded in the period from 2005 to 2007⁴ when the average growth rate of the GDP was 6,5%, the macroeconomic stability and stability of the currency exchange rate was improved and the foreign currency reserves kept growing (about 10 billion EURO), the net inflow of direct investments was 6,2 billion Euros, the unemployment rate dropped to 18,7% and the citizens' hard currency savings increased to have been at the level of 5 billion Euros at the end of 2007. This created a basis and established a more solid foundation for even faster reforms of the society that would lead to a higher economic growth, improve business environment and create a social climate more favorable for building an efficient and competitive economic structure.

However, the achieved economic results have been accompanied by an increased level of the internal and external misbalancing, which in the year 2007 was characterized by the inflation of 10,1%, the commodity transactions deficit of 21,5% GDP and the current transactions deficit of 13,7% GDP.

Without considering all aspects of the socio-economic development of the country, this paper is focused on the banking sector and primarily on internationalization of the shareholder capital in banks and creation of the new products demanded by modern markets.

In addition to the production sector, more and more important for implementation of the country's development policy is the finances and banking services and products sector. This is primarily applying to development of the financial and equity markets, which in our country have been particularly intensified with transition processes going on in all of the post-socialist countries. Beside changes in the socio-economic and political system, proprietary structure and the management and decision-making modes, the transition has also activated significant changes in the finances and banking sector.⁵ Based on those, the legal and institutional conditions on the financial market have been built, these being of significant importance for development of the new financial products, which open new options for the increased investment activity that is a prerogative of a speedy economic growth and new jobs, respectively. This has resulted in the new institutions, economic associations, entrepreneurships and the new educational, expert and scientific disciplines, professions and activities required by modern markets. In addition to it, a road towards the development, organization and work of the new educational and professional organizations and their institutions, societies and other forms of the mutual-interest associations has been opened.

Creating new products and services

With creating institutional conditions in the legal and other regulatory areas and with the financial and banking institutions enterprising and professional behavior, the conditions for designing the new financial and banking products and services for the financial market are made. These actions are supposed to make direct contribution to increasing the overall economic activity and to expanding the space for new employment, respectively. In addition and on the basis of it, the free cash funds available to the population on their new dinars saving accounts as well as on their (new or old) foreign currency saving accounts, in the form of securities or similar, may be —through the new institutional investors, such are the investment and retirement funds —invested in the programs and projects that are

⁴ »Memorandum on the Budget and the Economic and Fiscal Policy for the year 2009 with projections for the years 2010 and 2011«, Pg. 1

⁵ Milan Vujović: »A Road to the Shareholding«, Vedes, Belgrade, 2002. Pg. 209

not only profitable but also contributing to a faster social development and, indirectly –new employment. Beside direct employment for the new jobs opened in the financial, banking and insurance organizations, there are much bigger employment opportunities through the programs and projects implemented within framework of the new investments, which are based on the capital collected in the market. Accordingly, the development of financial markets and the stock-exchange transactions are contributing to the increased number of market participants and to the extension of the products and services assortment, i.e. the overall investment activity and new employment.

A faster trade and economic development, the more profitable businesses and the greater development options – especially the bigger capital investments in the real economy sector, may be partially expected from the domestic but mostly from the companies, banks, insurance companies, the investment and retirement funds and other investors with majority of the foreign capital. With the above accomplished the realistic options for designing the new products that are going to contribute to further development of the equity market and, respectively, the new employment are opened.

The faster socio-economic growth has been, certainly, assisted by the Law on Investment Funds⁶, Law on the Optional Retirement Funds (yr.2005) and the Law on Leasing (yr. 2003), with which the large professional investors were introduced to our market for the first time.

Operating in Serbia today are seven retirement/pension funds and associations and ten investment funds, while there are seven more requests for operating license still pending. This should contribute to an even faster development of the financial market and speed-up the privatization process. Besides, these funds should be viewed as the institutions of collective investment in which the cash funds are to be collected and invested in order to make a profit and reduce risks. With this, the more favorable conditions for many investors are created in our country, primarily for small investors who will have the opportunity to invest their funds through professional investors to the programs that are profitable.

The investment fund resources may be invested in: debt securities issued by the National Bank of Serbia, Republic of Serbia, the territorial autonomy and local self-governing units and the other legal persons if guaranteed by the Republic of Serbia, as well as in the securities of the international financial institutions, debt securities issued by the EU and OECD member states, mortgage bonds issued at the territory of the Republic of Serbia and the other securities that are meeting trading requirements and are in conformance with the conditions proscribed by the Securities Commission.

With development of this, very important market segment and with opening other possibilities for development of the economy, the space for new employment and faster resolving of the unemployment problem that our society is faced with, is extended. This can be accomplished primarily through:

- the domestic and foreign companies', banks', investment funds' and other investors' investments in the new development programs and projects, which require hiring of the professional, educated and enterprising human resources,
- organization, development and functioning of the new financial investors such are the investment, pension/retirement and other funds and their institutions, organizations and associations that will have considerable funds at their disposal and that are to use those funds rationally in order to create new jobs, and
- investments of the strategic partners, the investment and other funds in modern development and improvement of the work processes in the companies, banks and the other organizations, which are offering opportunities for new employment.

For successful performance and profitable operations of the emerging financial organizations, such are the investment and pension funds, custody banks, financial leasing and the other, it is necessary to provide for the educated and professionally trained human resources. This primarily refers to the portfolio managers, the tax and investment advisors as well as the other banking and the dealer-broker experts and professionals that are presently scarce on our market.

In addition to this, it is very important for further development of the financial markets and the country in general that a number of the educated, highly qualified and professional human resources with the

⁶ » The Law on Investment Funds«, Official Gazette of the Republic of Serbia, Belgrade, No. 46

experience and some, with a significant capital, has returned from abroad and engages in the work of some companies, banks, stock exchanges, brokerage-dealer, insurance and consulting firms, or decided to do the business independently. The knowledge and experience they acquired and confirmed at the financially developed markets, together with the capital they own, will greatly contribute to the improved organization, functioning and professional work in the newly established financial organizations and institutions at our market. Nevertheless, from the standpoint of the new financial products as well as the organizations themselves, a more developed financial market will definitely require education of a growing number of new human resources that will have to acquire the new knowledge, which will enable them to get actively involved with the modern work process.

With faster arrival of the companies, banks, insurance companies and other investors bringing the foreign capital to our market and with a modern work processes organization, professionalism, wide assortment of the new products and services and high level of the technical-technological and computer equipment, the mentioned requirements are becoming more actual. The whole situation should also contribute to a faster development of the combined banking services' market, these products and services being the investment banking, insurance deals, corporate management, keeping of the securities, etc.

Trading shares at the stock exchange

The transition in general and the privatization in our country in particular are for quite a while opening some other issues as well. These issues include trade with the securities and financial derivatives, among which --especially with the shares originating from privatization — trading with the share participates in the securities trade, is being increased. It contributes to increase of the market capitalization at the exchange, with turnover for the year 2007 being over 2,0 billion Euros.⁷ Participation of the shares in the total turnover of the Belgrade Exchange is 90%. The foreign investors participated in the exchange trading with 48%, and in the shares transactions with 54,6%. It is important to point out that last year, the newly founded investment and pension funds got included in the exchange trade for the first time.

The increase in the exchange trade will be particularly influenced by the free shares distributed to the citizens who did not exercise that right through the companies' privatizations. To clarify: the state passed a special law on distributing free shares once the privatization and sale of public companies such are JAT, Telekom, Elektroprivreda Srbije, Naftna industrija Srbije, Aerodrom »Nikola Tesla« and Galenika is completed. It is estimated that this right will be exercised by four million citizens.

The structure of trade transactions shows the highest participation of the companies' shares (53%), followed by bank shares (37%) and government bonds (10%). Beside those, there is a growing participation of the companies, which are trading according to the continuing trade method (50 companies), whose participation is 63% while the participation of the ones trading according to the prevailing price method is 27%. The constantly growing presence of foreign investors participating in the securities' trade transactions and particularly in the trade with shares on our market is indicative of the increasing internalization of the shareholder capital and stands as a good example for the foreign investors that are interested to make investments in our country. Contrary to this, the sale of all shares to foreign investors, such was the sale of "Hemofarm" shares to the German "Shtade", led to a significant drop in the turnover of these shares at the Belgrade Exchange, since they are traded with abroad.

When talking about exchange transactions with the banks' shares, it should be pointed out that most of the shares that are the subject of transactions are those with the majority domestic capital. Majority owners in the privatized banks – primarily the foreign banks that have bought off the government package of the individual banks' shares—are not appearing on the stock exchange market, yet. It is their strategic decision and a long-term interest to follow on the economic stabilization and a favorable economic ambience in the country and achieve the improved results and faster development, add sup-

⁷ <http://www.belex.co.yu>

plement capital or enter the merger or acquisition with some other local bank, with which they will improve their rating on the banking services market.

Table 1. Serbia: The direct foreign investments in cash – net (000 USD)

Sr.No.	Country	2000.	2001.	2002.	2003.	2004.	2005.	2006.	2007.	KINO
1	Austria	183	1.421	33.876	93.747	146.104	201.189	520.356	1.161.096	2.157.972
2	Greece	334	1.280	12.496	62.268	52.968	249.536	923.698	336.401	1.638.981
3	Norway	0	2	74	280	0	29	1.546.993	3.187	1.550.565
4	Germany	6.152	9.788	82.801	75.708	51.985	187.320	905.824	69.530	1.389.108
5	Netherlands	0	102	2.248	598.963	102.008	92.113	-214.119	-27.958	553.357
6	Slovenia	33	11.254	9.561	29.036	15.706	183.563	201.241	92.856	543.250
7	France	0	81	87.489	7.858	24.022	62.347	159.085	84.391	425.273
8	Luxemburg	0	128	3.619	4.108	2.387	108.885	8.843	241.537	369.507
9	Hungary	0	275	1.167	4.224	16.567	24.677	244.045	31.494	322.449
10	Great Britain	0	1.225	6.618	20.631	79.620	63.330	135.915	-26.584	280.755
11	Italy	2.006	594	7.553	21.325	10.149	18.316	52.752	155.363	268.058
12	Monte Negro	0	0	0	0	0	0	12.946	209.288	222.234
13	Switzerland	35	86	2.913	12.559	29.401	56.990	-15.421	96.157	182.720
14	Croatia	0	1.096	5.243	34.446	10.806	40.484	25.240	35.944	153.259
15	Bulgaria	0	0	133	129	9.910	655	54.270	46.916	112.013
16	USA	343	1.906	18.099	15.068	18.187	22.257	-29.612	31.825	78.073
17	Slovakia	3	10	10	18.342	0	25.447	19.325	3.084	66.221
18	Latvia	0	0	5	15.330	17.082	6.441	10.527	3.535	52.920
19	Israel	0	0	260	207	3.052	14.294	4.544	26.510	48.867
20	Belgium	0	0	344	1.925	2.523	12.407	6.464	24.038	47.701
21	Russia	736	3.581	2.556	3.359	538	14.324	15.992	488	41.574
22	Lichtenstein	0	216	57	2.162	2.974	-41.316	-17.538	-2.937	-56.382
23	Cyprus	762	2.045	41.717	31.581	16.310	71.551	-387.154	137.427	-85.761
24	B&H **	189	169	2.951	5.056	2.104	4.692	-16.750	-838.608	-840.197
25	Others	476	129	4.664	13.098	182.000	21.175	118.913	109.317	449.772
	TOTAL	11.252	35.388	326.454	1.071.410	796.403	1.440.706	4.286.379	2.004.297	9.972.289

NOTE: For the year 2006, the foreign investments from Norway are listed without the license for TELENOR for 410 million and without the investments from Austria for purchase of the third license for 425 million dollars, since according to the BOP technology those have been carried as the capital licenses and patents.

Source: The National Bank of Serbia.

The concentration of capital and reduction of the number of banks have been, primarily, determined by economic strength of the society, the value of social product, level of the financial market development, level of the economy's integration with the international capital flows, social standard, and similar. With stabilization of the local socio-economic circumstances, with exercising the rules of Law, strengthening of the macroeconomic stability and, respectively, faster development of the society as a whole, a more intensive development of the equity market and, particularly the stock exchange operations and the arrival of the new and the financially stronger investors are to be expected. At the same time, the strengthening of integration processes in developed countries will intensify same processes in our economy and particularly in the banking sector. This will open new areas in the banking sector and stimulate the equity market, the bank shares and the other securities, in particular. Under these market-development conditions and lead by the aspirations for faster development and higher profits, the ma-

jority shareholders in banks will become more interested in activating their participation in the exchange trade operations.

Foreign investments in the banking sector

Over the period of intensified privatization from 2001 to 2007, a significant net inflow of direct foreign investments of about 15 billion dollars created conditions for financing of the new infrastructural and other development projects, which are of great influence to the development of local economy. With reference to this, however, it is necessary to emphasize that the said investments have mostly been the result of the revenues from privatization of 3.254 socially-owned companies, state-owned, the sale of “Mobtel” to Norwegian “Telenor” an sale of the third mobile operator license to “Mobilkom Austria”,

The banking sector reform, which has been intensified during the last five years, led to the change of ownership structure and shareholder internationalization as well as to corporate management of the capital in banks, which are characterized by reduction of the domestic in favor of the foreign capital and by increase of the private relative to the state-owned capital.

There are 35 banks functioning in the country, 25 of which with the majority foreign capital, meaning that in the total banking sector’s capital, the foreign capital participates with 84%.⁸ If viewed by the countries, the foreign countries with highest participation are Austria 25%, Greece 20% and Italy 10%. Changes in the banks’ ownership structure will have an influence on concentration of capital in the region, strengthening of the balance position of the banks, expansion of the banks’ network, introduction of the modern operations, increased efficiency and professionalism, as well as on a more rational and functional organization and forming of the new banking groups. In view of the already completed (Banca Intessa and Sanpaolo Bank) and the announced merger of some banks with the majority foreign capital (NLB and Continental Bank), the number of banks in our country will continue to reduce. It should also been mentioned that for the first time since the year 2001, the National Bank of Serbia issued license for instituting its operations to the Moscow Bank from Russia, which will be opened for business soon.

Table 2. The Banking Sector of Serbia – Structure of the ownership capital

Sr.No.	Element	31.12.2005.	31.12.2006.	31.12.2007.
1.	Total number of banks	40	37	35
	Majority foreign capital			
2.	Number of banks	17	22	25
	Share in the overall balance amount	66%	80%	84%
	Share in the overall equity	49%	67%	84%
	Majority domestic capital			
3.	Number of banks	23	15	10
	Share in the overall balance amount	44%	20%	16%
	Share in the overall equity	51%	33%	16%

Source: Association of the Banks of Serbia

Investing foreign capital in the banking sector is determined by the motives, modalities, effects and the level of banks’ capital management.

The motives for investing foreign capital in the banking sector start with the interest in investing capital in new markets with the prospects of a fast and long-term sustainable growth, including the potential for expansion of the organizational units, such are the representative, branch and front offices, the

⁸ The Banking Sector in Serbia in the Year 2007 (Association of the Banks of Serbia), Belgrade, April 2008, Pg. 9

increased demand for banking products and higher investments in the profitable and development projects.

The modalities for investing foreign capital depend on the possibilities to obtain green field licenses, increase share capital and conduct a tender sale of the banks' state-owned capital, including development of the stock-exchange markets.

The effects of investing capital are reflected in development of the new business philosophies and profitable operations in the banks, transfer of a long experiences and development of the shareholding culture, the application of new technologies and financial innovations, the increased offer and assortment of banking products, promotion and improvement of the competitive environment, development of the business ethics and increasing investments in the projects that are profitable.

Managing the banks' shareholder capital is characterized by decisive role of the capital owner in the managing process, as well as by strengthening of the bank through profitable operations and higher responsibilities and devotion of its management to the development goals.

When the motives of the internalization of shareholder capital in banks are concerned, they are in:

- Maximized use of the bank resources: capital, human resources, organization, IT systems, business network, management, modernized operations
- Market rating/position of the mother bank: the level of development, corporate image, stability and professionalism, confidence of the clients, development of the operations network, the level of integration with the international capital flows
- Avoiding the regulatory restrictions – mitigating limitations to the in-country capital movement, operating on the new markets
- Decreasing the rate of risks: timely assessment of the political, economic and social factors impacting the operational risks and preparation of a defense strategy
- A special bank-client relationship: monitoring of the major standing foreign clients, focusing on a successful appearance on the new markets, followed by planning of the further development strategies.

Restructuring of the domestic banking sector may be realized through sales of the remaining state-owned majority package of shares in some banks (Srpska bank, Credi bank, Privredna bank Pančevo, Jubmes bank, Poštanska štedionica bank), then through the mergers, integration and acquisition of the banks as it has already been done with a certain number of banks (OTP bank has become the majority shareholder in the Kulska, Niška and Zepter banks; Nova Ljubljanska bank and Continental bank, HVB and Exsim bank, the merger of Banca Intesa and the Sanpaolo IMI bank), as well as through strengthening of the capital and more profitable operations of the majority domestic capital banks (Komercijalna bank, AIK bank, Agrobank, Univerzal bank, Čačanska bank, Metals bank, Privredna bank Beograd).

Changes in the banking sector's ownership structure have opened new processes in development of the banking business. Primarily, a growing participation of the foreign share capital, changes in the management structure, development of the new business philosophies, i.e. development of a more profitable business. With these, the domestic market has been enriched with the additional capital and the new banking products, which opened up wider possibilities for the higher loan arrangements and investing activity. With the appearance of foreign banks, the banking sector's operational network was extended, particularly in the field of resident operations. This has contributed to extension of the banking services' assortment and quality, application of modern knowledge, promotion of the new organization, the work process and managing technology, as well as to the increased employment. In addition to it, growing competition in the banking sector⁹ and particularly the increasing number of the majority foreign capital banks is forcing banks to intensify application of the other forms and methods for maintaining and acquisition of the new customers to their services.

⁹ Veroljub Dugalić, Vesna Matić: »The Reform of Banking Sector in the Republic of Serbia«, »Economic Annals«, Belgrade, April 2006, Pg. 83.

For efficient performance of the said operations and growing needs of the clients, both corporate and natural persons, it is necessary to provide for the qualified, educated and professionally trained human resources. This, by itself, opens the opportunities for employment of the new human resources. From the standpoint of recruiting the new, young and educated human resources and development of the financial market in general, it is of a special importance to provide for continuing education of the HR qualified for the exchange and modern trading operations, particularly in the area of trading with the privatization-originating shares, which are expected to be more and more present in the stock exchange transactions. This will be accomplished with the ever developing electronic trade, easier access to the information and reduction in the transaction costs.

Also, introduction of the novel trading methods --such is the algorithm-guided transaction of shares, with which traders on the basis of quantitative models decide when to place their purchase or sales orders that are automatically generating submission and size of the order – is opening even wider opportunities for employment of the new human resources (at the end of 2005, in the USA over 25% of the trade was done with use of this model).

References

- “Memorandum o budžetu i ekonomskoj i fiskalnoj politici za 2009. godinu sa projekcijama za 2010. i 2011. godinu”, Republika Srbije-Ministarstvo finansija, Bgd, 2008 (*»Memorandum on the Budget and the Economic and Fiscal Policy for the year 2009 with projections for the years 2010 and 2011«*, Pg. 1)
- “Bankarski sektor Srbije u 2007. godini”, Udruženje banaka Srbije, Bgd. 2007 (*The Banking Sector in Serbia in the Year 2007 (Association of the Banks of Serbia)*, Belgrade, April 2008, Pg. 9)
- Hasan Hanić i Vlastimir Vuković (redaktori), *»Razvoj tržišta bankarskih proizvoda i usluga«, Beogradska bankarska akademija i Institut ekonomskih nauka, Beograd, 2008.*
- “Najveći strani investitori u Srbiji”, Privredni pregled, Bgd. maj 2008 “*The Major Foreign Investors in Serbia*”, *Economic Review, May 2008*
- Frederic S. Mishkin: “Monetarna ekonomija, bankarstvo i finansijska tržišta”, “Data status” i Beogradska bankarska akademija, Bgd. 2006 “*Monetary Economy, Banking and the Financial Markets*”, “*Data Status*” and the *Belgrade Banking Academy, 2006*
- Milan Vujović: “Zaštita interesa i prava akcionara”, “Pravni savetnik”, Bgd. 5/2004 “*Protection of the Shareholders’ Rights and Interests*”, “*Legal Advisor*”, *Belgrade, 5/2004*)
- Milan Vujović: “Put u akcionarstvo”, “*Vedes*”, Bgd. 2002 (*»A Road to the Shareholding «*, *Vedes, Belgrade, 2002. Pg. 209*)
- Milan Vujović: “Privatizacija i trgovanje akcijama banaka u Srbiji”, redaktori: Đ.Đukić, H.Hanić, Beogradska bankarska akademija i Institut ekonomskih nauka, Bgd. 2005 (*Milan Vujović: »Privatization and Trade with the Banks’ Shares «*, *The Collection of Scientific Papers, Privatization of the Banks in Serbia; editors Đ.Đukić and H.Hanić, Belgrade Banking Academy and the Institute of Economic Sciences, Belgrade, 2005, Pg. 123*
- Milan Vujović: “Akcionarstvi a privatizace v Srbsku”, “Hobulet”, Praha-“Vedes”, Beograd, 2006 (“*Shareholding and Privatization in Serbia*”, “*Hobulet*”, *Praha-“Vedes”*, *Belgrade, 2006*)
- Milan Vujović: “Creation of the new financial products and employment possibilities”, *Economic policy and the development of Serbia, Faculty of economics, Belgrade, 2007.*
- Veroljub Dugalić, Vesna Matić: “Reforma bankarskog sektora u Republici Srbiji”, “Ekonomski anali”, Bgd. April 2006 (*Veroljub Dugalić, Vesna Matić: »The Reform of Banking Sector in the Republic of Serbia«, »Economic Annals«, Belgrade, April 2006, Pg. 83.*)
- Beogradska berza “Godišnji izveštaj za 2007. godinu”, Bgd. 2008 (*Belgrade Exchange “The Year 2007 Annual Report”*, *Belgrade, 2008*)
- “Zakon o investicionim fondovima”, Sl. glasnik RS, Bgd. Br. 46 (“*The Law on Investment Funds*”, “*Official Gazette of the Republic of Serbia, Belgrade, No. 46*)
- “Zakon o preuzimanju akcionarskih društava”, Sl. glasnik RS, Bgd. 2006. br.46 (“*Law on the Shareholder Companies’ Acquisition*” “*Official Gazette of the Republic of Serbia, Belgrade, No. 46*)

“Zakon o dobrovoljnim penzijskim fondovima i penzijskim planovima”, Sl. glasnik RS, Bgd. br. 85/2005 (*The Law on Optional Retirement Funds and Pension Plans*), “Official Gazette of the Republic of Serbia, Belgrade, No. 85/2005)

“Zakon o lizingu”, Sl. glasnik RS, Bgd. br. 55/2003. i 61/2005 (*The Law on Leasing*), “Official Gazette of the Republic of Serbia, Belgrade, No. 55/2003 and 61/2005)

<http://www.fins.sr.gov.yu>

<http://www.belex.co.yu>

Structural Characteristics and Profitability of Banking in Selected Transition Economies

Vlastimir Vuković¹

ABSTRACT – This paper analyses the linkage between banking structure development and banks profitability in transition countries. Foreign banks entry is the main indicator of profit attractiveness of the local bank market and one of the factors of the structural development. However, that is not sufficient proof of adequate correlation of the structural development of bank sector and its profitability. Therefore, the most important structural characteristics are comparatively analyzed (excluding regulatory environment and supervision) - privatization level, capacity, network density, market concentration and banking intermediation efficiency. Then ROA (return on assets) and ROE (return on equity) profitability are examined. Finally, the comparison of structural development and bank profitability in selected transition economies has been done. Due to the pretension, as well as general similarities, of Serbia to achieve the status of the candidate for EU membership, the comparative group of transition countries is consisted of the EU members: Bulgaria, Czech Republic, Hungary, Poland, Romania, Slovenia, and Slovakia.

KEY WORDS: transition economies, banking structure, privatization level, capacity, network density, market concentration, intermediation efficiency, ROA and ROE profitability

Introduction

Since the beginning of the structural changes in the banking sector in European transition countries, numerous researches of relations between ownership, penetration of foreign banks, market concentration, efficiency and performance of banks in these countries have been carried out, as well as their comparison with developed countries, mostly the EU member states.² The relationship between the structural characteristics of banking profitability and a country is especially inductive, because it clarifies the motives of an entry of foreign banks and explains the accelerated expansion of the banking sector in all transitional countries.

Extremely fast growth of banking in Serbia, almost on the edge of the credit boom, has lasted since 2003. However, the real achievement of this expansion can be investigated in comparison to the structural characteristics of domestic banking with the banking in transition countries, which have already achieved the strategic goal of Serbia - join the EU. The relationship of these characteristics and profitability at the same time facilitate the prediction of future developments in the banking sector.

Structural development of the banking sector in all EU countries, the transition, and as well as developed, is continuously analyzed by the European Central Bank (ECB).³ The methodology and statistics of ECB were predominantly used in this paper, because of consistency of the research procedures and comparability of the data. European Bank for Reconstruction and Development (EBRD) data were also used, especially concerning privatization and efficiency intermediation.⁴ The data about the banking sector in Serbia were primarily retrieved from the EBRD statistics data, and the remaining part, from the National Bank of Serbia (NBS).⁵

¹ Vlastimir Vuković, Belgrade Banking Academy, Belgrade

² See Bonin et al. (2005) and Fries et al. (2006).

³ ECB (2007a).

⁴ EBRD (2007).

⁵ NBS (2007).

The paper examined the following structural characteristics: 1) the level of privatization, 2) the sector capacity, 3) the network density, 4) the market concentration, and 5) the efficiency of banking intermediation. The level of privatization was measured by the percentage share of foreign and state-owned banks assets in the total banking assets. The selected indicator of the capacity of the banking sector was assets per employee, and the indicator of the network density was the number of inhabitants per branch. Herfindahl-Hirschman index and the ratio of concentration of the five largest banks were used for the establishment of the market concentration. The efficiency of banking intermediation was assessed according to the share of credits to the private sector, particularly households, in total of domestic credits, compared to the percentage of banking assets in GDP and the capital multiplier.

Profitability of the banking sector was presented using two indicators - return on asset (ROA) and return on equity (ROE). By comparing the profitability and the structural characteristics of their relationship, the correlation and causal connection was examined.

The banking sectors of the selected group of countries have mostly passed the stages of development, which are only yet to come in the domestic banking, which justifies their choice. Also, many other variations of grouping of countries are possible, depending on the target and the scope of research.⁶

Structural characteristics

The structural characteristics of the eight transition countries banking sectors - the seven members of the EU and Serbia - during 2006, are shown in Table 1. The first two indicators show the level of privatization, the third represents the sector capacity, the fourth network density, and the fifth and sixth the market concentration.

Table 1. Some structural characteristics of banking sector in 2006

Country	Foreign-owned banks (%)	State-owned banks (%)	Assets per employee (Eur millions)	Population per branch	Herfindahl-Hirschman index(HHi)	Concentration ratio 5 largest banks (C5)
BG ⁷	80,1	1,8	0,83	1.379	707	50,3
CZ	84,7	2,2	3,03	5.458	1.106	64,1
HU	82,9	7,4	2,39	3.105	823	53,5
PL	74,3	21,1	1,22	7.393	599	46,5
RO	87,9	5,9	0,87	4.828	1.165	60,1
SL	29,5	12,6	2,94	2.885	1.300	62,0
SK	97,0	1,1	2,13	4.588	1.331	66,9
SRB	78,7	14,9	0,53	3.428	614	47,2

Sources: ECB (2007a), EBRD (2007), and NBS (2007).

Note: asset share of foreign-owned banks and state-owned banks (in per cent).

At first glance it can be seen that the foreign-owned banks share in the banking in Serbia is greater than in Slovenia and Poland, and approximately close to Bulgaria and Hungary. Numerous studies confirm that "the foreign bank presence has been linked to growth and better allocation of resources in emerging markets."⁸ Influence of foreign banks entry explains and reduces the gap in bank efficiency between Central and Eastern European and Western European countries (Weill, 2007). It is redundant

⁶ For example, Tore de la Augusto, Peria Maria, and Schumkler Sergio in the research called "Involvement with SMES: Beyond Relationship Lending" (World Bank Conference, May 5-6, 2008) comparatively analyze larger group of banks in four countries: Argentina, Chile, Colombia and Serbia.

⁷ Abbreviations: BG – Bulgaria, CZ – Czech Republic, HU – Hungary, PL – Poland, RO – Romania, SL – Slovenia, SK – Slovakia, SRB – Serbia.

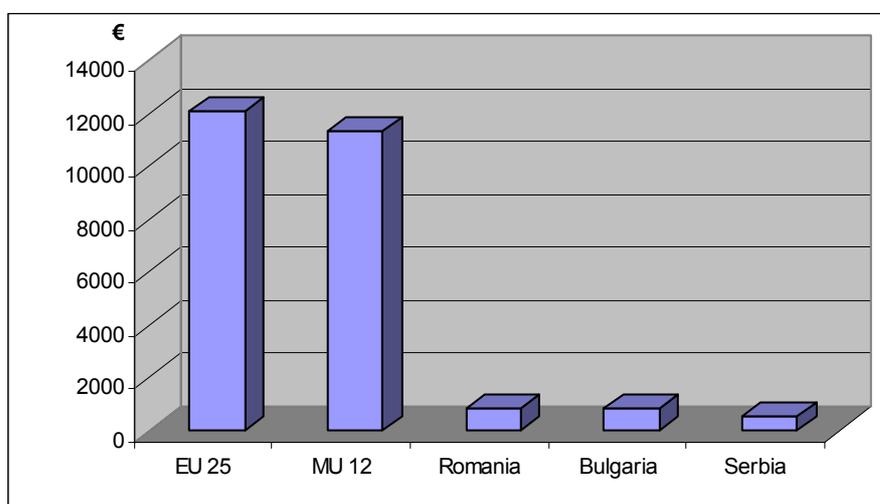
⁸ Compare Correa (2008), p. 24.

to emphasize that minimizing of barriers for entry has been the requirement for penetration of foreign banks in the banking sectors of transition countries. Entry liberalization at the same time is also the important structural characteristic.

According to the participation of state-owned banks, Serbia is the second behind Poland and Slovenia and close to average, which is a consequence of long delays in start of the process of domestic economic transition (Sorsa et al., 2007). Generally, the level of privatization of the banking sector in Serbia is close to the approximate average of the observed group of countries in transition.

According to the methodology of ECB the assets per employee is the indicator of the capacity of the banking sector. According to this indicator, the capacity of banking in Serbia does not fall behind only for the other transition countries - older EU members (two to six times), but also for new members - Bulgaria (to 36%) and Romania (to 39%). However, the true scales of this slowdown are shown compared to the average assets per employee for the EU 25 countries and MU 12,⁹ shown in Figure 1.

Figure 1. Average assets per employee in 2006



The capacity of banking in Serbia, despite the increase in assets per employee to 2.2 times since 2003, falls behind by 23 times from the average of the EU 25.¹⁰ At the same time, the banking sector in Czech Republic, which is considered to have the largest capacity in the group, falls behind 4 times compared to the capacity of the EU average.¹¹

However, the differences between the banking analyzed in these eight countries and the other EU members are much less when compared to the other indicator of capacity - population per employee (EU 25 - 152, BG - 287, CZ - 271, HU - 256, PL - 245, RO - 369, SL - 170, SK - 275, AUT - 263).

⁹ EU 25 stands for ECB for the period until the end of 2006, when the Union had 25 member states, and MU 12 stands for Monetary Union (12 countries participating in the euro area), for the period until the end of 2006.

¹⁰ "Tight monetary policy of the NBS continued into the last quarter of 2006 ... A note should be taken of the fact that monetary policy tightness was underpinned by the monetary policy measures implemented as far back as end of 2005 and first half of 2006.", NBS (2007), Inflation report, Fourth quarter 2006, p.5. It is this restrictive character of monetary policy, especially the high reserve requirement ratios, one of the primary causes of low levels of assets per employee in the banking in Serbia. The degree of monetary restriction reflects the EBRD monetization indicator - broad money (M2) in per cent in gross domestic product (GDP), according to which Serbia has 2.2 to 5 times less per unit of GDP than in other transition economies (EBRD, 2007). Placing the objective of curbing inflation is the argument for international money sterilization, but despite the record sub monetization there are high inflation expectations, which have put Serbia for years among the countries with the highest inflation in Europe.

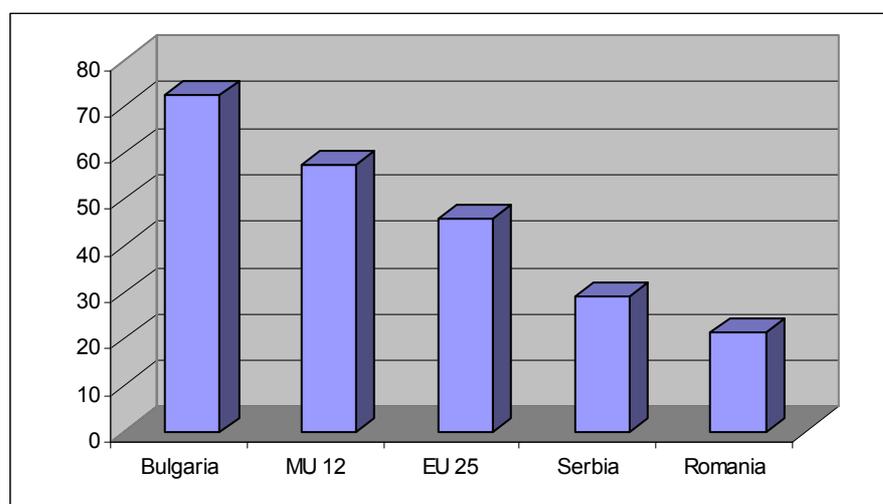
¹¹ The average member of the EU 25 exceeds EMU 12 because of United Kingdom, whose banking sector, after the inauguration of euro, according to the size of assets acquired the leading position in Europe from the banking in Germany.

Within the group of eight countries, measured by this indicator, the capacity of the banking sector in Serbia is greater than in Czech Republic, Slovakia, Bulgaria, and Romania.

Population per branch ECB also makes the indicators of capacity and the network density (ECB, 2007). The network density in Serbia is greater than in Poland, Czech Republic, Romania, and Slovakia.¹² It is interesting that the banking sector in Serbia, according to the network density, exceeds eleven EU 25 countries, including the Netherlands (4,728), United Kingdom (4,700), Ireland (4,549), and Sweden (4,531).

The proportion of the population toward branch can be expressed as the number of branch per 100,000 people. This relationship shown in Figure 2 illustrates the gradual convergence of the network density of branches of "old" and "new" members of the EU.

Figure 2. Branch per 100.000 people in 2006



The presented data testify that the gap is minimized in the network density between the banking in transition countries and the EU banks. They show that the network density of branches is no longer the obstacle in the development of banking, not only in Serbia but also in other transition countries in Europe. At the same time, it is the proof that the network density is not sufficient precondition for the development of a banking sector in one country.

According to the density of branches in the banking network, Serbia exceeds some developed European countries and is closer and closer to the EU average, while by the assets per employee it is at the bottom of the ladder comparing to other transition countries - members of the EU. The growth rate of assets per employee is significantly limited by the monetary policy.

Market concentration of the banks in the observed transition countries is noticeably low, especially in Poland and Serbia. Concentration in the banking markets in all eight analyzed transition countries is lower than in some of the developed EU countries - Finland 2,560 HHi and 82.3% C5, Belgium 2,041 HHi and 84.4% C5, Netherlands 1,822 HHi and 85.1% C5 (the ECB, 2007). The low level of market concentration is suitable for the development of competition. Therefore, these indicators point to the respectable level of competition in all eight countries, considering that the official lower limit of oligopoly in Europe is 2000 HHi points, and in the United States 1800 HHi points. The conclusion about the banking market in transition countries can be corroborated by the information that most credit institutions in these markets are branches and subsidiary banks from the developed EU countries.

¹² Bulgaria still has a greater network density (1.379), but it has been the result of small offices (the number of employees per branch is threefold less than the EU average, in contrast to Serbia, whose banking units have approximately the same average employment as a branch in the EU 25). Therefore, an indicator branch per 100,000 people Bulgaria exceeds the EU 25 average for even 58% and the average of MU 12 for 27% (Figure 2).

Because of "banking specificities", there is an opinion that the concentration of banks is not directly correlated with the degree of competition, which is proved by the results of the empirical researches (Claessens, 2006). However, the fact that the economically developed countries are practicing severe monitoring and limiting the concentration of banks in order to protect from the competition, confirms the power of the evidence about their interdependence.

Despite the low concentration, real interest rates on credits in the transition economies surpass the same rate in the concentrated and oligopolic markets of the developed countries members of the EU. However, it is not the proof of autonomous "pricing" in relation to market concentration, but it only confirms the inevitable gradual "catch up" process. The banking markets of the observed eight countries, as well as all others, are characterized by product differentiation, characteristics of monopolistic competition markets.

Intermediation efficiency level reflects the structural development of the banking sector. Important indicators of the intermediation efficiency are the ratio of private sector credit and credits to households and GDP, the proportion of banking assets to GDP and the capital multiplier.

Table 2. Some indicators intermediation efficiency level

2006 Country	Domestic credit to private sector (%)	Domestic credit to households (%)	Total banks asset in per cent of GDP	Capital multiplier (A/E)
BG	47,4	16,6	88,4	13,2
CZ	39,9	16,5	101,3	19,1
HU	54,6	18,5	104,0	15,0
PL	33,4	15,6	69,7	13,6
RO	26,3	11,2	53,1	12,8
SL	67,1	17,0	114,4	16,8
SK	39,2	13,1	93,6	17,3
SRB	18,9	7,2	61,0	5,7

Sources: ECB (2007a), EBRD (2007), and NBS (2007).

Note: Domestic credit in per cent of GDP.

The largest credits to the private sector in relation to GDP provides the banking sector in Slovenia, then Hungary and Bulgaria. Slovenia at the same time has the highest GDP per capita (19,219 USD), while Serbia has the lowest GDP per capita (3,835 USD) and the least credits to the private sector¹³ in relation to GDP. According to the domestic credit to households in per cent of GDP, Serbia is also convincingly on the tail of this group of countries (EBRD, 2007). However, in the total banks assets toward GDP the lowest is Romania, and then Serbia and Poland. Indirectly it may be concluded that banks in Serbia have markedly lower share of private sector credits in total assets, which may be explained by the relatively high volume purchase two-week repo securities.

Banking sector in Serbia has by far the lowest capital multiplier, and the maximum capital adequacy. Banking in other seven countries has two, three or four times higher multiplier, but it is their leverage effect that is still considerably lower than in the developed EU member countries. Potential leverage gives evidences about the possibilities of growth of banking sector assets of all eight countries in the next years.

The indicators - high degree of privatization, relatively dense network of branches and low market concentration - confirmed that according to the structural characteristics, banking sectors in the transition are gradually approaching economic developed EU countries. The stopping capacity measured by

¹³ By definition, cross-border bank lending is excluded, although guaranteed by the domestic banks (IMF, 2008).

assets per employee, as well as the modest level of intermediation, signals significance of a long term process of economic transition.

Banks profitability

ROA and ROE banking profitability of the observed eight countries in the transition are shown in the next Table 3. The relation between these two indicators of profitability reflects the sector leverage and the capital multiplier.

Table 3. ROA and ROE banking sector profitability in 2006 (in per cent)

Country	BG	CZ	HU	PL	RO	SL	SK	SRB
ROA	1,82	1,23	1,43	1,56	1,79	0,89	1,27	1,70
ROE	24,07	23,48	21,47	21,15	22,97	14,98	22,01	9,67

Sources: ECB (2007), EBRD (2007), and NBS (2007).

ROA indicators of the monitored banking sectors show large differences in profitability - of 1.82% in Bulgaria to 0.89% in Slovenia. Obviously, the new EU members Bulgaria and Romania have the highest ROA profitability, and Slovenia that is the most developed, the lowest. However, the ROE profitability is extremely equated (from 21.15% to 24.07%), except Slovenia (14.98%) and Serbia (9.67%). Equalization is the result of the influence of the capital multiplier, which allowed the same banks from the developed EU14 countries a similar return on equity of their subsidiary in various transition countries. Hence, there is the founded assumption that foreign banks planned approximately equal ROE target rate, to which the management of subsidiaries customized the level of leverage.

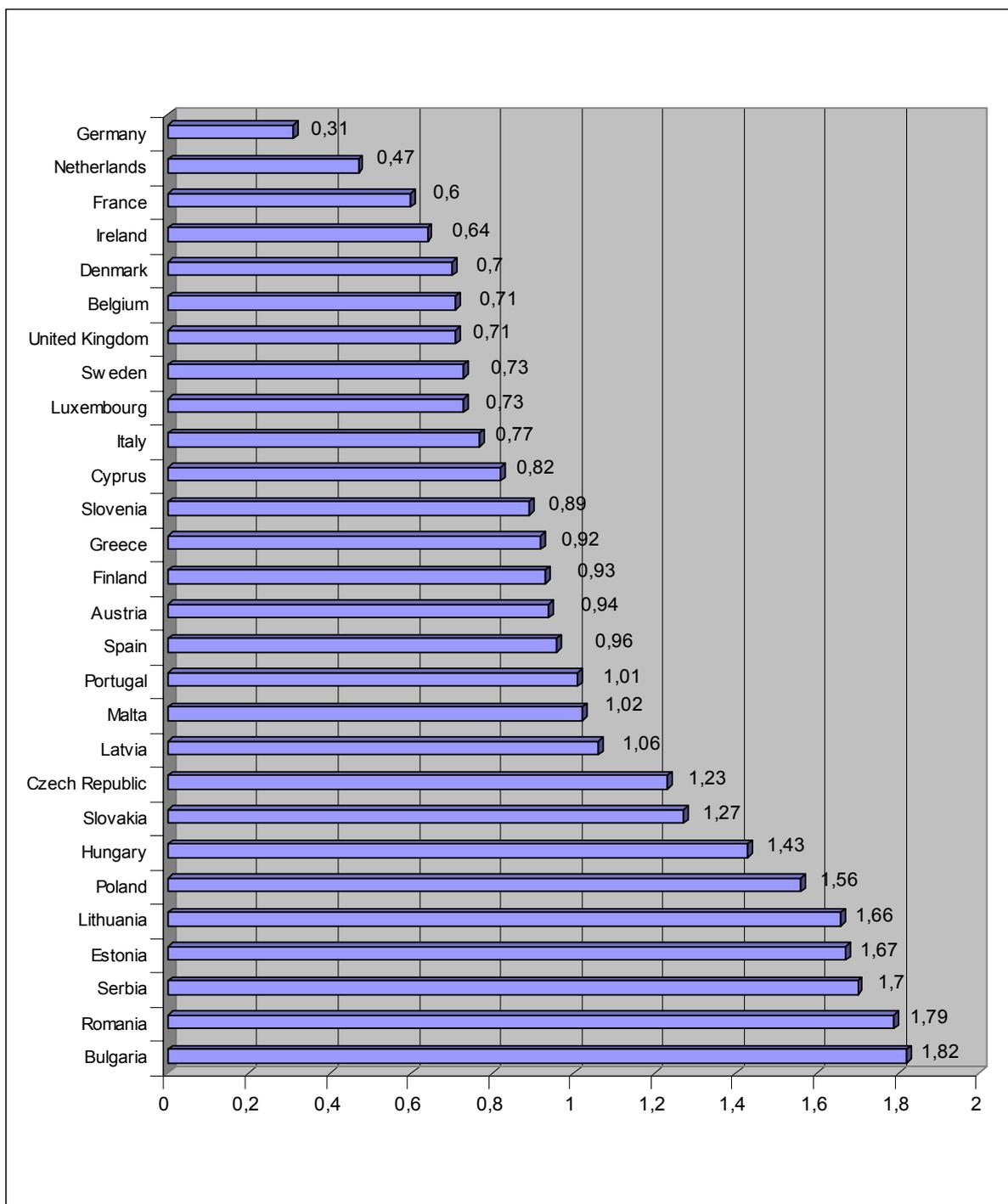
The banking sector of Serbia was ranked at the high third place by performance in 2006 with its 1.70% ROA immediately after Bulgaria and Romania. High ROA is the indicator of lagging for other countries, because this indicator shows the level of the development in banking.

The height of the banking return on assets is proportionally reverse to the sector development (Figure 3). Border line of the developed banking sectors and the sector in developing countries is presented by one percent ROA indicator, which divides the EU banking space into 11 countries with credit institutions in developing and 16 countries with the developed banking. The first group, which consists almost entirely of transitional countries (except Slovenia), ends with Portugal (1.01%), and the other starts with Spain (0.96%). The fundamental cause of this correlation is the law of diminishing returns that acts stronger with the growth of banking assets.

The negative correlation of the banking sector development and ROA profitability is enormously influenced by the country's credit rating, which determines average level risk premium rate.

Transition countries - EU member states, have the higher ROE indicator of the economically developed members, whose return on equity is ranging from 10.24% (Germany) to 23.34% (Belgium). However, the ROE discrepancy between these two groups of countries is considerably less than the difference in the ROA profitability. Five developed EU countries, apart from Belgium, had ROE indicator above 20% (Austria, Sweden, Spain and France). Relatively lower range of ROE indicators of banks in transition countries and the old EU member states is also the result of increasing capital multiplier in the countries with developed banking.

¹⁴ Raiffeisen Bank, Bank Austria HVB, Hypo Alpe Adria Bank, Societe General Bank, Uni Credito (Radzic and Juce, 2008, p. 9).

Figure 3. ROA indicators distribution in 2006

Sources: ECB (2007), and NBS (2007).

Detailed analysis of the banking sector in Serbia shows that banks in the ownership of the domestic shareholders mostly have a higher ROA and lower ROE profitability, and the banks in a foreign ownership - lower ROA and higher ROE indicator in relation to the sector average.

Rapid expansion of the international banking will continue in a great measure to affect the profitability and structural changes in the banking sector of the developing countries, despite the current financial turmoil in the world (WB, 2008).

The findings of this brief comparative analysis of the banking sectors in transition countries have significantly higher ROA and slightly higher ROE profitability in comparison with the developed members of the Union. Generally, when the ROA profitability declines, banking becomes more developed. The distribution of ROE indicator is less equitable, but the banking sectors of transition countries are in average profitable. Reducing the barriers between the banking systems of the developed and transition countries – the member of the EU (Berger, 2007) will contribute to the convergence of their ROA and ROE profitability.

Structures - profitability linkage

The basic relationship between the structural characteristics and the banking sector profitability of the seven countries in transition - the members of the EU and Serbia has already been determined – is that with the development of the structure decreases the sector ROA profitability. However, the ROE profitability remains relatively high due to the leverage effect and the capital multiplier, which grows with the development of the banking sector. The same pattern of the relation between the structure and profitability also exists in the banking sectors of developed EU countries.

Comparing the analyzed structural characteristics individually with the ROA profitability shows large differences in the correlation. The degree of privatization of banks, measured by the share of foreign-owned banks and state-owned banks in the market, is not connected in any way with the ROA profitability, in the group of the eight transition countries and as well as the EU 25 countries. Both indicators were lower in most of the developed EU countries than in transition countries (Berger, 2007).

The capacity of the banking sector, the assets per employee, shows a negative correlation with ROA profitability, so that countries with the lowest capacity have the highest ROA indicators, and vice versa. At the same time, this is a causal connection, which is a phenomenal form of the law of diminishing returns. However, the relation between the assets per employee and the ROE profitability is negligible.

The network density established on the basis of population per branch, does not show any significant connection with the ROA banking profitability of the eight transition countries and the developed member states.

Finally, market concentration, measured by indicators HHi and Cr5 also does not correlate with the banking sector of ROA profitability, as well as ROE profitability.¹⁵

Conclusion

Structural characteristics of the banking sectors in the seven transition EU countries and Serbia - a high degree of privatization, relatively dense network of branches and low market concentration - confirms that their banking is getting closer to the economically developed countries of the EU. Penetration of foreign banks from the developed countries of the EU has the strongest influence on the structural development of the banking sectors in transition countries. Foreign banks have invested their capital, introduced advanced technology, trained their staff, set an efficient organization and implemented modern management in the banking of transition countries. Therefore, the lagging in capacity, measured by assets per employee, as well as the modest level of intermediation are not insurmountable obstacles to their further development and convergence with the developed banking sectors.

The comparative analysis has shown that the banking sectors of transition countries have significantly higher ROA and slightly higher ROE profitability compared to the developed EU members. A general pattern is that ROA profitability declines as banking develops, primarily as a consequence of the law of diminishing returns. The range of ROE indicators is considerably lower, thanks to the leverage effect, but banking sectors of transition countries are in average profitable.

¹⁵ It is necessary to bear in mind that this analysis is autonomous in relation to the structure-conduct-performance framework, which uses other indicators of banking efficiency.

The individual structural characteristics are not correlated with ROA profitability, except for the assets per employee. This indicator of capacity is negatively correlation with ROA profitability, so that the countries with the most minimal capacity are in average more profitable. Thus the connection of the capacity shown in this way and ROE profitability is not significant.

Relevant data show that the analyzed group of the eight transition countries in average has a higher degree of privatization of banks and a lower market concentration than a developed banking sector. According to the privatization, the network density and concentration of the banking market in Serbia is close to the average in transition countries. The banking sector in Serbia has noticeably fallen behind by the assets per employee and the efficiency of intermediation in relation to the transition countries – the EU member states.

The current world financial crisis will definitely slow down some, but it will not stop the process of structural development in the banking of transition countries.

References

- Berger Allen (2007), “Obstacles to a global banking system: “Old Europe” versus “New Europe””, *Journal of Banking&Finance*, No. 31, pp. 1955-1973.
- Bonin John, Hasan Iftexhar and Wachtel Paul (2005), “Bank performance, efficiency and ownership in transition countries”, *Journal of Banking&Finance*, No. 29, pp. 31-53.
- Claessens Stijn (2006), “Competitive Implications of Cross-Border Banking”, pp. 151-182, in: *Cross-Border Banking: Regulatory Challenges*, World Scientific Studies in International Economics – Vol. 1, World scientific Press.
- Correa Ricardo (2008), “Cross-border Bank Acquisition: Is there a Performance Effect?” *International Finance Discussion Papers*, Board of Governors of the Federal Reserve System, Number 922, pp. 1-44.
- European Bank for Reconstruction and Development (2007), *Transition Report 2007*
- European Central Bank (2007), *EU BANKING SECTOR STABILITY*
- European Central Bank (2007a), *EU BANKING SECTOR STRUCTURES*
- Fries Steven, Neven Damien, Seabright Paul and Taci Anita (2006), “Market entry, privatization and bank performance in transition”, *Economics of Transition*, Volume 14(4), pp. 579-610.
- International Monetary Fund (2008), *Republic of Serbia: Selected Issues*, IMF Country Report, No. 08/55.
- National Bank of Serbia (2007), *BANKING SECTOR IN SERBIA*, Fourth Quarter Report 2006
- Radzic Jelena and Yuce Ayse (2008), “Banking Development In The Former Yugoslavian Republics”, IABR&TLC Conference Proceedings, San Juan, Puerto Rico, USA, pp. 1-12.
- Sorsa Piritta, Bakker Bas, Duenwald Christoph, Maechler Andrea and Tiffin Andrew (2007), “Vulnerabilities in Emerging Southeastern Europe – How Much Cause for Concern?”, IMF WP/07/236, pp. 1-40.
- Weill Laurent (2007), “Is there a Gap in Bank Efficiency between CEE and Western European Countries?”, *Comparative Economic Studies*, No. 49, pp. 101-127.
- World Bank (2008), *GLOBAL DEVELOPMENT FINANCE – The role of international banking*

SECTION V
SOCIAL AND CIVIL DIALOGUE

The Process of Establishing a Better Quality Higher Education System in Serbia

Maja Ćirić¹, Sanja Đurđić²

ABSTRACT – *On its way to becoming a contemporary, modern state ready to enter the European integrations, and become a significant partner of the developed countries in the 21st century, Serbia has encountered a great challenge in improving its higher education system. Namely, in the conditions of knowledge and economy development, human resources represent the key asset of every organization and one of the most important factors of the economic growth of a country. With respect to this, investments by the state in the development of education system is a prerequisite for the production of highly competent experts, which would, in turn, contribute to the competitive economy.*

The purpose of this paper is to present the steps which Serbia has already taken in the process of establishing a quality education system based on the Bologna Declaration, as well as to point out specific problems faced by higher education institutions during the process. The aim of the paper is to reach conclusions as to how far Serbia has advanced in this process, and how successful Serbia is in its efforts to become a country with high quality higher education institutions.

Our findings provide an insight into the improvements in higher education system that have been already done, problems that have to be solved, and effect of quality higher education and competent human resources on economic growth and development of Serbia.

KEY WORDS: *higher education system, improvement, economic growth, development*

Introduction

The last decade of the 20th century saw greater emphasis than ever before placed on higher education. In both developed and developing nations, higher education was believed to be the key to the continuing growth of national economies. Many surveys show that education is an investment in human capital that pays individual and social dividends. Data from the U.S. Bureau of Labour Statistics show that earnings rise and unemployment declines for each higher level of education. (Schiller, 2008, p. 17) According to the data from the Brazilian Statistical Bureau, in 1998, the difference between a monthly wage of a university graduate and a worker with no degree was 814% (Blom, 2001, p.185). This undoubtedly indicates that education is a key determinant of wages in Brazil. In Serbia the difference between average salary of highly educated employees and unqualified workers, at the beginning of the 21st century, is not as high as it was in Brazil, but it is significant. The detail data are presented in the table 1.

¹ Maja Ćirić, Faculty of Economics and Engineering Management, Novi Sad

² Sanja Đurđić, Faculty of Law and Business Studies, Novi Sad

Table 1. Employees, according to education level and average salary in March 2008(dinars)

	Total		Central Serbia				Vojvodina	
	Employ-ees	Avg. sala-ries and wages	Employ-ees	Avg. sala-ries and wages	Employ-ees	Avg. sala-ries and wages	Em-ployees	Avg. sala-ries and wages
Total	1110188	42551	818745	42806	332151	53612	291443	41837
VIII*	215425	72241	161950	72662	80016	84645	53475	70968
VII	89419	48872	66849	48730	26643	58631	22570	49294
VI	345651	38617	249399	38930	109772	45881	96252	37805
V	54775	26988	38837	27671	17090	34633	15938	25324
IV	61757	43778	50952	43978	25844	50517	10805	42836
III	197186	31416	146611	30857	46678	38085	50575	33037
II	60400	26461	45547	26029	13075	30860	14853	27784
I	85575	26461	58600	21979	13033	27404	26975	25825

* The highest level of education

Source: Statistical Office of the Republic of Serbia, Communications-Employment and Earnings, no. 187, LVIII, 08.07.2008., p. 6.

As it can be seen from the table, the data from the Statistical Office of the Republic of Serbia show that the difference between salaries of the highest level of educated employees and unqualified workers in March 2008 was 311,5%. For the same period, the structure of the unemployed, according to their qualifications is presented in table 2.

Table 2. The structure of the unemployed, according to their qualifications

Level of education	Number of unemployed people	Percentage of unemployment
VIII*	36 persons	-
VII	31.210	3.9%
VI	31.082	3.9%
V	9.767	1.2%
IV	211.218	26.6%
III	214.048	26.6%
II	43.291	5.4%
I	254.429	32.0%

* The highest level of education

Source: Republic of Serbia National Employment Service, Monthly Statistics Bulletin- Unemployment and Employment in the Republic of Serbia, No. 67, March, 2008, p. 15.

The data given show that with increase in education level, wages rise, whereas unemployment rate falls. Thus, it is perfectly understandable that more and more people see education as an investment that would provide them with a job, higher earnings and better life quality. Not only that education has positive implications for individuals, but there is compelling evidence that human capital and education are potentially important driving forces in the determination of long-run growth; see e.g. Lucas (1988), Barro (1991), Stern (1991) Mankiw et al. (1992), Benhabib and Spiegel (1994), Fernandez and Rogerson (1995), Rehme (2007), etc.

All in all, having in mind that education has a significant role in the development of an individual as well as economy, higher education institutions are in front of a great challenge of how they can respond appropriately to the needs of the society and the market. In Serbia, a range of measures was introduced by which necessary prerequisites were created for the improvement of the higher education system, as well as the quality of higher education institutions. In this paper, we will explain the most important aspects of the Law on Higher Education and Standards for Accreditation of Higher Educa-

tion Institutions and Study Programmes, in order for us to elucidate the advantages they bring to higher education in Serbia. Likewise, we believe that it is very important to point out the way in which the planned changes were implemented in higher education institutions, to put accent on the problems higher education institutions confronted in realizing the changes, and in final reflections, give opinion about the current situation in higher education in Serbia as well as future perspectives.

Legal framework for the improvement of the quality of higher education institutions in Serbia

Confronted with the challenge of involvement in European integrations, the Republic of Serbia has to create necessary legislative postulate in many areas of its social life. This refers to the system of higher education, too. Namely, it becomes necessary to keep pace with the trend of reforms in the process of obtaining higher education qualifications in Europe, defined by the Bologna process and EHEA (European Higher Education Area). Education policy of the Republic of Serbia also follows these reformation strategies. The intention is to make it possible for students to compare their qualifications with the qualifications acquired by students at other European higher education institutions, as well as the possibility of improvement of student exchange programmes or continuation of studies at a related institution in Europe, which is a prerequisite for future integration processes and free exchange of intellectual resources in Europe.

In that regard, the Republic of Serbia adopted the Law on Higher Education in 2005, which implements completely the Bologna Declaration, signed by our country in September 2003. With that act Serbia bound itself to coordinate higher education policy with a group of European countries, the aim of it being to form European zone of higher education by 2010 and, at the same time, to preserve cultural, linguistic and national specificities, which is one of the basic postulates of Bologna Declaration. According to Article II of the Law on Higher Education (hereinafter: the Law) the field of higher education is of special importance for the Republic of Serbia as it is a part of international, and especially European educational and scientific field. Three subjects are responsible for the Law's implementation: the National Council for Higher Education, the Commission for Accreditation and Quality Assurance and the Ministry.

Immediately after it was set up, the National Council for Higher Education and the Commission for Accreditation and Quality Assurance started making norms and standards, so that the accreditation of higher education institutions and study programmes in compliance with Bologna Declaration could start as soon as possible. The European Qualifications Framework was taken as a point of departure, as well as the experience of majority European countries signatories of Bologna Declaration, with the aim to adjust it and implement as much as possible in the system of higher education in Serbia. The National Council approved the following acts on October 20, 2006: Standards for Accreditation of Higher Education Institutions and Study Programmes, Standards for Self-certification and Assessment of Quality of Higher Education Institutions, and the Standards and Procedures for External Quality Assurance of Higher Education Institutions. On December 11, 2006, the Commission for Accreditation and Quality Assurance became a full member of INQAAHE (International Network for Quality Assurance Agencies in Higher Education). (Grupa autora, 2007, p.3).

The novelties in the Law are a consequence of the legislator's intention for the system of higher education in Serbia to become a part of international, especially European educational area, as well as to enable our institutions to enter the process of acknowledgement of higher education qualifications in Europe. They are mostly reflected in types and levels of studies, introducing the European credit transfer system (ECTS – a system of unique point scoring for students' study obligations), creating study programmes that are compatible and comparable to study programmes organized/carried out at higher education institutions in other European countries, and providing quality of higher education. The innovations mentioned are indispensable assumptions for synchronization with European system of higher education and improvement of academic mobility of professors and students, which were postulated in the Law, article IV, as one of the principles of higher education.

When it comes to types and levels of studies, the Law makes difference between three levels of studies. First level studies are basic academic studies and basic professional studies. Second level studies are graduate academic studies – master, specialist professional studies and specialist academic studies, whereas doctoral academic studies represent third level studies. The previous law did not offer professional studies, master studies, nor doctoral studies, but only basic academic studies, postgraduate studies and doctoral dissertation. Basic academic studies may last three or four years, whereas master studies last a year or two, depending on the duration of basic studies. More precisely, the volume of studies is expressed with the sum of ECTS credits, which is yet another novelty in the Law. Namely, a certain number of ECTS credits is assigned to every course within a study programme, whereas the volume of the studies is indicated with the sum of ECTS credits. A sum of 60 ECTS credits corresponds to the average of overall student's engagement of 40-hour work week during one academic year. Accordingly, basic academic studies carry from 180 credits (when they last for three years) until 240 (when they last for four years). Basic professional studies carry 180 ECTS credits, specialist professional studies at least 60 ECTS credits. Graduate academic studies carry at least 60 ECTS credits (when the total sum of ECTS credits previously acquired at basic academic studies is 240), or at least 120 ECTS credits (when the total sum of ECTS credits previously acquired at basic academic studies is 180). Doctoral studies carry at least 180 ECTS credits with a previously acquired sum of at least 300 ECTS credits during basic and graduate academic studies.

Legal solutions that are given, seen in providing high quality, transparency, measurability of study work-load and introduction of European credit transfer system, are all in the function of involving Serbia in a unique European high education area, which creates conditions for higher mobility of students.

In its efforts for the improvement of the quality of the higher education system in Serbia, higher education institutions and study programmes, the National Council for Higher Education adopted the following acts: Standards for Accreditation of Higher Education Institutions and Study Programmes; Standards for Self-certification and Assessment of Quality of Higher Education Institutions; and Standards and Procedures for External Quality Assurance of Higher Education Institutions. Standards for accreditation of higher education institutions comprise 13 standards. They are as follows: basic tasks and aims of a higher education institution, planning and monitoring, organization and management, studies, educational-scientific and artistic work, academic staff, non-academic staff, students, facilities and equipment, library, course books and information technology, financial resources, inner mechanisms for quality assurance, public character of their work. Twelve accreditation standards of the study programmes are: the structure, purpose and objectives of the curricula; competences of the graduates; curriculum; quality and international compliance of study program; enrolment of students, their grading and promotion; the faculty staff; material resources; quality control; and distance learning.

Obviously, the purpose of Standards for accreditation of higher education institutions is assuring the quality of their work by making it better. Namely, higher education institutions are required to define clearly and in detail strategy of ensuring the quality of teaching process, management of higher education institution, extracurricular activities, as well as conditions of work and study. Higher education institutions are especially urged to monitor the quality of teaching, conducting the exams, students' efficacy during the course of their studies in the whole as well as in specific subjects, the quality of the course books, and taking actions for removing perceived faults. It is important to emphasize the active role that students have in adopting and implementing the strategy of quality assurance. The assessment of teaching process quality, established through a poll given to students, is especially important.

The purpose of Standards for accreditation of study programmes is improving their quality, which is a prerequisite in students' obtaining competence and, consequently, creating high-quality and competent human resources. Study programme quality control implies constant and systematic monitoring of its realization and taking actions for the improvement of the quality regarding curriculum, teaching, professors, assessment of students' course books and required literature. These measures aim to ensure obtaining competence and academic skills which are socially justified and useful. Attempts are made to achieve both development of creative skills and acquiring specific practical skills needed for practicing a profession. Specifically, the main aim of the Standards for accreditation of study programmes

is encouraging development of competences, namely general competences or transferable competences and course-specific competences which serve the function of realizing professional and scientific occupation at a high level of quality. Focus on the results of study programmes expressed in competences is rather evident. Hence, competences, by which we imply synthesis of theoretical and practical professional knowledge and skills, are a global aim of education. (Devjak, 2008, p. 2).

Implementation of quality of standards, established in the Law on Higher Education and Bylaws on standards is of essential importance for the improvement of the quality of higher education system and involvement of the Republic of Serbia in the unique European area of higher education.

However, the implementation of the standards of quality is a great challenge for higher education institutions in the Republic of Serbia. On their way, the institutions are confronted with various problems. We will try to explain these problems through a survey of how changes are conducted in higher education institutions.

Leading changes in higher education institutions in Serbia

Every time when a change needs to be accepted and implemented in an organization, there is resistance on the part of people. One reason for that is, to a great extent, psychological in its nature. People are difficult to renounce rooted habits and routine forms of behaviour. Fear of changes is provoked by both personal insecurity and fear of losing obtained position and privileges in the organization. In order for a change to be implemented successfully, a whole range of steps need to be taken. It can not be expected from the employees in the organization to accept the change ad hoc, neither can it be expected that the change be carried out successfully and incorporated into organizational culture through short actions on a one-time basis. Implementation of changes, especially if we are concerned with complex changes such as implementation of quality standards in higher education institutions, requires a long term, well-planned and guided process.

There are different approaches on how changes should be conducted. For instance, when organizations run their businesses in relatively stable circumstances resembling calm sea, which is stricken by a storm once in a while, then it is possible for the change to be carried out in three steps, as suggested by Kurt Lewin (Robbins, 2005, p.314). The process begins with unfreezing the status quo, moving on to the changing stage and refreezing, so that the change could take root. Nevertheless, if changes are a part of everyday business, this approach is not acceptable as there is no long-lasting balance and employees are forced to accept the changes as a normal pattern of behaviour. In such conditions without appropriate leadership and management, successful functioning of organization is not possible.

Education system in Serbia can be perceived as calm sea which functioned for a long time without any changes, and then it was suddenly stricken by a storm. Depending on the attitudes of their management and employees, higher education institutions dealt with changes and problems that were arising in different ways. Just like companies on the market, some higher education institutions coped better in changed circumstances, some worse. Starting from John Kotter's belief that managing changes in an organization can be successfully conducted through a process of eight phases, we will try to describe problems which some higher institutions confronted in the process of implementation required. Eight phases that were suggested by Kotter as a model for managing changes successfully, are as follows: (Kotter, 1996, p.33)

5. Establishing a sense of urgency
6. Creating the guiding coalition
7. Developing a vision and strategy
8. Communicating the change vision
9. Empowering employees for broad-based action
10. Generating short-term wins
11. Consolidating gains and producing more change
12. Anchoring new approaches in the culture.

It is of crucial interest to raise public awareness of the necessity for the change in order to achieve needed cooperation inside an institution of higher education. However, a part of Serbian intellectual elite holds the stand that these changes, if implemented according to the Bologna Declaration, are a wrong move and that the education system which has been working for years is much better. On the other hand, the rest of the elite declared itself to be a pro-change, while in reality they can hardly renounce their old habits. Only a small portion of people working in higher education institutions can truly realize the necessity for changes and are prepared to implement them. Those people are mostly young people, energetic professors and assistants who have not been fully satisfied with their old system of education. Since they have been the ones who eagerly want their country as well as their careers to develop, they have been initiators of the changes and the first ones to implement the new standards. In the process of implementation, they have been supported by some older colleagues, the ones that had the opportunity to study at different universities abroad, so they were able to find the advantages and disadvantages of the education system in their own country. Thus, they were able to help their young colleagues by advising them and giving them further suggestions.

Successful transformations in such organizations stress the need for making a team which would consist of managers (or even owners in some private institutions) and an adequate number of competent people. Individuals do not have enough power to overcome the tradition and inertia by themselves. That is why the changes cannot happen without the support of leading people in an organization. Several institutions of higher education in Serbia have formed more than one team to help the implementation of the standards. These teams consist of professors and assistants, who are being coordinated by the management of the faculty. Rising problems are related to the fact that most of the work has been done by the assistants, but their position does not give them enough power to carry the burden of changes which are supposed to be done. Beside that, team work is possible only if the members of the team are competent, free from their sense of self-importance, and truly eager to accomplish their goal. However, very often positions in the team have been filled by people who failed to meet the required criteria for successful team work. The situation is aggravated by the existence of a great number of teams which are supposed to work together. In that kind of situation, there is a need for a successful management which would organize and coordinate these teams, but this failed to happen on several occasions. As a result of this, a needless repetition of the work already done caused discontent among team members as well as bad working atmosphere.

The incompatibility of the teams was also due to the lack of a clearly defined vision and strategy. Without a clear vision which controls the decision making, each choice which needs to be made by the employees could easily become an endless debate. That is to say, every institution of higher education in Serbia has a defined vision, mission, goals, and tasks. However, the first problem is the fact that they have not been defined properly, and a second one is that they have not been recognized and accepted by the employees. That is why they seem to be only words on paper.

Kotler says that the vision of change needs to be communicated, that is to say, spread around the organization. Every employee needs to be familiar with the vision of the organization and the change that needs to be made for the purpose of its accomplishment. Changes require sacrifices and people are prepared to make these sacrifices if only can they see any potential benefit from them. This is the reason why communication is so significant, since it is used to convince people that these changes would bring positive results. To do this, management needs to show how it is supposed to be done and how these changes need to be implemented. They need to know that people can be easily influenced, by influencing their common sense, but also by influencing their emotions. Sometimes emotions play a much bigger role in decision making and accepting changes than common sense. A good manager needs to know how to achieve just that. In some institutions of higher education in Serbia the problem was that nobody could realize the importance of vision, so very little time was dedicated to its spreading through an organization. Thus, some comments could be heard, like: "Why are we doing this now?", "I have some better things to do", "How long will this take?", etc. All this could have been avoided if the vision had been communicated and if the employees had truly understood the importance of changes for the future of their institutions.

Preparing the employees for a wide independent action includes disposition of the barriers on the way to fulfilling the vision of change. When economic organisations are concerned, the most common obstacles can be formal structure, lack of competence, bad information system, bad management, and lack of financial means. In institutions of higher education the greatest barriers which teams have been facing on their way to implementing a quality standard have been the lack of professors and assistants needed for realization of study programmes. This is the problem that has affected both public and private faculties. Teams at public faculties have been adjusting their study programmes to the academic staff they have, while private faculties tend to employ as many professors and assistants as they can to make a good study programme. One of the problems noticed is that on the human resources market in Serbia, it is really difficult to find people who have a doctoral degree. Even bigger problem is that the ones that have this degree have been mostly working in economy, and not teaching, so they have no teaching experience, no published textbooks or articles in international magazines. This is probably a result of the previous higher education system. Namely, the fact that there is a small number of people with doctoral degrees in our country shows that either the previous system did not encourage people to pursue a higher education or that the ones who wanted to pursue it could not do it due to the fact that there was a number of professors whose feeling of self-importance made them scared of competition. Whichever reason it may be, it can be stated that this goes in favour of the statement about the necessity of change in higher education system of Serbia. Another barrier observed by the teams while doing their work is that even the professors that have been working as teachers for years have not published any articles in journals listed in SCI and SSCI. This implies that if these professors do not publish their papers in some of the leading international journals very soon, their competence for teaching and mentoring PhD studies will become an issue. Furthermore, there is an evident lack of adequate space for teaching to take place. One of the Standards for Accreditation Study Programmes has stated that an institution has to have at least two square metres per student, while in reality a great number of institutions had not fulfilled such conditions until the standard was prescribed. Private faculties felt the need for investing in building new facilities, or renting the old ones that could be functionally adapted for teaching to take place. Thus, the teams that have been working on the implementation of the standard practically depend on the will and financial means of the owners of these faculties to solve the problem. The situation with public faculties has been even more complicated since they have been limited by and the Standard on one side, and the inability to invest into building new facilities by themselves on the other. This problem led to the fact that some public faculties have not been able to accredit all of their study programmes. These have been some of the biggest obstacles which all the faculties in Serbia have been faced with. Besides these, there have been other but less important issues, and since they differ from faculty to faculty, they will not be discussed any further.

Time is needed in order for these radical changes to take place. However, without some short-term successes people will lose faith in the final result. A good short-term success needs to be: visible, indisputable, and related tightly to the final goal of change. The role of these short-term successes is that they act as a proof to show that sacrifices do pay off and that the initiators of these changes get rewarded. They also help refining the vision and strategies, disabling the actions of cynics, as well as creating a driving force for further work. Having in mind the fact that all Serbian institutions of higher education have to go through the process of accreditation, the evaluation given by the Commission for Accreditation serves as a genuine confirmation whether a certain institution has managed to implement successfully both the standards related a particular institution and the standards related to its study programmes. This evaluation can be either positive, negative, or in a form of a warning for the institution to resolve certain irregularities in order to get a positive evaluation. By getting a positive evaluation by the Commission for Accreditation, an institution of higher education receives an official acknowledgement for its entire work on improving the quality of that institution. This kind of acknowledgement is an extremely important short-term success because it shows that the work has finally paid off. Employees that participated in implementing these changes get rewarded, while those that were against it stay a minority.

However, the thing that each institution of higher education has to have in mind is that getting a positive evaluation by the Commission is not the final stage in the process of change. Until these changes are deeply implanted in the culture, these new approaches are prone to regression. It happens some-

times that the initiators of changes exaggerate in boasting about them, take things easy, and the opposing parties use that to undermine the project. That is why it is necessary to consolidate the advantages achieved and initiate further changes. Namely, in each institution of higher education there is always a possibility for further development and improvement of study programmes, teaching process, scientific-research activities, non-academic staff, facilities, information, and library resources. With respect to this, every higher education institution has to be aware of the fact that the time has passed when one could work for years with making small and insignificant changes. Today, changes and need for constant adjustment to the environment is a model of behaviour which needs to be looked up to not only by economic organizations but education institutions as well.

Thus, it is necessary to implant all the changes, as well as all the improvements planned for the future in the culture of an organization. The change can become sustainable only when it becomes “the way we do it here”. Having in mind that people are not only rational but also emotional beings, we need to find an appropriate way to motivate them to leave the old and accept the new culture.

Summary

At the beginning of the 21st century all the economies in the world have been faced with a lot of challenges: fast and radical changes in the surrounding countries, increasing global competition, global financial crisis, increasing importance of new information technologies, and domination of knowledge as a key factor that influences competitive advantages. In such circumstances it is crucial for every country's economy to have a higher education system which will provide competent experts capable of using their knowledge to contribute to economic growth and development of the country. Beside that, people are becoming more aware of the fact that by investing in their own education they get the chance to find a better job and improve their life circumstances. Thus, we can state that in the 21st century the institutions of higher education are becoming more important, not only to a country but also to an individual. In compliance with all the above mentioned, the actions have been taken to improve the system of higher education in Serbia.

In this paper we have drawn attention to some of the most important aspects of the Law on Higher Education and the Standards for accreditation of higher education institutions and study programmes. We have explained their primary goal which is reflected in fulfilling systematic requirements for education of highly competent students. Then, we have explained the way to conduct changes in institutions of higher education while they are trying to implement established standards and improve their own quality as well as the quality of their study programmes. We have also drawn attention to the most important mistakes made by the institutions and barriers they have been facing.

Conclusion

At the very end of this paper it should be said that Serbia has advanced its higher education system to a great extent by passing a new law and standards for accreditation. However, what is still left to be done is: to define a clear education policy of the Republic of Serbia, to invest more intensely into the development of science and education, to adopt the National Strategy of the higher education system reformation, to adopt Bylaws to the Law on Higher Education, as well as to follow the process of implementation of the international standards and to constantly pass and adopt Serbian National Reports on Bologna Process Implementation. All the regulations mentioned, with appreciating the experiences of other countries, would be used to make hypotheses for even more successful reformation of the higher education system. When the institutions of higher education are concerned, they have faced reality that the world is changing and they need to follow it. If these institutions want to use their qualities to compete with other higher education institutions in the world, they need to change and improve constantly by investing in all their resources, especially the human ones.

References

- Barro, R. J. (1991). Economic growth in a cross section of countries. *Quarterly Journal of Economics*, 106, 407-44.
- Benhabib, J., Spiegel, M. (1994). The role of human capital in economic development: evidence from aggregate cross-country data. *Journal of Monetary Economics*, 34, 143-73.
- Blom, A., Holm-Nielsen, L., Verner, D. (2001), Education, Earnings, and Inequality in Brazil, 1982-1998: Implications for Education Policy *Peabody Journal of Education*, 76(3&4), 180-221.
- Devjak, S., Devjak, T. (2008), Organizacioni aspekti uvođenja kompetentnog modela bolonjske reforme studijskih programa, *Zbornik SYMORG-a Menadžment i društvena odgovornost*, Beograd.
- Fernandez, R. and Rogerson, R. (1995). On the political economy of education subsidies. *Review of Economic Studies*, 62, 249-62.
- Grupa autora, (2007), Akreditacija u visokom obrazovanju, Ministarstvo prosvete i sporta Republike Srbije, Beograd.
- Kotter, J., (1996) *Leading change*, Harvard business school press, USA.
- Lucas, R. E. (1988). On the mechanics of economic development. *Journal of Monetary Economics*, 22, 3-42.
- Mankiw, N. G., Romer, D. and Weil, D. N. (1992). A contribution to the empirics of economic growth. *Quarterly Journal of Economics*, 152, 407-37.
- Rehme, G. (2007) Education, Economic Growth and Measured Income Inequality, *Economica* 74, 493-514.
- Robbins, S., Coulter, M., (2005) *Menadžment*, Data Status, Beograd.
- Statistical Office of the Republic of Serbia, *Communications-Employment and Earnings*, no. 187, LVIII, 08.07.2008.
- Republic of Serbia National Employment Service, *Monthly Statistics Bulletin- Unemployment and Employment in the Republic of Serbia*, No. 67, March, 2008.
- Grupa autora,(2007),Akreditacija u visokom obrazovanju, Ministarstvo prosvete i sporta Republike Srbije, Beograd.
- Zakon o Visokom obrazovanju
- Stern N. (1991) The determinants of growth, *Economy Journal*, 101, 122-133.
- Schiller, T., (2008) Human Capital and Higher Education: How Does Our Region Fare?, *Business Review* (Federal Reserve Bank of Philadelphia), First Quarter, p16-26.

At the Turns of Centuries and Millennia - Challenges of Globalization and the Technology of the Information Society¹

Slavenko Grgurević²

ABSTRACT – *The global systems of trade, finance and production act as a tissue connecting progress and the lives of individual human beings, communities and nations all over the world. Modern communication networks and IT systems have dramatically changed the very essence of communication. It may appear that mankind is now at the state of momentum that has brought it very close to the ideal of ascendancy to perfection. But this is just a deception, because our civilization has never found itself so dangerously close to Armageddon.*

Our selfish attitude towards the environment and numerous problems that this attitude generates, such as overpopulation, poverty, widespread pollution, alienation and a threat of destruction for our civilization, have forced the best minds of the industrialized world to question the very foundations of modern science and its use. Far from being solipsistic or culturally arrogant, they go back to the tradition of ancient civilizations of the Far East in their-quest for an objective view of Nature that does not ride out the spiritual and the metaphysical views of the world. To paraphrase famous Iranian scholar Syed Hossain Nasr, if our planet is in danger of plunging into disarray and chaos, then it is so because of the West's obsession with the material and separation of the life on this planet from reality that surpasses it. It is impossible to introduce order into the realm of Nature without first removing the causes of disorder, it is equally impossible to view human existence outside the framework of existence of all things.

A fundamental reassessment of the phenomenon of progress of our civilization requires an in-depth analysis of the very meaning of progress. The concept of progress that has prevailed for centuries and that has brought our civilization to the verge of self-destruction puts emphasis on incessant material progress and growth. There can be no more illusion that material growth has supremacy over spiritual growth, but this, one the other hand, gives us reason to believe that the survival of our civilization is possible.

Contrary to mechanistic epistemology, contemporary views of the dynamics underpinning the key processes in nature and society proceed from an interpretation focusing on the hidden dimensions of a new entropic paradigm. Such interpretation fundamentally change our positions on the meaning of history and progress and reject the illusion that technology is the ultimate tool for the salvation from chaos into which our civilization is sinking. Adjusting the rhythm of development of our civilization to the conditions prevailing in nature is the only way to slow down the process of entropy and preserve the biosphere and mankind as a whole.

KEY WORDS: *globalization, Technology, information, society, metaphysics*

Introduction

"If we ask the question of what really constituted the great exploit of Christopher Colombo when he discovered America, the answer will have to read as follows: it was not the idea to use the oval shape of the Earth to travel to India by going westwards; there had been oilier people, too, who had been

¹ This paper is a part of researching project no.159004, financed by the Ministry of Science and Technological Development of Republic of Serbia, named: "The Integration of Serbian Economy into the EU - Planning and Financing of Regional and Rural Development and Enterprise Development Policy"

² Slavenko Grgurević, Institute of Economic Science, Belgrade

thinking of that. Nor was it the careful preparations for the expedition, nor the competent equipping of the ships, which others could have done, too. What was the most difficult part in that exploratory journey was precisely the decision to abandon the until then blown part of the Earth and sail so far westwards that no going back would be possible by relying on the existing supplies.

New land can be conquered in science in a similar way, too: this will only happen if one is at a decisive juncture and willing to abandon the base underpinning all science that has existed so far and, as it were, jump into the void. But when one really steps for the first time on truly new ground, acceptance of the new substance is quite often not enough but, rather, the structure of thought must be changed as well if one wants to understand the novelty" (Heisenberg '69).

Challenges of globalization and the technology of the information society

Globalization is not a new phenomenon but new is its intensity. Development of technology, of the global economy, of the mass communications systems and the military potentials has surpassed all expectations. Ever more intensive regionalization and globalization, especially in the era since the end of the Second World War, have contributed to the expansion of the functional competences and responsibilities of the liberal democratic states with simultaneous decline of their capacity to address numerous and growing demands on their own. The level of interaction and interdependence within and between the states and societies is in constant progression - the chains of political, economic and social activities have become global by their proportions. Goods, capital, people, know-how and convictions are crossing state borders seemingly easily - transnational networks, social movements and social interactions are expanding in all fields of human activity. Global systems of trade, finance and manufacture mutually link progress to the fate of the individual, the community and nations all over the world. Modern communications networks and new information technologies are changing the nature of communications dramatically. One gets the impression that mankind, in a state of the Big Momentum, has come very close to the ideal of eternal ascent to Perfection. This is only seemingly so, however; mankind has never been closer to Armageddon. Survival of mankind today represents the most radical although, at the same time, the most minimum Utopia and the thoughts about possible self-Apocalypse of the human race are murky predictions which modern scientific thought is full of.

Apocalyptic interdependence

The sources of evil are usually sought in the animal side of human nature. However, the possibility and probability of the absolute evil (self-destruction of the human race) do not take their roots from our animal nature but from our specificity. Destructiveness does not constitute any external opposite to human creativity but is inherent and immanent to it. At its 'peak' even the human creative legacy shows that it is potentially and even tendentially self-apocalyptic. As if creativity, in addition to Eros, also included a collective Tanatos, This is about a blend that characterizes man's generic self combining the two myths, I would say that Prometheus' man is punished, because he "stretched beyond the coverlet", not only by having, like Sisyphus, to push the stone towards the top of the hill in vain but also runs the real risk that the stone may roll back and hit him at any moment. In order to make the situation even worse, deep down the man knows that he lives in the shadow of self-Apocalypse but is pushing this aside casually by living a carefree, leisurely and easy-going life and is doing almost nothing to change this stale of affairs. This is the main feature of our spiritual situation as this century is closing and the next century and millennium are beginning (Stojanovic '96).

In the absence of elementary ethics that would combine the existence of the spirit and mechanism of global solidarity and responsibility the achieved level of interdependence, the will for power and the egotistic interest make up the real potential of self-Apocalypse. This is the reason why the new perception is no longer interpreted only as an ephemeral skepticism because the possible self-annihilation of mankind remains a realistic threat looming over all future forms of human civilization. Its presence is getting increasingly apparent with the announcement of somber recurrences of the "Roman Club" that re-emerge with disconcerting contents and apparitions (Huntington '93, Fukuyama '92).

The Satanic threat of, as many believe, possible self-annihilation of mankind posed by apocalyptic technology, the abyss between the developed and the poor parts of the world, demographic explosion and environmental degradation constitute a new challenge to globalization in circumstances of apocalyptic interdependence. The impotence of self-limiting of destruction made human cruelty take unbelievable shapes - Gulag, Auschwitz, Hiroshima - created by modern science and technology in the absence of elementary human accountability, virtue and essence of the mission of the idea of the Architect of all worlds and the cosmic order.

The pace of technical civilization is losing sense because technology becomes a goal unto itself and its unlimited power indicates that the causal determination has replaced the Purpose and Choice, Such a development of technological potential and of its use leads to the critical mass in which technology (as a new idolatry) can no longer be technologically controlled. To prevent such an outcome, the emergence of new ethics is necessary which would be comparable to the range of modern engineering that has expanded both in space and time (Ibid '96). Such a new ethics would be compatible with the search for new meaning of man's mission, inclined to interpret progress as preservation and survival of mankind conducive to a new interpretation of power in the spirit of the united mankind's capacity to offset apocalyptic threats.

When the concern for the preservation of mankind is accepted as a super-categorical must, as the duty over and above all other duties, then many will rightfully ask what sovereignty and security of a particular state mean under conditions of the urgent need for common security and sovereignty of mankind over its own survival. The search for lasting peace and global (con) federation is hardly conceivable in the absence of global solidarity and in the circumstances of destructive philosophy of unreasonable egotism which has brought economic inequalities in the world to the level of an absurdity. True, the need to create universal environmental stability has triggered numerous discussions about the meaning and substance of the new global ethics precisely in the most developed countries. However, the principle that has still not been accepted is that social and economic inequalities should bring greatest benefits to those that are the most disadvantaged. Many are inclined to claim that globalization grants privileges to those that are in the most favorable position anyway and it is, therefore, difficult to expect that the developed world's appeal to create conditions for containing the demographic explosion can have a real effect.

In contrast to the search for collective decision-making mechanisms addressing the essential questions of how the individual and the community function, there where people act together intending to shape their own interests and power to create the necessary social cohesion in the developed countries is in progress the creation of new global coteries whose goal is to institutionalize the power of private groups over the fate of mankind. In addition, free movement of labor, which is one of the key postulates of the theory of free trade has decreased significantly due to the state's intervention on the market (new immigration policy). Further, new protectionism in the field of technology transfers, dictated by transnational capital, and is putting a new break on free flow of ideas and know-how. Contrary to these trends, the flow of short-term and speculative capital has been evidently intensive, which has prompted many people to interpret this to mean that modern globalization means liberalization of financial flows rather than of people and ideas. Global crisis whose onset was attributable in the mid-1990s to the decline in years-long demand was brought about precisely by uncontrolled global financial flows in the countries in transition. However, that was only seemingly so; the collapse in Asia and elsewhere resulted from much deeper consequences, notably lack of preparedness and undeveloped status of the economic, social and political setting as well as lack of global responsibility for the success of colossal changes in the countries in transition.

However, robust economic development in China and India made it possible for millions to cross the poverty line, which instills some hope that such global processes hold a promise for the future. Such a view is also supported by certain positive movements that may be interpreted also by initial development of social responsibility of transnational corporations (social goals and humanitarian missions of the foundations established by the companies themselves) which are a paradox of the social (philanthropic) activity of international corporations and the richest individuals (Woren Bafet, Gates) whose new mission, albeit still insufficiently researched, means that certain headway has been made towards

a new role of the transnational capital in creating a stimulating social ambience. The importance attached to the role of these foundations is dovetailed to fit the interest of transnational corporations to achieve the necessary level of social cohesion, which is a condition for achieving a fast-growing business environment in the countries in transition. However, in parallel with these trends the process that is ongoing is one of huge concentration of unproductive capital in the world which affects the most the employed workers that are being dismissed en masse which seems to be the harbinger of large-scale social tensions and future conflicts in the developed countries. On the other hand, the mankind's enormous poverty, hunger for development, shortage of capital and know-how are continuously deepening the gap between the one fifth of the world that is made up of the richest and the four fifths of the world that are made up of the poorest ones. In the absence of a global mechanism of responsibility a space is thus being created for apocalyptic impacts which will come less and less from wars ("the clash of civilizations" S. Huntington '93), and increasingly from unpredictable and destructive situations which could find expression in 'terrorist fanaticism' where prediction possibilities are limited.

The latest huge economic crisis worldwide that affected the most developed countries and in the analytical circles in the world compared with the Huge Economic Crisis in the 30s of the past century, indicates that the world as a whole found itself at the crossroads and that fundamental values of western civilization embodied during centuries through material growth, and on the other hand interpreted as the essence of progress – are not any more appropriate sources of general satisfaction and hope, even in the most developed countries. In searching for these and other answers to the latest challenges, the whole intellectual world has found itself in a real whirl of contradictory, confusing and cacophonous ideas. The whole world has found itself in a state of creative confusion, and conflicting views offer a new dynamism and the level of social responsibility unprecedented up till now that accepts, but less and less appreciates the argument of material wealth, power and balance of forces in achieving the sustainability of the same. The primordial significance and the destiny of an individual and its potentials, limitations and distress are opposing to that more and more – since the society that is morally, politically and culturally humiliated cannot be a progressive society. This is supported by more and more pronounced phenomena of voluntary simplicity and peculiar spiritual catharsis in the most developed countries where the conflict between external wealth and internal poverty is more and more pronounced and that conflict cannot be solved on the foundations of classical values of mechanic (materialistic) epistemology. In that sense, announcement of conceptual dilemmas regarding sustainable market influence, that is state intervention, are the dilemmas in the sphere of a mechanism of the economic policy, which is the consequence and not the cause of overall social "swinging" in which the humanity has found itself at the threshold of the third millennium.

Similar visions and new social reality in the developed countries fraught with social tensions, contradictory value judgments and quandaries make up an outline of the future social map of the world where the countries of the developed part of mankind appear as the main countries in transition on the threshold of the third millennium. Such a turnabout will, according to many, not affect the developing countries: by starting from a much lower developmental level without any mortgage on values and experience of the developed world - the poor (part of the) world will be developing on new foundations.

Cyber "civilization" and the meaning of metaphysics

Contrary to the mechanistic epistemology, modern considerations of the processes in nature and society are based on the interpretation of the latent dimensions of the new entropic paradigm that is essentially changing not only the hitherto perceptions of the meaning of history and progress but also rejects the illusion of technology that the scientific-technological thought is decisive in the salvation of the human race from chaos into which it is sinking. Adapting the rhythm of civilization development to the conditions reigning supreme in nature is the only way to slow down the process of entropy, preserve the biosphere and human civilization. Proceeding from the laws of thermo-dynamics, the criticism of the mechanistic paradigm is in tune with incessant material growth - ever larger flow of energy and new technologies, which has as its consequence enormous dissipation of energy (from the "state of usability" towards the "state of non-usability") and the bigger and bigger chaos. Although the laws of

thermodynamics provide a comprehensive scientific framework for pursuit of all physical activities and represent a way civilization is governing its physical reality, the importance attached to the material aspect of existence may limit the human need for spiritual development. This will not happen depending on how the mankind relates to these laws (of entropy) the understanding of which is decisive for understanding the physical context which is the point of departure for man's spiritual development. Introduction of cybernetics and modern information theory has contributed to the importance of the law on entropy: gathering and storage of information requires energy, its transformation, i.e. entropy. Modern interpretations concerning the impact entropy exerts on the cognitive processes in human brain point to the importance that the increasing flow of energy has on the development of human thought - from instinct to intuition to reason and abstract (mathematical) thought. Adams' considerations regarding the importance of instinct and intellect point that "the more phases there are in a mental process the more complicated, abstract, centralized it is and the greater the dissipation of energy is along with the disorder it causes" (Adams '49). The information society, the post-industrial model, is, no doubt, a major incentive for human creation but also a challenge in terms of social alienation that goes as far as the state of mental saturation and emotional contamination. This does not exhaust the threats of computerization: fragmentary information, unilateral statements, contradictory instructions are potentially devastating flashpoints for cognitive processes and for reaching cognitive maturity in adolescents. Research done in the US pointed to the fact that the classical methods of education of children yielded more results than in the environs with the most advanced equipment, where the level of concentration and taking in of information was drastically lower, which is accounted for precisely by the operation of the law of entropy. When the meaning of recognition boils down to the perception of cause and effect and quantification, i.e. to absence of quality and abstraction - it is the reaching of mental maturity that suffers. This is why the entropic approach to recognition is based on research into the flow of mutually linked phenomena, rather than on perception, gathering, storage and use of the supplies of isolated facts. The information revolution - a synonym for domination of the constantly growing multitude of facts which seek to find a key to understand the multi-faceted nature of social reality, in fact transparently signifies the paradoxical state of cognition of the human race: the man is constantly exposed to a great deal of information, his knowledge is constantly growing, but he is understanding less and less of what is happening to him! Constantly focusing on the pulsating technological pseudo-civilization, quite separated from nature, man's urban intellect has totally lost the feeling for the meaning of its own existence. Techno-centrism excludes man from all the dimensions of reality, except from the material, and as a person idolizing purely technological prosperity man ceases to be "the measure of all things" so that in the absence of subjective moral and value judgments the real range of "progress" boils down to destructive activism rather than to peaceful and beneficial official activities. Instead of plunging into the essence of man's self and conscience -based on search for the essence of his mission in the Universe, efforts are made to simulate, replicate and re-arrange man's biological characteristics. Technological transformation of biogenetic structures - the shaping of genotypes, artificial manufacture of man is the highest level of cyber "civilization" that leads to the saturation of the human race.

The mankind has come up to a "new Genesis" which means the birth of artificial nature designed to simulate the primordial mechanisms of evolution. This is the last and the highest level of development in the mechanistic interpretation of the apparent world on which modern Eugenic mercantile society is based, which exhausts the concept of classical scientific thought and the model of organization of society which is based only on material growth and on the progress thus understood. A similar world view, which was the prevailing one in the second millennium of mankind after Jesus Christ bringing about high achievements of the technological civilization with persistent devastation and spiritual hopelessness - has been put in question with the announcement of a cyber "civilization". It seems that the new awareness makes definitely disappear the old distinction between meaning and meaninglessness, good and evil, death and life, nature and culture, death and God. Modern reflections and contacts point to the major turnabout resulting from a switch from the technical to the "anthropo-technical age" and the panic that was created in the "human garden" after the human genome was decoded opening the way to human cloning (Sloterdeik '00).

In search of the New Organon the main obstacle is seen to be the distinctive (European) cultural heritage which used to show contempt for other cultures and wiped out everything that was not made following its own pattern, opposed it and surpassed it (Gadamer '99). The roots of that world view can be seen in the curse of science; European culture is a scientific culture and it is only in it that there are strict limits between science, philosophy, the arts and religion, i.e. inexplicable domination of science over all these forms of spiritual creativity,

The great cultures of Asia, Latin America and the Middle East were not limited by science and its method, which goes to show that science is not the culture's destiny and that it need not develop exclusively based on scientific insights. What Europe obtained is a scientific-technological world, and the question that is now posed is whether the spirit can do anything more in such a world (Ibid '99).

Far from every solipsism and cultural arrogance Hans Georg Gadamer and others have been searching, following the traditions of the Russian religious thought (Berdyayev) and other Oriental civilizations - the achievements of man's planetary heritage, for what is regarded as the objective knowledge of nature and does not exclude the spiritual and metaphysical world view. Seeking to reconcile the earthly world with its metaphysical reality they send the message that it is impossible to 'introduce order' in the domain of nature without first of all removing the cause of the disorder: lack of harmony and the attempt to view the level of earthly existence separately from the meaning of overall existence.

Return to harmony means adapting to a different life rhythm which will be more appropriate in terms of man's primordial needs rather than any authoritarian choice and imposed technological "achievements". The search for meaning of man's mission in the Universe is difficult to imagine without studying man's sources and without his metaphysical reconstruction. By uniting with the metaphysical unity of the Universe, by identifying with the Absolute principle uniting all life on Earth, by getting to know the Creator, man will come back to the truth and to his own biological matrix where matter and energy are the primordial arch-factors which keep hidden in the human conscience the secret of the answer to the 6,000 years-old questions: What is life? What is man? Where does he come from? (Grgurevic '97).

In lieu of a conclusion

Three centuries after *Novum Organum* was published (1620) by Francis Bacon who thus paved the way for a mechanistic world view (whose subsequent founders were Descartes, Newton and Locke) by exposing the classical Greek philosophical thought to criticism, German physicist Heisenberg broke the backbone of the theory of determination. Heisenberg's discovery made invalid the principle of cause and effect in evidence in the classical physics, thus annulling the scientific base of the mechanistic interpretation of the apparent world, which had been the fundamental principle underpinning the philosophy of industrial civilization. The breakthrough of Heisenberg's ideas of indeterminism (whose motto is interminable unpredictability of events in nature) was best expressed by Max Born, a renowned physicist of the new generation: "We searched for solid ground but did not find it. The deeper we plunge, the more rough the Universe is becoming, everything is moving in a wild dance" (Born '36).

Civilization - the state of man's spiritual and physical Universe - is at the stage of "creative commotion". The time of parenthesis - in-depth change of the structure of human civilization - is a state of thorough re-conceptualization, the age of creation of a new image of reality based on new assumptions concerning time, space, substance and sample. The world at the threshold of the third millennium is a harmony of mutually interlinked changes that have affected the energy base, technology, the communications system, human habitats and value judgments. When time, space and cause, as the fundamental tripod of Western humanist philosophy, were put in a relative perspective, scientific thought became inundated with vagueness, unpredictability, accidental elements, unexpected mutations, what were known as "quantum leaps". The meaning and knowledge became relative categories susceptible to change, provisional as much as everything else.

Search for alternative realities - by using psychedelic stimulating substances, by escaping from the consumer society, by experiencing trance and ecstasy as a surrogate for creation and play is directly

associated with the spiritual decline of the Western man in his quest for something that will appease his hunger for the Absolute, This gives special importance to in-depth reviews in Western humanities that are facing the lack of those spiritual values that have been fostered in the traditional civilizations and which have managed to survive in the culture of the Orient: harmony, beauty, mutual linkages which generate and maintain the life of the community. In the western techno-centric civilization spirituality is becoming ever more present and this is why its contacts and interaction with the traditional values of the East, where the principle of interdependence of all things is taking center stage, may serve as a signpost to guide us back to the metaphysical foundations of the world.

Only science based on metaphysical principles - this is the message of the Eastern thinkers - can restore the harmony between Man and Nature by first establishing a harmony between man and the spirit creating conditions for settling the burning problems of mankind, caused by the unilateral attitude to the environment, ranging from overpopulation and general pollution to human alienation and threat of man's self-annihilation.

*
* *
*

It is definite that the beginning of the third millennium offers the mankind both the chance and the anxiety. Such a world is far more opened and indefinite than the one whose historical essence is found in superiority of hierarchical structures, brutal power, incredible forms of collective self-destruction (Gulag, Hiroshima, and Auschwitz) and planetary poverty. Such new world promises perhaps more – but it will be more unstable. Multi-polar worlds ask for delicate adaptation according to the maps of power that will fluctuate continuously. Objective essence of power is in elasticity, adaptability and competition that may, to a certain extent and only temporarily, neutralize uncertainty. Knowledge and education, ethical principles, social responsibility and humanity are the foundations on the basis of which one may search for models and institutions of long-term struggle with uncertainty the mankind is facing in the third millennium. All the more so, due to the fact that historical experience shows that material and spiritual development followed opposite paths during the larger part of the history of mankind. These paths may again become closer when the mankind gives up from the desire *to rule* and when it begins to adapt not to the world we created, but the world which we have been created for. In such a world that is now only a vision of future, the power of an individual and of the institutions will rest in common spirit of developing course. That means adaptation of internal human nature rhythm with primordial principles that rule over the emerging process in the nature and around it. By feeling love for everything in life before and love to follow after – a man will find out primordial welfare of cosmic Mind, that is the condition of his dedication to natural rhythmic course that bears in itself the whole physical reality.

If the choice of the new emerging world will be the path that measures success not only by the rate of growth of the consumption of goods and services, but also by the results with minimum consumption achieved in realizing internal satisfaction of people, joy and harmonious development of a personality, in that case economic cooperation will have its purpose, and mankind prosperous future. By neutralizing *Greed*, as a motive and source of power and consequence of the whole self-destruction over several millennia, *Love* will give a man and mankind final and collective source of salvation (Grgurevic '08).

References

- Adams Henry (1949), A Letter tu American Historz Teacher's In Degradation of the Democratic Dogma, New York: Peter Smith.
- Born Max (1936), s. 72. The Restless Unverse, Harper, New York.
- Francis Fukuzama (1991), The End ofHisory and Last Man, Free Press, New York - London.
- Hans Georg Gadamer, European Heritage, Plato, Belgrade.
- Peter Sloterdeik (2000), Excitement in the Human Garden, Magazine Rec (Word), Belgrade,
- Slavenko Grgurevic and Dragana Milovanovic (1997), Towards Solar Civiliyation: Human Resources from Primordial Times. International Conference Proseeding: Human Resources & Small States, Malta, I .a Valeta.
- Slavenko Grgurevic (2008), "FACING THE FUTURE – Following the Track of New Architectonies the International Relations: World, EU, Balkan" - Introduction Speech on International Conference: Regional Safety and Cooperation – Sofia, sept 2008.
- Samuel Huntington (1993), The Clash of Civilisation. Foreign Affairs.
- Samuel Huntington (1997), The Chash of Civilisation and Remaking of Wold Order, Simon and Schuster, New York.
- Svetozar Stojanovic (1996), At the Crossroads of Centuries and Millennia, Opening Address at the Krusevac School of Philosophy and Literature "History, Philosophy and Literature, Belgrade.
- Werner Heisenberg (1969), p. 112. Der Teil und das Ganze; R. Piper & Co. Verlag, Munchen.

Training and Education of Employees as a Factor Affecting Competitiveness of Companies

Lidija Lesko, Zdenko Klepić¹

ABSTRACT – *In the terms of faster development and spreading of technology, multiplication of competitiveness and product obsolescence occurring overnight, and an increasingly deepening gap between labour demands and knowledge, training and education of employees as an essential function of human resource management is becoming more and more important.*

It is completely clear that in a business environment that is becoming more complex, turbulent and uncertain, and in the terms of competitive activities performed to earn respect and trust of customers, only companies providing a quality education system will be able to keep pace with changes and perform business activities on the market successfully.

Therefore employees are expected to engage in different types of training and education programmes, whereas companies and human resource management units are expected to organise, encourage and award employees in the course of their knowledge and skills acquisition. In order to create such conditions, the Employee Training, Education and Development Policy has to become an indispensable part of the whole company policy and a result obtained from the selected strategy. Also, the existence of an organisation that makes possible pursuing of such policy and training is necessary.

Apart from the significance and role of training and education of employees in the process of creating a competitive company, this paper also focuses on the training objectives, process and methods, and the spreading rate of the above mentioned functions in companies in Herzegovina.

KEY WORDS: *training, education, employees, company, management, competitiveness*

Introduction

Training and education of employees become a key factor of competitiveness of companies. Therefore the companies are expected to offer and enable various programs for their employees in order to acquire and develop diversified skills and knowledge as to increase their performance. But, likewise the successful companies are expecting from their employees to devote a specific period of their time to be engaged in different types of training and education. Thus is estimated for managers that they need to invest 20% of their annual working time in their own education should they wish the acquired knowledge not be obsolete.

Although the terms training and education are seldom used as synonyms it should be emphasized that they have different professional meanings.

Training is a planned activity of acquiring specific skills and knowledge requiring a successful performing of a specific job or activity. It is more concentrated on a job and less on a person.

On the other hand, education means spreading of overall cognitions, knowledge, skills and abilities of a person being trained for the independent decision-making and operation in different situations. It creates a foundation for further development (Bahtijarević-Šiber, 1999, p. 721).

There are numerous reasons of investment in training and education of employees, but especially the following are prominent:

- technology changes,

¹ Lidija Lesko, Zdenko Klepić, Faculty of Economics, University of Mostar

- increase in complexity, turbulence and uncertainty of business environment,
- modern business operation looks for new skills (interpersonal and communication skills, conflicts and time management skills and so on),
- widening a gap between the ever growing demands of work and actual knowledge in the labour market.

Employee training process

Each process, and thus the employee training process include some phases. The following four fundamental phases of training process are usually quoted (Buble, 2000, p. 413):

1. identification of training needs
2. planning of needed training
3. carrying out of training
4. evaluation of carried out training.

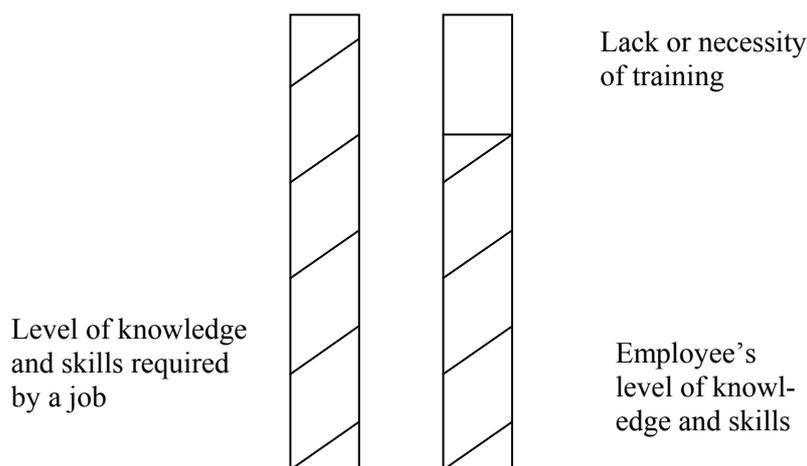
In order to implement the training process in terms of quality the existence of the following assumptions is necessary:

- existence of the employee training and development policy in the company and
- existence of an organisation for realization of that policy and carrying out training.

The employee training and development policy should be an integral part of the overall company policy as well as a resultant of selected company strategy.

The organisation for carrying out training relates to organisational structure of training function (department for education) and organisation of training process. The organisational structure is primarily defined by whether the training is carried out solely within the company or outside of it. A combination of both of them is usually used. The organization of training process includes all activities, means, participants, methods, venue and time of carrying out training in order to establish attuned relations among them for the duration of training.

Figure 1. Identification of training needs



1) Identification of training needs consists of determination of difference between a level of needed and actual knowledge and skills. In other words, for each job is determined a difference between requests made by it and requests met by performer of that job (Figure 1).

2) Planning of training needs should include:

- goals to be achieved
- contents and program of training
- methods and techniques of training.

It is possible to divide training and education goals into overall and specific ones (Bahtijarević-Šiber, 1999, p. 737-739).

Overall goals:

- increase of competitive ability of the company
- improvement of performance
- actualisation of knowledge and skills of employees
- avoiding of managerial obsolescence
- solving of organisational problems
- orientation of new employees
- preparation for promotion and managerial succession
- satisfying individual needs of growth.

Specific goals:

- mastering of specific methods and working procedures
- reduction of labour costs
- improving the quality of products and total quality management
- improvement of customer relationship and services to customers
- improvement of team work skills and cooperation
- improvement of creativity
- more efficient time management
- improvement of conflict management skills and so on.

It is noticeable that the overall goals of training are pointing to what the company expects of realization of training program, whilst the specific goals are pointing to what should be expected from participants upon completion of training.

In regard to the content there could be distinguished four types of training:

- fundamental knowledge and skills
- technical, or professional skills
- interpersonal skills
- conceptual, or strategic skills.

As to methods of training they are usually divided into methods of on-the-job training and methods of off-the-job training as well as methods of non-managers training and managers training.

Individual instructions, job rotation, traineeship, awarding of projects, participation at the staff meeting are some of most often used on-the-job training methods, whilst lectures, conferences, discussions, programmed instruction method, computer-aided training, simulation method, case method, roles playing method, "in-basket" method, performance modelling method and like are most often used off-the-job.

A selection of method primarily depends upon goals wishing to be achieved. The key question for a selection of method is: "*What should be learned?*"

In any case the method should (Bahtijarević-Šiber, 1999, p. 753):

- motivate participants to improve their performance,
- clearly illustrate desired knowledge and skills,
- provide active participation to participants,
- provide a possibility of exercise,
- provide a feedback information on successfulness during learning,
- include some means of motivation to participants during learning,

- give structure to subject matter from simpler to more complex tasks,
- adapt to specific problems,
- enable participants a transfer of learnt to other situations, especially to job they are performing.

A training plan should encompass priorities, key areas of training, number and structure of candidates, training methods, trainers, preliminary timetable, and venue of training and training costs.

3) Carrying out of training is a complex process realizing training program in predetermined way – by direct communication trainer – participants or indirectly by using different media.

4) Evaluation of training is a part of training control process, which as any other control process relates to setting of appropriate training standards. The aim is to objectify evaluation of success of carried out training of employees in order to be able to undertake measures for its improvement.

Educational structure of population and employees in Bosnia and Herzegovina

Before tackling a development of educational function in companies it is good to take a look at educational structure of population and employees in Bosnia and Herzegovina.

The last official census in Bosnia and Herzegovina had been carried out in 1991. Data obtained by this census and those relating to educational structure of population are more than devastating. Namely, as the Table 1 shows yet 58,1% of population was with completed primary school or without completed primary school and thus without any formal education, whilst only 6,5% of them were with two-year past-secondary school and completed university degree.

As it has been quoted, data dates back to 1991 and it is to believe that situation has at least slightly improved.

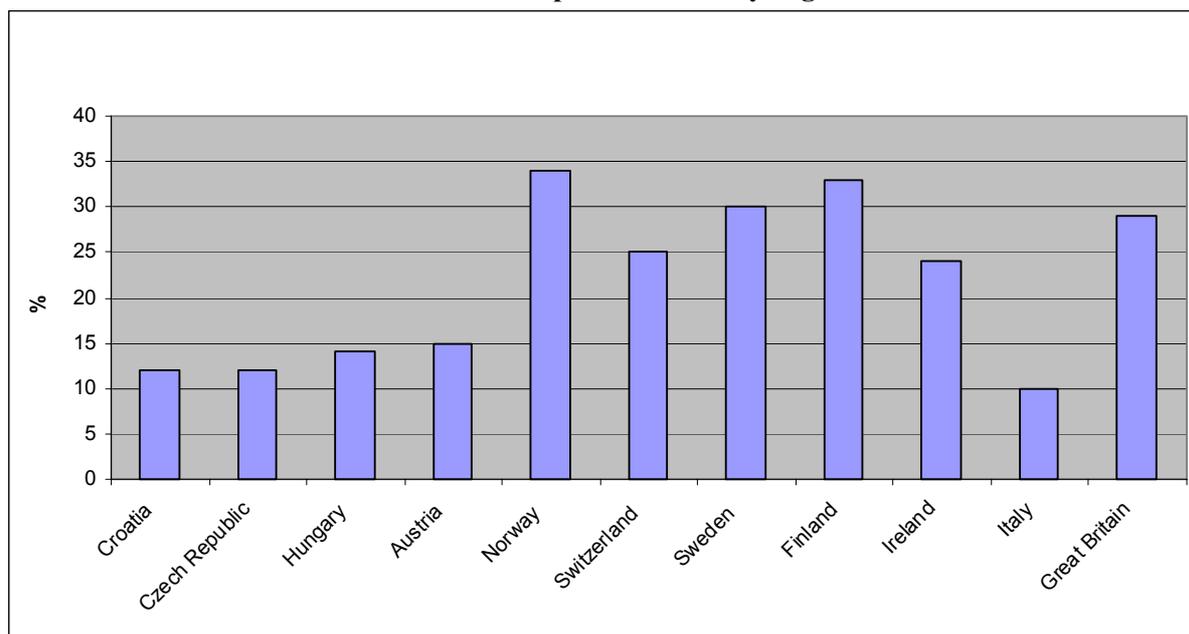
Table1. Educational structure of population in Bosnia and Herzegovina (1991)

Education	%
Without education	14,1
Without completed primary school	19,6
With completed primary school	24,4
With completed secondary school	32,6
With completed two-year past-secondary school	2,8
With completed university degree	3,7
Not known	2,8

Source: www.fzs.ba/Dem/Popis/ObrazovanjeStanB.htm

It is interesting also to look at a comparative presentation of population with completed two-year-past-secondary school and completed university degree encompassing eleven European countries and be once more convinced how much Bosnia and Herzegovina is backward to all of them and especially to Scandinavian countries having between 30 and 35% of population with completed university degree (Graph 1).

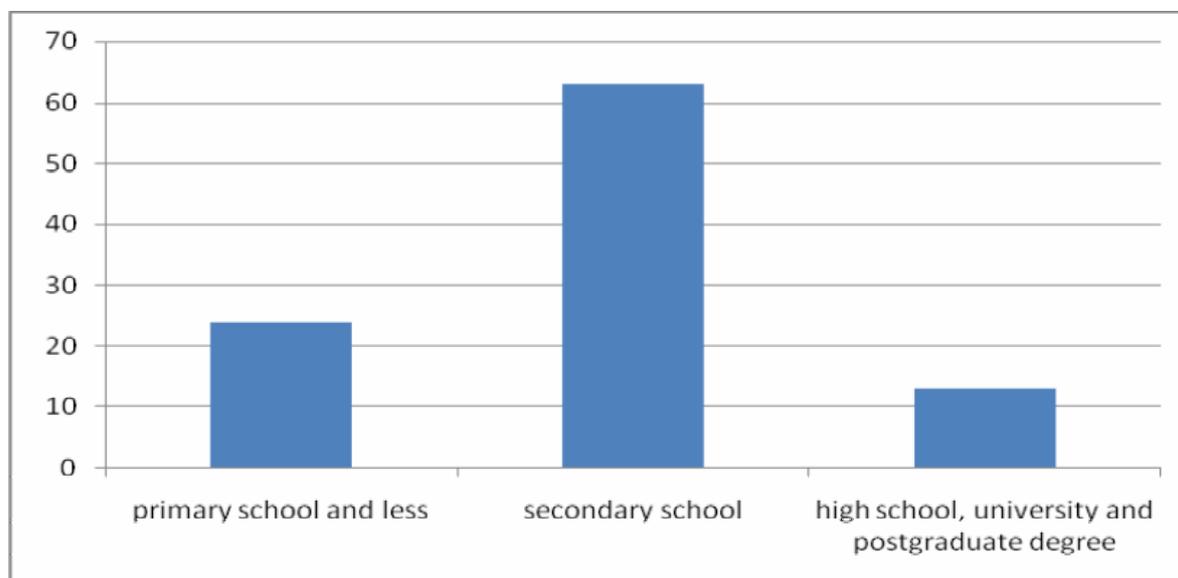
Graph 1. Comparative presentation of population with completed two-year-past secondary school and completed university degree



Source: ICSED

Should we however observe employees according to their educational background, the situation should be and is somehow better by the obvious logic but it is still far from satisfactory one (Graph 2).

Graph 2. Employees according to educational background in Bosnia and Herzegovina (%)



Source: Agency for Statistics of Bosnia and Herzegovina: Survey of labour force in 2008

Organisation, stimulation and making training and education of employees possible in companies in Herzegovina

As it has been already quoted, investment in training and education of employees is the only right track towards the market competition and competitiveness. And how much attention the companies in

Herzegovina, or their management are devoting to (or putting it better are not devoting) that all activity and task is shown by the research results carried out at the beginning of 2007.

The research has encompassed 200 companies of different size and activities, and results show that 62,81% of them do not have or have very few training carried out with a view of acquiring new knowledge, whilst only 4,02% of them are carrying out a continuous training but also they are stimulating additional education on faculties and higher schools (Table 2).

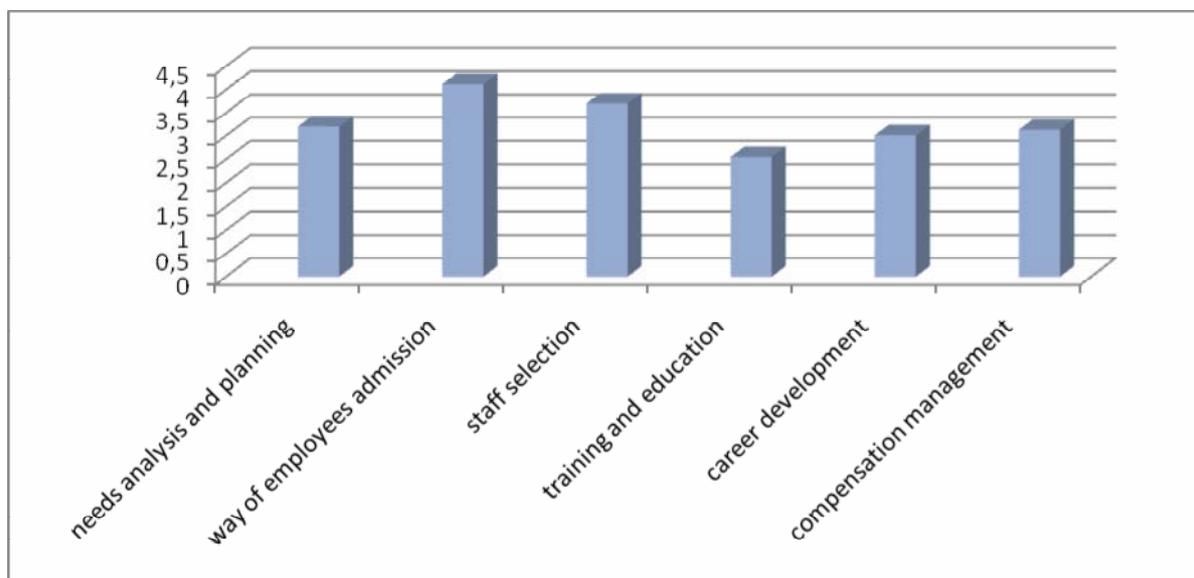
Table 2. Organisation, stimulation and making training and education of employees possible

Carrying out of training and education	Companies (%)
No training	2,01
Very few training	60,80
Planned and is carried out well	21,11
Continuous training in all segments	12,06
Continuous training, but additional education outside the company is stimulated too	4,02
Total	100,00

Source: Klepić, Z., Lesko, L., Papac, N., 2007, p. 371

An average mark for training and education of employees is very low and is 2,55. It is at the same time the least rated activity of human resources management.

Graph 3. Rating of carrying out activities of human resources management



Source: Klepić, Z., Lesko, L., Papac, N., 2007, p. 373

Additional education in the rank of motivational factors

The results of another research which, among others, had aimed at determination of the rank of motivational factors are also devastating. Namely, additional education is on the penultimate 12th place. And when such result could have been anticipated from elderly interviewees it arouses concern that younger and university-trained people also put this motivational factor almost at the bottom of rank-list.

Table 3. Rank-list of motivational factors

Rank	Motivational factor
1	Salary
2	Pension and health insurance
3	Good management
4	Interpersonal relations
5	Continuity and certainty of job
6	Working conditions
7	Responsibility
8	Flexible working time
9	Professional improvement
10	Interesting job
11	Company reputation
12	Additional education
13	Participation in decision-making

Source: Lesko, L., 2001, p. 97

The question is asked why so is like that and where do those negative attitudes towards additional education come from.

S. Marušić (2007., p. 605-606) emphasizes that a negative attitude towards education has been created gradually and he quotes several historical “blocks”:

The old Labour Relations Act (from the sixties and seventies) did not anticipate additional points for additional education. Job analysis, according to which salaries had been formed, had been taking into account the completed school, but not always inevitably. The Act had not dealt with any commendations, awards, more favourable jobs or points for completed additional courses and schools. Indeed, there were also very positive sporadic examples, but the examples are known too where employees had been educated secretly since they were afraid not to be get into trouble with diploma.

The Associated Labour Act (somewhat later on) quoted the educational qualification as one of conditions when forming points for basic salary. It had been an improvement but the educational background had been still required as mandatory condition (there was: either – or)!

The educational reform from 1974 (know as Šušvar’s reform) had abolished gymnasiums, technical schools and vocational training schools but it had introduced identical, obligatory and very extensive, programs for all secondary schools and all students. Unfortunately, since all do not have the same wishes or the same abilities, the program was simply too difficult for some. In the first year of reform the first grade had not been completed even by 30% of students. Furthermore, the private courses had been abolished for those who wanted to learn independently (workers’ education centres, cultural centres, adult education centres and so on). Only the regular schools had enrolled students and on-the-job students, and so with the company’s certificate.

A very important reason for negative attitude towards education is also the conventional wisdom that family ties, acquaintances, obedience, affiliation to some political party and so on, are contributing more to advancement than work, knowledge, ability and achieved results. Therefore it is no surprise that the rate of emigration of those with completed university degree even amounts to 28,6% (Jutarnji list, 24 October 2007).

Moreover, the human nature has a tendency towards some kind of prestige and recognition, respect by colleagues, being described long ago in motivational theories (from Maslow and further on). But, the prestige can be achieved by brand name clothes and shoes, expensive cars, aggressiveness, and much harder by learning. The youth knows that of course and it is destroying in their eyes even more the value of education and their interest in learning.

What and how to do next?

The competitiveness of companies depends a lot upon the quality of all its employees, starting with a doorkeeper at the entrance up to top managers. Therefore, additional education and lifelong learning becomes a base of growth and development especially today in time of fast changes in needed skills and knowledge. Unfortunately, it is about the concepts that have not still enough become reality and entered consciousness either of employers or employees.

Investing in knowledge the value of workplaces, competitiveness of products is raised, incomes are increasing, and in line with that the salaries should have the same. However, it is easier to dismiss workers to some employers than to prepare a plan of their additional training and education in due course for new business systems, technologies and workplaces. In that way they would achieve a better performance and avoid dismissals and search for new workers. In other words, the human resources are still the cost instead of investment for most of them.

In order to change that, the employees' policy of training, education and development should become an integral part of the whole company's policy and result of selected strategy. Likewise, the existence of organisation is necessary to enable realisation of that policy and carrying out the training process. That means that in the companies, especially those bigger ones should be established a special unit for employees training disposing of adequate material and staff resources (instructors, lecturers, psychologists and so on).

It is necessary to prepare the appropriate educational programs for all categories of employees in a company, raise continuously interest in learning and development that is aimed at establishment of learning organisation. It is such an organisation in which employees are continuously following up and learning changes in technique and technology, working processes and so on, and applying the acquired knowledge and skills in their work and behaviour. The constant learning and improvement of employees is not only their individual concern, but the task and obligation of organisation or management.

Moreover, it is necessary to harmonize educational programs in schools and faculties with the needs of economy. It can be freely said that Bosnia and Herzegovina does not still have enough quality business schools for top and middle management. There are also cases that employers are sending their employees for education abroad, but that is not sometimes the best solution since that what has been learnt there could be hardly transferred to our very much specific conditions.

In any case the investment in training and education of employees should become a priority since the economy of knowledge is a goal towards which the European Union is progressing and we would like to be undoubtedly its part.

References

- Agencija za statistiku Bosne i Hercegovine: Anketa o radnoj snazi 2008. Sarajevo, 1. Septembar 2008.
- Bahtijarević-Šiber, F., 1999., Management ljudskih potencijala, Golden marketing, Zagreb
- Buble, M., 2000., Management, Ekonomski fakultet Split, Split
- Jahić, E., 2008., Obrazovna struktura stanovništva BiH (1961.-1991.), The New Teacher 33.
- Klepić, Z., Bektaš, M., 2007., Istraživanje i analiza potreba za treninzima malih i srednjih poduzeća u regiji Hercegovina, Regionalna agencija za razvoj Hercegovine – REDAH, Mostar
- Klepić, Z., Lesko, L., Papac, N., 2007., Menadžment ljudskih resursa kao faktor konkurentnosti: primjer regije Hercegovina, Izazovi ekonomske nauke i prakse u procesu pridruživanja Evropskoj uniji, Ekonomski fakultet Niš, Niš
- Lesko, L., 2001., Radna motivacija i zadaće managementa poduzeća u tranziciji, magistarski rad, Ekonomski fakultet Sveučilišta u Mostaru, Mostar
- Marušić, S., 2007., Obrazovanje u poduzeću, stav prema učenju i europska konkurentnost, Ekonomski pregled, broj 9-10, Zagreb
- www.fzs.ba/Dem/Popis/ObrazovanjeStanB.htm

Arts and Market Economy

Dragan Milinkovic Fimon¹

ABSTRACT – *Does a market economy encourage or discourage the artistic production?*

Do economic forces of supply and demand help or harm the pursuit of creativity?

It is obvious to most observers that new art faces significant obstacles in a market economy. Large numbers of consumers are ignorant, poorly educated, and sometimes even hostile to innovation. Many creators are confronted by large corporate conglomerates that demand a proven track record or prior contacts. Complex networks of retail distribution, advertising, and media make some products profitable and others unprofitable, often without regard for artistic quality. Art lovers who revere aesthetic merit often dislike or resent market exchange for these reasons. No social system, however, elevates “Excellences” to a deciding principle, whether the realm is art, politics, or economics. Rather than comparing the market for art to a Platonic alternative, this paper seeks to uncover the social mechanisms that encourage and discourage creative artistic achievement and therefore shed light on the production of culture.

KEY WORDS: *artistic production, market economy, commercialisation of culture*

Introduction

Art markets consist of artists, consumers, and middlemen, or distributors. Artists work to achieve self-fulfilment, fame and riches. The complex motivations behind artistic creation include love of the beautiful, need of money, dream of fame, personal arrogance and inner compulsions. Creators hold strong desires to be heard and witnessed. Joshua Reynolds, in his *Discourses on Art*, pronounced that “The highest ambition of every Artist is to be thought a man of Genius.” More generally, artists could be treated as pursuing a complex mix of pecuniary and non-pecuniary returns.

Consumers and patrons stand as the artist’s silent partners. We support creators with our money, our time, our emotions, and our approbation. We discover subtle nuances in their work that the artists had not noticed or consciously intended. Inspired consumption is a creative act that further enriches the viewer and the work itself. Art works provoke us to re-examine or reaffirm what we think and feel, and consumer and patron demands finance the market.

Distributors bring together producer and consumer, whether the product is beauty soap, bread, or Beethoven. The resultant meeting of supply and demand fuels the creative drive and disseminates its results. Neither producers nor consumers of art can flourish without the other side of the market. No distributor can profit without attracting both artists and consumers. The interactions between producers, consumers, and distributors provide the basic setting for the analysis of this book.

Creators respond to both internal and external forces. Internal forces include the artist’s love of creating, demands for money and fame, and the desire to work out styles, aesthetics, and problems posed by previous works. External forces include the artistic materials and media available, the conditions of patronage, the distribution network, and opportunities for earning income. When translated into the terminology of economics or rational choice theory, the internal forces correspond to preferences and external forces represent opportunities and constraints. These internal and external forces interact to shape artistic production.

¹ Dragan Milinkovic Fimon, Institute of Economic Sciences, Belgrade, Serbia

Psychological motivations, though a driving force behind many great artworks, do not operate in a vacuum, independent of external constraints. Economic circumstances influence the ability of artists to express their aesthetic aspirations. Specifically, artistic independence requires financial independence and a strong commercial market. Beethoven wrote: "I am not out to be a musical usurer as you think, who writes only to become rich, by no means! Yet, I love an independent life, and this I cannot have without a small income." (*Alexander Thayer, 1967, p. 500*)

Strong economies generate the wealth that enables individuals to support themselves through art. The artistic professions, a relatively recent development in human history, flourish with economic growth. Increasing levels of wealth and comfort have freed creative individuals from tiresome physical labour and have supplied them with the means to pursue their flights of fancy. Wealthy societies usually consume the greatest quantities of non-pecuniary enjoyments. The ability of wealth to fulfil our basic physical needs elevates our goals and our interest in the aesthetic. In accord with this mechanism, the number of individuals who can support themselves as full-time creators has risen steadily for centuries.

Perhaps ironically, the market economy increases the independence of the artist from the immediate demands of the culture-consuming public. Capitalism funds alternative sources of financial support, allowing artists to invest in skills, undertake long-term projects, pursue the internal logic of their chosen genre or niche, and develop their marketing abilities. A commercial society is a prosperous and comfortable society, and offers a rich variety of niches in which artists can find the means to satisfy their creative desires.

Many artists cannot make a living from their craft, and require external sources of financial support. Contrary to many other commentators, I do not interpret this as a sign of market failure. Art markets sometimes fail to recognize the merits of great creators, but a wealthy economy, taken as a whole, is more robust to that kind of failure in judgment than is a poor economy. A wealthy economy gives artists a greater number of other sources of potential financial support.

Private foundations, universities, bequests from wealthy relatives, and ordinary jobs, that bane of the artistic impulse, all have supported budding creators. Jane Austen lived from the wealth of her family, T. S. Eliot worked in Lloyd's bank, James Joyce taught languages, Paul Gauguin accumulated a financial cushion through his work as a stockbroker, Charles Ives was an Insurance executive, Vincent van Gogh received support from his brother, William Faulkner worked in a power plant and later as a Hollywood screenwriter, and Philip Glass drove a taxi in New York City. William Carlos Williams worked as a physician in Rutherford, New Jersey, and wrote poetry between the visits of his patients. (*David Perkins, 1976, pp. 544-554*)

Wallace Stevens, the American poet, pursued a full-time career in the insurance industry. "He was a very imaginative claims man," noted one former colleague. When offered an endowed chair to teach and write poetry at Harvard University, Stevens declined. He preferred insurance work to lecturing and did not wish to sacrifice his position in the firm. At one point a co-worker accused Stevens of working on his poetry during company time. He replied: "I'm thinking about surety problems Saturdays and Sundays when I'm strolling through Elizabeth Park, so it all evens out." (*Peter Brazeau, 1985, pp.57,67*)

Parents and elderly relations have financed many an anti-establishment cultural revolution. Most of the leading French artists of the nineteenth century lived off family funds-usually generated by mercantile activity-for at least part of their careers. The list includes Delacroix, Corot, Courbet, Seurat, Degas, Manet, Monet, Cezanne, Toulouse-Lautrec, and Moreau. French writers Charles Baudelaire, Paul Verlaine, and Gustave Flaubert went even further in their anti-establishment attitudes, again at their parents' expense. (*Alan Bowness, 1989, p.60*)

Even the most seclusive artists sometimes rely furtively on capitalist health. Marcel Proust sequestered himself in a cork-lined room to write, covering himself in blankets and venturing outside no more than fifteen minutes a day. Yet he relied on his family's wealth, obtained through the Parisian stock exchange. Paul Gauguin left the French art world for the tropical island of Tahiti, knowing that his pictures would appreciate in value in his absence, allowing for a triumphal return. Gauguin never ceased

his tireless self-promotion, and during his Pacific stays he constantly monitored the value of his pictures in France. (*Ronald Hayman, 1990, pp. 335,337,411*)

Wealth and financial security give artists the scope to reject societal values. The bohemian, the avant-garde, and the nihilist are all products of capitalism. They have pursued forms of liberty and inventiveness that are unique to the modern world.

Pecuniary incentives

Many artists reject the bohemian lifestyle and pursue profits. The artists of the Italian Renaissance were businessmen first and foremost. They produced for profit, wrote commercial contracts, and did not hesitate to walk away from a job if the remuneration was not sufficient. Renaissance sculptor Benvenuto Cellini, in his autobiography, remarked, "You poor idiots, I'm a poor goldsmith, and I work for anyone who pays me." (*B. Cellini, 1967/1568, p.165*)

Bach, Mozart, Haydn and Beethoven were all obsessed with earning money through their art, as a reading of their letters reveals. Mozart even wrote: "Believe me, my sole purpose is to make as much money as possible; for after good health it is the best thing to have. „When accepting an Academy Award in 1972, Charlie Chaplin remarked: "I went into the business for money and the art grew out of it. If people are disillusioned by that remark, I can't help it. It's the truth." The massive pecuniary rewards available to the most successful creators encourage many individuals to try their hand at entering the market. (*Alan Steptoe,1988, p. 63*)

Profits signal where the artist finds the largest and most enthusiastic audience. British "punk violinist" Nigel Kennedy has written: "I think if you're playing music or doing art you can in some way measure the amount of communication you are achieving by how much money it is bringing in for you and for those around you." Creators desiring to communicate a message to others thus pay heed to market earnings, even if they have little intrinsic interest in material riches. The millions earned by Prince and Bruce Springsteen indicate how successfully they have spread their influence. (*N. Kennedy, 1992, pp. 52-53*)

Beethoven cared about money as a means of helping others. When approached by a friend in need, he sometimes composed for money: "I have only to sit down at my desk and in a short time help for him is forthcoming." Money, as a general medium of exchange, serves many different ends, not just greedy or materialistic ones. (*H. C. Robbins Landon, 1992, p. 87*)

Funding artistic materials

Artists who chase profits are not always accumulating wealth for its own sake. An artist's income allows him or her to purchase the necessary materials for artistic creation. Budding sculptors must pay for bronze, aluminium, and stone. Writers wish to travel for ideas and background, and musicians need studio time. J. S. Bach used his outside income, obtained from playing at weddings and funerals, to buy himself out of his commitment to teach Latin, so that he would have more time to compose. Robert Townsend produced the hit film *Hollywood Shuffle* by selling the use of his credit cards to his friends. Money is a means to the ends of creative expression and artistic communication. (*Otto L. Bettmann, 1995, p. 56*)

Capitalist wealth supports the accoutrements of artistic production. Elizabethan theatres, the venues for Shakespeare's plays, were run for profit and funded from ticket receipts. For the first time in English history, the theatre employed full-time professional actors, production companies, and playwrights. Buildings were designed specifically for dramatic productions. Shakespeare, who wrote for money, earned a good living as an actor and playwright.

Pianos, violins, synthesizers, and mixers have all been falling in price, relative to general inflation, since their invention. With the advent of the home camcorder, even rudimentary movie-making

equipment is now widely available. Photography blossomed in the late nineteenth century with technological innovations. Equipment fell drastically in price and developing pictures became much easier. Photographers suddenly were able to work with hand cameras, and no longer needed to process pictures immediately after they were taken. Photographic equipment no longer weighed so hard and the expense of maintaining a travelling darkroom was removed.

Falling prices for materials have made the arts affordable to millions of enthusiast and would be professionals. In previous eras, even paper was costly, limiting the development of both writing and drawing skills to relatively well-off families. Vincent van Gogh, an ascetic loner who ignored public taste, could not have managed his very poor lifestyle at an earlier time in history. His non-conformism was possible because technological progress had lowered the costs of paints and canvas and enabled him to persist as an artist.

Female artists, like Berthe Morisot and Mary Cassatt, also took advantage of falling materials costs to move into the market. In the late nineteenth century women suddenly could paint in their spare time without having to spend exorbitant sums on materials. Artistic willpower became more important than external financial support. This shift gave victims of discrimination greater access to the art world. The presence of women in the visual arts, literature, and music has risen steadily as capitalism has advanced.

Falling materials costs help explain why art has been able to move away from popular taste in the twentieth century. In the early history of art, paint and materials were very expensive; artists were constrained by the need to generate immediate connections and sales. When these costs fell, artists could aim more at innovation and personal expression, and less at pleasing buyers and critics. Modern art became possible. The impressionists did not require immediate acceptance from the French Salon, and the abstract expressionists could continue even when Peggy Guggenheim was their only buyer.

The artist's own health and well-being, a form of "human capital," provides an especially important asset. Modernity has improved the health and lengthened the lives of artists. John Keats would not have died at age twenty-six of tuberculosis with access to modern medicine. Paula Modersohn-Becker, one of the most talented painters Germany has produced, died from complications following childbirth, at the age of thirty-one. Mozart, Schubert, Emily Bronte, and many others who never even made their start also count as medical tragedies who would have survived in the modern era. The ability of a wealthy society to support life for greater numbers of people, compared to pre-modern societies, has provided significant stimulus to both the supply and demand sides of art markets.

Most advances in health and life expectancy have come quite recently. In the United States of 1855, one of the wealthiest and healthiest countries in the world at that time, a newly born male child could expect no more than 39 years of life. Yet many of the greatest composers, writers, and painters peak well after their fortieth year.

Birth control technologies, generally available only for the last few decades, have given female creators greater control over their lives and domestic conditions. Most of the renowned female painters of the past, for various intentional or accidental reasons, had either few children or no children at all. Childbearing responsibilities kept most women out of the art world. Today, budding female artists can exercise far greater control over whether and when they wish to have children. The increasing prominence of women in music, literature, and the visual arts provides one of the most compelling arguments for cultural optimism. For much of human history, at least half of the human race has been shut out from many prominent artistic forms, and women are only beginning to redress the balance. (*Tyler Cowen, 1996, pp. 93-113*)

Do the arts lag in productivity?

William Baumol and William Bowen, two economists who have analyzed the performing arts, believe that economic growth imposes a "cost disease" on artistic production. They claim that rising productivity causes the arts to increase in relative cost, as a share of national income. The arts supposedly do not enjoy the benefits of technical progress to equal degree. It took forty minutes to produce a Mozart

string quartet in 1780, and still takes forty minutes today. As wages rise in the economy, the relative cost of supporting the arts will increase, according to this hypothesis. (*James Heilbrun and Charles M. Gray, 1993, p. 207*)

Contrary to Baumol and Bowen, the visible evidence suggests that the arts benefit greatly from technological progress. The printing press, innovations in paper production, and now the World Wide Web have increased the availability of the written word. The French impressionists drew their new colours from innovations in the chemical industry. Recording and radio, both capital technologies, have improved the productivity of the symphony orchestra. Symphonic productions now reach millions of listeners more easily than ever before. These technological improvements are not once-and-for-all events that only postpone the onset of the cost disease. Rather, technological progress benefits the arts in an ongoing and cumulative fashion. (*Baumol, Blackman and Wolff, 1989, pp.131-135*)

The cost disease argument neglects other beneficial aspects of economic growth. The arts benefit more from technological advances than it may at first appear. Production of a symphonic concert, for instance, involves more than sitting an orchestra in a room and having them play Shostakovich. The players must discover each other's existence, maintain their health and mental composure, arrange transportation for rehearsals and concerts, and receive quality feedback from critics and teachers. In each of these regards the modern world vastly surpasses the productivity of earlier times, largely because of technological advances.

Other productivity advances arise from new ideas. A string quartet in 1800 could play Mozart, but a string quartet today can play Brahms, Bartok and Shostakovich. The Kronos Quartet even plays Jimi Hendrix's "Purple Haze." Creativity, as the form of human capital, pervades cultural industries. Most productivity improvements, whether in the arts or not, come from human creativity, the "performing art" of the scientist, engineer, or inventor. Our entertainment and leisure industries have generated productivity increases that would put many computer companies or engineering firms to shame.

Mechanisms in support of artistic diversity

Well-developed markets support cultural diversity. A quick walk through any compact disc or book superstore belies the view that today's musical and literary tastes are becoming increasingly homogeneous. Retail outlets use product selection and diversity as primary strategies for bringing consumers through the door. Even items that do not turn a direct profit will help attract business and store visits, thereby supporting the ability of the business to offer a wide variety of products.

The successive relaxation of external constraints on internal creativity tends to give rise to a wide gamut of emotions and styles. Contemporary culture has proved itself optimistic, celebratory, and life-affirming. The music of Goran Bregović, Ratko Lalić's paintings, and Mika Aleksić's *Heart's Affair* show positive cultural forces with great vigour. The songs of Hank Williams, Isaac Bashevis Singer's stories, and Ingmar Bergman's *Persona* depict a sadder, more shattering aesthetic, although not without the possibility of redemption. And for a dark and ecstatic experience we are drawn to the works of Mark Rothko. Depravity an excess, exquisitely executed, can be found in the photography of Robert Mapplethorpe, the Sex Pistols's music, and Bernardo Bertolucci's *Last tango in Paris*.

The available variety of artistic products should come as no surprise. Adam Smith emphasized that the division of labour, and thus degree of specialization is limited by the extent of the market. In the case of art, a large market lowers the costs of creative pursuits and makes market niches easier to find. In the contrary case of a single patron, the artist must meet the tastes of that patron or earn no income.

Growing markets in music, literature and the fine arts have moved creators away from dependence on patronage. A patron, as opposed to a customer, supports an artist with his or her own money, without necessarily purchasing the artistic output. Samuel Johnson, writing in the eighteenth century, referred to a patron as "a wretch who supports with insolence, and is paid with flattery." Even Johnson, however, did not believe that patrons were intrinsically bad; the problem arises only when artists are completely dependent upon a single patron. Patronage relationships, which today stand at an all-time high, have become more beneficial to artistic creativity over time. The size and diversity of modern funding

sources gives artists bargaining power to create space for their creative freedom. (Dragan Milinković Fimon, 2007, pp. 99-112)

Growth of the market has liberated artists, not only from the patron, but also from the potential tyranny of mainstream market taste. Unlike in the eighteenth century, today's books need not top the bestseller list to remunerate their authors handsomely. Artists who believe that they know better than the crowd can indulge their own tastes and lead fashion. Today it is easier than ever before to make a living by marketing to an artistic niche and rejecting mainstream taste.

The wealth and diversity of capitalism have increased the latitude of artists to educate their critics and audiences. Starting in the late nineteenth century, many painters deliberately refused to produce works that were easily accessible to viewers. At first Manet, Monet and Cezanne shocked the art world with their paintings but eventually they converted it. The financial support they received from the families and customers was crucial to this struggle. The twentieth-century American pop artists, such as Andy Warhol, Roy Lichtenstein, Robert Rauschenberg and Jasper Johns, also made initial sacrifices to elevate our tastes. Today we enjoy their brilliant pictures while taking the once-shocking approach for granted.

In the realm of culture, market mechanisms do more than simply give consumers what they want. Markets give producers the greatest latitude to educate their audiences. Art consists of a continual dialogue between producer and consumer. This dialogue helps both parties decide what they want. The market incentive to conclude a profitable sale simultaneously provides an incentive to engage consumers and producers in a process of want refinement. Economic growth increases our ability to develop sophisticated and specialized tastes.

Many commentators, such as Jürgen Habermas, see the development of "critical theory" as vital to the reform of social and individual wants. Habermas's critical theorist outside the market order and attempts to deconstruct and dehegemonize the presuppositions upon which modern society is based. Rational communicative discourse and want refinement provide keys to his philosophy. Rather than seeing communicative reason as a project that stands outside and evaluates the market, I conceive of communicative reason within a concrete institutional framework with market incentives and property rights. Habermas wishes by reason and clear communication. I see his "ideal speech community" as a Platonic myth, and instead place greater emphasis on the competition of contrasting notions of cultural reason within regimes ruled by incentives.

Competition and complementarity as forces for innovation

Artists offer new products to increase their income, their fame, and their audience exposure. They seek to avoid duplicating older media and styles, which become played out and filled with previous achievements. Picasso had the talent to master many styles, but won greater accolades with his innovations than he would have achieved by copying the French impressionists. Rather than safely performing Haydn and Beethoven, four young talented performers decided to become the Kronos Quartet, and to perform music by Glass and Riley and African music. As a leader in a new line of production, the quartet has earned especially high profits. The Arditti Quartet has not earned the profits of Kronos, but nonetheless has staked out its position as a pre-eminent string quartet for contemporary chamber music.

Innovation enables artists to overcome their fear of being compared to previous giants. A century of German and Austrian musicians - Schumann, Schubert, Brahms and Bruckner - dreaded comparison with Beethoven and pursued new directions. Brahms avoided composing symphonies for many years, instead whiting songs and vocal ensembles. These works surpassed Beethoven's vocal music. Brahms turned to symphonies much later in life: He had once written, "You don't know what it is like always to hear that giant marching along behind me." Beethoven refused to hear the operas of Mozart for this reason, but even Beethoven could not escape being intimidated by his own achievements. Rather than finishing a tenth symphony, which might have paled in comparison to his ninth, he wrote his innovative late string quartets. (*Landon, 1992, p.81*)

Walter Jackson Bate coined the phrase *The Burden of the Past*. Harold Bloom produced a theory of poetry based on *The Anxiety of Influence*. In another book, *A Map of Misreading*, Bloom suggests another response to the past-deliberate misunderstanding of previous contributions. These tactics allow artists to overcome the quantity and quality of accumulated past masterworks. (*Walter J. Bate, 1970; Harold Bloom, 1975*)

Creators sometimes respond to past masterworks with emulation rather than product differentiation. The impressionist painters saw many of their innovations with sharp colours, flatness of field, and verticality of perspective in Japanese woodblock prints. They responded by collecting and promoting such prints. Mary Cassatt even copied the style literally. Similarly, the Rolling Stones were encouraged by the possibility of favoured the preservation of antiquities to “keep alive the examples of the ancients so as to equal and surpass them.”

Many of the newest cultural permutations emulate the very old and the sometimes forgotten. Tribal or ‘primitive’ modes of art have exercised a strong influence throughout our century. Picasso took much inspiration from African masks, Brancusi and Modigliani drew upon Cycladic art, the Surrealists looked to the South Pacific, and the Art Deco movement was influenced by the Mayan temples. Both rock-and-rollers and contemporary “classical” composers explore originally African rhythmic traditions.

Critics often write premature obituaries for changing styles and genres. The writings of epic poetry has not ceased but lives on in the works of Derek Walcott, who emulates Homer. Lawrence Kasdan’s *Body Heat* and Paul Verhoeven’s *Basic Instinct* follow the film noir tradition of the 1940s or 1950s. Many of the most popular bands of the last several years, like Nirvana, Pearl Jam, and Smashing Pumpkins, have created a deliberately retrograde sound, hearkening back to the 1970s. In classical music, Arvo Pärt resurrects the medieval tradition and in jazz George Gruntz has revitalized the big band. (*Howard D. Weinbrot, 1993, chpt. 3*)

The pastiche of today’s so-called “post-modern” style responds to two market incentives. First, an increasing number of past styles accumulate over time. It becomes harder to create works that do not refer to past styles in some fashion. Second, both creators and audiences come to know more past styles over time, due to the success of markets in preserving and disseminating cultural creations. Performers find themselves increasingly able to establish rapport with their audiences by referring to past works. Warhol could reproduce Chairman Mao, Marilyn Monroe or the Mona Lisa in silkscreen form, but Leonardo da Vinci had a smaller number of established icons, primarily religious, to draw upon.

Some new artistic developments turn their back on the futuristic and high-tech and embrace earlier, more naturalistic forms of art. Witness the recent trend of rock stars to go “unplugged” and produce acoustic albums and concerts. Andy Goldsworthy and Robert Smithson, two contemporary sculptors, have worked with objects taken from nature, such as stones, tree branches and ice. The artist Cy Twombly uses crayon to great effect. Artists increase their income and fame by reaching audiences, and they will not hesitate to cast off electronic gadgetry and draw upon earlier styles to achieve that end.

Standing still is one tactic that artists cannot prosper by in a dynamic market economy. Artists stake out niche positions but they are not protected against competition for long. Picasso and Braque introduced cubism but eventually had to contend with competitors who built on their work. Declining eminence and profits, combined with threatening competition, often induce the original artist to innovate again. Stravinsky, Picasso and the Beatles outpaced their competitors, at least for a while, by undergoing several metamorphoses of style.

Eventually most artists lose the drive or depth to meet challenges and consequently give up their place as industry leaders. Andy Warhol set up The Factory and sold studio-made prints and silk-screens under his own name. Maria Callas did not take sufficient care with her voice and Rossini ceased composing operas altogether. E. M. Forster published his last novels in the 1920s, even though he did not die until 1970. “I have nothing more to say” was his explanation. These artists ceded their places on the cutting edge of their respective fields. (*Francis King, 1978, p.76*)

New innovations do not always eclipse older, more established artistic forms, but they do inevitably change them. Outside competition shakes up older forms and spurs ingenuity. Renaissance sculpture communicated the idea of depth perspective to painters, jazz crept into the rhythms of classical music and movies have sped up the pacing of the best-selling novel. Sometimes a new medium pushes other works in the opposite direction. The need to compete with television prompted film directors to develop the big-screen movie with spectacular special effects. Photography created a cheap substitute for portraiture, which induced painters to direct their talents to more abstract and less realistic themes. (*Remi Clignet, 1985, p. 57*)

Artistic fertilizations and innovations also occur backwards in time, as later works improve the quality of earlier ones by changing their meaning. Verdi's opera *Otello* and Orson Welles's film *Othello* tell us more about Shakespeare's *Othello* than does any piece of literary criticism. These variations on the work, through different media and presentation, enable us to see Shakespeare's work anew. Verdi's music brings out the aspect of terror in the text and influences how we read the play. Subsequent contributions and adaptations thus make Shakespeare's work richer, just as Shakespeare's original *Othello* now contributes the depth of the later versions. Art Tatum's piano improvements, Lichtenstein's take-offs on French and abstract expressionist paintings and Beethoven's *Diabelli Variations* all shed light on previous artworks to an especially high degree. T. S. Eliot, who focused on this mechanism in his essay „Tradition and the Individual Talent“, has been prominent on both sides of such exchanges.

Art creates an individual language whose whole exceeds the sum of parts. Masterpieces therefore provide more satisfaction and insight as we artistic experience. Rossini's operas were once viewed as “too Germanic” and “too intellectual”, because he used the orchestra to frame the melodic line. The eventual adoption of this practice by opera composers all over Europe illuminated the universality of Rossini's original conception. Arthur Danto observes that And Warhol's Brillo Boxes would not have qualified as a work of art, had they been created one hundred years ago. Not only would these works have passed unappreciated, but they would not provide compelling images outside of a modern commercial context. (*Edward J. Dent, 1976, p. 14*)

The importance of context and the possibility of ex post “reinterpretations” make the best artworks truly inexhaustible. The more music we know, the more we can hear in the compositions of Bach and Beethoven. The very best creators manage to anticipate the future development of their genre and to produce works that will subsequently exhibit an ever greater richness. In these cases both the consumption and production of art are subject to increasing returns to scale. The more notable works that are produced, the greater is the significance of the best works from the past. The present therefore deserves at least partial credit for our understanding of the past. Ironically, if modern culture were so poor, it would not be able to produce so many cultural pessimists with such a fine appreciation of past masterworks.

Successive creations increase the potency of some works but devalue others. We now find Richardson's *Pamela* to be implausible and chauvinist; the heroine submits to a forced marriage to an unsavoury character and eventually grows to enjoy it. Contemporary audiences might best enjoy James Dean in *Rebel without a cause* as unintended farce, rather than as a rousing story of an angry young man. Markets have preserved the physical substance of these works but have devalued their original force and meaning.

Cultural critics and commentators contribute powerfully to the vitality of market art. Critics put artistic consumers in touch with artistic producers, and help us separate the wheat from the chaff. They support the process of taste refinement. Listeners who take a sudden interest in classical music do not have to sort through the entire eighteenth century repertoire, but can listen to Mozart and Haydn. Harold Rosenberg and Clement Greenberg helped the American abstract expressionist painters find a public audience and win their way into museums. Pauline Kael directs our attention to the best of recent film. These forms of professional cultural criticism, all relatively new professions, owe their thanks to capitalist wealth. The modern world can support many thousands of intellectuals who specialize in arguing the merits of artistic products.

Conclusion

The market enterprise and productive wealth should be treated as allies of cultural production. It seeks to redress the current intellectual and popular balance and to encourage a more favourable attitude towards the commercialization of culture that we associate with modernity. The capitalist market economy, including most of transitional former communist economies, is a vital but underappreciated institutional framework for supporting a plurality of coexisting artistic visions, providing a steady stream of new and satisfying creations, helping consumers and artists refine their tastes, and paying homage to the eclipsed past by capturing, reproducing and disseminating it.

This paper is a try to presents some social mechanisms that link markets, wealth, and creativity, examines how these mechanisms have operated throughout relatively recent cultural history, and attempts to account for the widespread perception that modernity suffers from a cultural malaise.

Focusing on the role of markets and economic factors, including technology, in influencing culture, I do *not* represent a mono-causal materialist theory of culture. But I do outline some ways in which economic forces have shaped Western art, literature, and music since the Renaissance. Many others issues are to be yet considered in efforts to complete this complex consideration, such as relationship between High and low culture, about the Innovation in preserving past culture, the Outsiders as innovators and finally the role of Government as a art customer.

Without dismissing the role of non-economic forces, I argue that economic forces have had stronger effects on culture than is commonly believed. The printing press paved the way for classical music, while electricity made rock and roll possible. For better or worse, artists are subject to economic constraints, just as other businessmen are.

References

- Barro, Robert J. and Sala-i-Martin, Xavier, 1995. *Economic Growth*, New York: McGraw-Hill
- Bate, Walter J., 1975. *The Barden of the Past and the English Poet*, Cambridge, Harvard University Press
- Baumol, Blackman, and Wolf, 1989. *Productivity and American Leadership: The Long View*, Cambridge: MIT Press
- Bettman, L. Otto, *Johann Sebastian Bach as his World Knew Him*, New York: Birch Lane Press
- Brazeau, Peter, 1985. *Parts of the World: Wallace Stevens Remembered*, San Francisco: North Point Press
- Bowness, Alan, 1989. *The Conditions of Success: How the Modern Artist Rises to Fame*, London: Thames and Hudson
- Casson, Mark, 1993. 'Cultural determinants of economic performance,' *Journal of Comparative Economics*, 17
- Cellini, Benvenuto, 1967. *The Treatises of Benvenuto Cellini on Goldsmithing and Sculpture*, New York: Dover Publication
- Clignet, Remi, 1985. *The Structure of Artistic Revolutions*, Philadelphia: University of Pennsylvania Press
- Dent, Edward J., 1976. *The Rise of Romantic Opera*, Cambridge: Cambridge University Press
- Fukuyama, Francis, 1995. *Trust: The Social Virtues and the Creation of Prosperity*, London: Hamish Hamilton
- Gray, H. Peter, 1996. 'Culture and economic performance: policy as an intervening variable', *Journal of Comparative Economics*, 23
- Griffin, Keith, 1996. *Studies in Globalization and Economic Transitions*, London: Macmillan
- Hayman, Ronald, 1990. *Proust: A Biography*, New York: Carrol & Graf
- Heilbrun, J., and Gray M. C., 1993. *The Economics of Art and Culture: An American Perspective*, Cambridge: Cambridge University Press
- Inglehart, Ronald, 1990. *Culture Shift in Advanced Industrial Society*, Princeton University Press
- Kennedy, Nigel, 1992. *Always Playing*, London: Mandarin Paperbacks

- King, Francis, 1978. *E. M. Forster and his World*, New York: Charles Scribner's Sons
- Landon, Robins H. C., 1992. *Bethoween: His Life, Work and World*, London: Thames and Hudson
- Letheve, Jacques, 1972. *Daily Life of French Artists in the Nineteenth Century*, New York: Praeger Publishers
- Madžar, Ljubomir, (1969), *Tržište i kultura (The Market and the Culture)* , Beograd: Institut of Economic Sciences, (*Separat 76*)
- Milinković, D. Fimon, 2007. *Uvod u ekonomiku kulture (Introduction to the Cultural Economics)*, Beograd: Institut of Economic Sciences and Belgrade Banking Academy
- Perkins, David, 1976. *A History of Modern Poetry*, Cambridge: Belknap Press of Harvard University Press
- Popović, Milenko, 2008. 'The Market of the Art Products', *Montenegrin Journal of Economics* vol.4/No.8, Dec. 2008
- Stephoe, Alan, 1998. *The Mozart-DaPonte Operas*, Oxford: Clarendon Press
- Thayer, Aleksander, 1967. *Life of Beethoven*, Princeton: Princeton University Press
- Throsby, David, 1995., 'Culture, economics and sustainability', *Journal of Cultural Economics*, 19
- Weinbrot, Howard D., 1993. *Britannia's Issue: The Rise of British Literature from Dryden to Ossian*, Cambridge: Cambridge University Press
- Wolfensohn, James D. *et al.*, 2000. *Culture Counts: Financing, Resources, and the Economics of Culture in Sustainable Development*, Washington, DC: World . Bank
- World Bank, 1999. *Culture and Sustainable Development: A Framework for Action*, Washington, DC: World Bank
- World Commission on Culture and Development (WCCD), 1995. *Our Creative Diversity*, Paris: UNESCO

Change Management for Implementation of Health Informatics Programs in Serbia

Jane Paunković, Nebojša Paunković, Vesna Baltezrević,
Srđan Žikić, Nenad Crnčević¹

ABSTRACT – *A successful Health Informatics program is the product of careful planning, sound management, dedicated healthcare professionals and support staff, and a commitment to appropriate funding to support capital purchases and on-going operations. Also, it requires the fusion of multiple technologies such as medical devices, network computing, video conferencing, software and telecommunications, into a seamless system.*

Nevertheless, all new technical implementations impact the social system of which they become a part. This is particularly true of Health Informatics systems. The technological innovation and the desire to diffuse it into the medical profession of the project region, must strategically engage stakeholders within its project scope, and be sensitive to cultural beliefs and the local values system. Effective change requires that people not only believe that change is necessary but understand how change will come about and what the consequences will be. Consequently, the design of the Health Informatics System needs to include both a priori Organizational Change effort to overcome latent resistance within the social system and an early-on and continuing evaluation component to assure accurate feedback of utilization rates on a continuing basis. Of fundamental importance is a clearly articulated and hierarchically supported purpose that facilitates the change process.

Objective of this research is to define appropriate methodology for organizational change interventions for implementation in Health Informatics - telemedicine projects. As a case study we are presenting telemedicine program "THYRONET" developed in Serbia.

KEY WORDS: *change management, technology management, health informatics, electronic consultation system, telemedicine*

Background and significance

Breakthrough medical technologies have already raised life expectancies quickly and dramatically even in poor countries without much health infrastructure. Human Development Report 2001 (Oxford University Press, 2001) commissioned by the United Nations Development Program (UNDP) argues that information and communications technology and biotechnology can actually make major contributions to reducing world poverty. "Ignoring technological breakthroughs in medicine, agriculture and information will mean missing opportunities to transform the lives of poor people". Advanced medical technologies provide an important solution to providing high quality health care and controlling costs. They can save money, improve quality, increase economic productivity, and save lives. Medical technology is enabling diseases to be diagnosed faster and more accurately, health care providers to be more efficient, patients to recover faster and with improved quality of life, and nations to create greater productive wealth.

Health Informatics systems have a great potential to improve healthcare through the use of information technology, but at the same time they influence social systems of which they become a part [22,9,1]. Appropriate organizational interventions need to be designed into the health informatics projects to overcome inertial resistance to change, monitor utilization, and proactively ensure cost-effective sys-

¹ Jane Paunković, Nebojša Paunković, Vesna Baltezrević, Srđan Žikić, Nenad Crnčević, Faculty for Management Zaječar, Megatrend University, Special Hospital for Thyroid Diseases, Zlatibor

tems implementation. [3,6,8]. Continuous feedback loops maximizes stakeholder input, enhances the recognition for the need to change and indicate level of commitment to the process.

Information and Communication Technology (ICT) and health

Information and Communication Technology can be of great assistance to healthcare professionals in the process of diagnosis, treatment, monitoring, medication prescription, referral, information retrieval and communication, documentation and transactions. Innovations from the information technology industry, applied to health care, can be grouped into the following categories:

- *Public information on health*: health care services and providers, health care policies, legislation, news/information about health and medicine
- *Health information exchange for administrative purposes* between organizations, patients, patient-health insurance, hospitals, clinics; health authorities
- *Telehealth / Telemedicine*: investigation, monitoring, management of patients using remote access to patient data and information provider to provider or provider to patient

Over the years the terminology in health related information technology has changed and continues to change. The World Health Organization (WHO) has addressed this issue with an alternative idiom, Health Telematics, (2) which is a composite term defined as:

- "health-related activities, services and systems, carried out over a distance by means of information and communications technologies, for the purposes of global health promotion, disease control and health care, as well as education, management, and research for health."

Information and Communication Technology (ICT) and change management

Change management is about people, not about changing technology or processes. For change to work, it needs participation from all sides. It should involve all stakeholders, but the message, the training and the involvement should be tailored to the needs of each individual group. For change to last, it has to be reinforced. And the more control people feel they have over the change, the less stressed they become [33]. According to Bashshur (1997):

“When technological innovations are not accepted or implemented properly, generally the failure may be traced to a poor fit between the nature of the innovation and the vested interests, resources, and expectations of its major gatekeepers.”

The importance of managing organizational change effectively has compelled a growing number of organizations to incorporate the discipline into major initiatives of all sorts, from the introduction of IT software packages to business process and organizational structure changes. The contribution of effective change management/leadership to the achievement of positive results is quite evident. Statistics Canada has reported that Canadian firms have achieved performance improvements of 46 percent for process innovation, 32 percent for product innovation and 25 percent for productivity improvement, when combining of innovative Human Resource Management (HRM) practices with information and communication technologies (ICT), in change initiatives. When firms do not include, or use only low levels of HRM practices, and only rely on high ICT for benefits, the resulting productivity improvements were noticeably smaller: 24 percent for process innovation, 14 percent for product innovation and 9 percent for productivity improvement [28]. A large number of ICT programs are actually more predominately change programs, or service improvement programs, with the implementation of technology being only part of the solution [17]. Furthermore, concentrating on the technological aspects of these programs can lead to less effective results.

Research methodology

Previously, we have reported a development of cost-effective, highly efficient electronic Thyroid consultation and referral system from primary care to secondary and tertiary institutions in Serbia “THYRONET SERBIA” [23].

Research on quality improvement in health care shows that there are some areas of organizational development that are particularly important [32]. Firstly, cultural change ensures that the underlying beliefs and values of the organization support the open, constructive reflection required for effective clinical governance. Secondly, "technical" development ensures that people have the skills to undertake such work, and, thirdly, structural development of committees and systems is necessary to coordinate and monitor quality improvement work. In addition, effective organizational development requires determined leadership. Those responsible for the development of clinical governance will need a clear understanding of what is being introduced and why.

From the literature review we have found that following approaches have been considered to be essential for successful implementation of health information technology [4,34]:

Leadership - health informatics projects need three kinds of leaders: one (or more) physician champion(s), a senior management commitment and a skilled project manager.

Detailed planning. - All project managers have to be trained in developing detailed project plans.

Managing expectations. - Careful consideration has to be given to the scope and benefits of the projects so that user expectations are kept realistic

Ensure that clinicians are an integral part of the initiative. Where appropriate, project sponsors have to be lead clinicians and both project steering groups and working groups consisted of multi-disciplinary groups. Members of both working and steering groups have to include clinical staff from a wide variety of backgrounds, e.g. physicians, nurses, administrative staff and allied health professionals.

Case study - “THYRONET Serbia”

An electronic thyroid consultation network to optimize patient care in Serbia

Currently in Serbia, estimated 80% of all referrals to Tertiary Care for Thyroid disease are deemed unnecessary or ill-timed by the specialty care providers, and detract from time and effort available to treat the remaining appropriate referrals. Specialists are forced to conduct trips to Primary Care facilities to effectively triage the thyroid cases that truly need to be seen in the Tertiary Care setting. Caseloads during these trips are high, reducing patient to specialist interaction to a few minutes per patient. Documentation on patient treatment rarely is delivered from Primary Care to the Specialty Care center, necessitating costly duplication of laboratory and radiology testing. Documentation from the Specialty Care center often does not return to the Primary Care center, rendering follow up care more difficult, and denying Primary Care clinicians with the opportunity to learn from each case.

A deployed web-based electronic consultation system is proposed to alleviate the problems noted above. Specialty Care endocrinologist and Nuclear Medicine specialists created web-based protocols for patients referred to their facility. These forms dictate the minimum level of clinical data required for referral. A clinical case manager will review these submitted consult requests, triage them, and forward to the appropriate specialist/sub-specialist. The receiving specialist will only accept the referral after approval. Interaction between referring provider and specialist about the case will occur securely within the system. Treatment recommendations, additional diagnostic studies and other required data would be exchanged in this manner. Patient treatment notes, diagnostic findings and follow up notes will be stored within the system. As patient's return to the Primary Care setting, their case history and treatment plans will be available for the referring provider for review.

An important first step in this extensive project is the development of a pilot program implementing web based consultation in a patient referral system. The pilot program comprises an electronic consultation and referral system between the Thyroid Gland and Metabolism Institute in Zlatibor and the Endocrinology University Clinic in Belgrade.

The Thyroid Gland and Metabolism Institute in Zlatibor exemplifies an excellent model for rationalization of a patient referral system, since almost 100% of the patients that enter the Institute are being referred to specialist consultations. Institute in Zlatibor consists of hospital facilities (400 beds) and out-patients unit (ambulatory part). It is a combination of a local (regional) primary health institution (for out-patients) and specialized hospital (second and tertiary level). Thyroid disease patients from the surrounding area (population of approximately 2,000 000 people) are referred to Thyroid Gland and Metabolism Institute in Zlatibor. Although almost all procedures routinely used in thyroid disease diagnostics and therapy are available the in Zlatibor current physician and staff education levels and experience are at the primary care level. Specialty care consultations are provided by the referent (University) institutions from Belgrade (350 km distance). These specialists travel to Zlatibor to review practically all in-patients and outpatients during their weekend visits. They usually have around 200 consultations per visit (averaging two minutes per patient). Thus, the quality of this type of consultation is less than ideal.

The use of an electronic system will optimize the time a specialist spends with a referred patient, as complete diagnostic workups will have been completed. Additionally, this needy patient will not be competing for specialist time with inappropriately referred patients. Electronic storage of patient information allows for rapid retrieval and secure archival of critical information. Additionally, modern database information supports detailed data analysis to observe clinical patterns and treatment effectiveness.

Nevertheless, ITC - telemedicine projects like “Thyro-Net Serbia” not only hold the potential for increasing patient access, and enhancing the quality and timeliness of patient care, but they also hold the potential of altering the flow of clinical information and the potential to alter the loci of clinical decision-making. It is in the latter two areas that we find the roots of social resistance to the utilization of Health Informatics systems. The degree of this resistance varies from case to case, but is always present and more often than not results in low utilization rates of Health Informatics solutions after the initial “honey moon period” of new implementations. To overcome this serious problem, the design of the Health Informatics system needs to include both a priori Organizational Change effort to overcome latent resistance within the social system and an early-on and continuing evaluation component to assure accurate feedback of utilization rates on a continuing basis.

We have defined organizational change interventions during the initial implementation phase and a continuous monitoring of system utilization for “Thyro-Net Serbia”. Additional Organizational Change interventions will be designed as dictated by downward trends in utilization rates of this project. The Organizational Change program involves group sessions with both Primary as well as Secondary and higher care-givers and their staffs at the onset of the pilot project, and thereafter as necessary. The monitoring effort is continuous during the entire length of the project and include on-site observation during at a 3 day period in time during the 0-3 month, 11 to 12 months, 23-24 month time-line periods. Qualitative methodologies are used as primary data collection techniques, with especial reliance on structured interviews and field observations. Local professionals are utilized to assist implementing the methodologies to facilitate cross cultural communications. Analysis of system utilization data will allow quantitative data cross-validation of the qualitative results.

One unanticipated, but functional result of Health informatics systems such as that here proposed has been the continuing medical education of Primary care-givers by Secondary and higher care-givers. This learning has been seen to occur at both an individual as well as an organizational level [5]. In addition to continuous utilization monitoring, a second effort will be undertaken to document both the individual and organizational learning which occurs as a consequence of the implementation of the proposed pilot Health Informatics system.

Discussion

Applications of health informatics can be done in all areas of patient care [14] provided by real-time and/or store-and-forward technologies [10,12] ranging from telephone and fax machines, e-mail, chat rooms, discussion boards, audio- and video-conferencing. Administrative applications include recording [19] and sharing of billing summaries, electronic connections to pharmacies, etc. Remote medical instruments include various types of imaging technologies [30], pressure sensors, haptic feedback devices and robotics. Educational applications focus on continuing medical education for professionals and patients [13] including tele-mentoring. Further, there exists substantial evidence that a byproduct of telemedicine implementation is substantial continuing education for all participants.

Clear benefits arising from the introduction of new information technology solutions are reported in the healthcare services literature. A systemic review by Chaudray [3] identified three major benefits for quality: increased adherence to guideline-based care, enhanced surveillance and monitoring of care, and reduced medication errors. Wolf [34] highlights that there are potential cost savings as manual tasks become automated and also acknowledges that better information can lead to earlier therapeutic interventions. However, in order to realize these benefits attention needs to be given to organizational change, workflow redesign (new ways of working) and human factor issues in order to provide systems that support the dissemination and sharing of meaning, rather than just information [11].

The importance of understanding communication flows, human factors (engagement and active support) and organizational factors (structures, project management processes and procedures) involved in implementing any new IT system has been cited in numerous publications [28,27,21] as well as being at the heart of some very public failures [25].

In the European Union "The European Fourth Framework Program for Research and Technological Development" and "The Global Healthcare Application Project" dedicate many sections to healthcare and contain many health informatics projects [7,20].

Information technology interventions in health care have been found successful in terms of cost effectiveness as well as in patient satisfaction. Currently there are widespread health informatics programs in the United States of America and throughout the world [15]. Health Informatics projects have been very successful in developing countries [29,24], and their clinical and economic utility has also been demonstrated in neighboring Croatia and in Kosovo [16,18].

Our experience has shown that the earliest inclusion of each site's administrative and clinical leadership is imperative to ensure success of the health informatics program. Lasting and meaningful organizational change ultimately comes from the individuals who are the building blocks of the organization. Prior to the first year implementation, sponsorship or sense of participatory ownership must be cultivated, strengthened and shared with each facility to ensure success of the pilot program, and a successful transition from pilot deployment to the broader integrated delivery of care. The true key to sustainability will be dependent upon the successful implementation of the Thyroid Network, where primary care clinicians receive timely and accurate responses to their requests, and specialists are able to better screen and prepare for the most appropriate referrals. This success will occur with the inclusion of the Ministry of Health leadership, the hospital leadership, and the consulting clinicians, in all aspects of the program, to ensure the focus is retained on the improvement of the health of the Serbian people.

References

- [1] Aas IH. Telemedicine and changes in the distribution of tasks between levels of care. *J Telemed Telecare*. 2002;8
- [2] A Health Telematics Policy in support of WHO's Health-for-All Strategy for Global Health Development, 11-17 December, Geneva, 1997.
- [3] Amendola, Mario and Jean-Luc Gaffard *The Innovative Choice. An Economic Analysis of the Dynamics of Technology*. Basil Blackwell Limited, UK. (1988).
- [4] Chaudray B, Wang J, Wu Setal. Systematic review: impact of health information technology on quality, efficiency, and costs of medical care. *Annals of Internal Medicine* 2006;
- [5] David C. Bangert and Robert Doktor (eds.). *Human and Organizational Dynamics in e-Health*. Radcliffe: Oxford/Seattle, 2005.
- [6] Davies, Stephen *THE DIFFUSION OF PROCESS INNOVATIONS*. Cambridge University Press. Cambridge, 1979
- [7] De Moor, G., Laires, Maria, McCurry, M., Thayer, Christine. *The European Health Telematics Observatory*. Medical Informatics Europe '96 - Human Facets in Information Technology, IOS Press, Amsterdam, 1996, pp. 108-112
- [8] Dodgson, Mark and John Bessant (1996). *Effective Innovation Policy: A New Approach*. International Thompson Business Press, London)
- [9] Frances Mair and Pamela Whitten Systematic review of studies of patient satisfaction with telemedicine. *BMJ*, Jun 2000; 320: 1517 -
- [10] Harno KS. Telemedicine in managing demand for secondary-care services. *J Telemed Telecare* 1999; 5: 189-192
- [11] Hartswood M, Proctor R, Rouncefield M, Slack R. Making a case in medical work: implications for the electronic medical record. *Computer Supported Cooperative Work* 2003; 12; 241-60.
- [12] Houston MS, Myers JD, Levens SP, McEvoy MT, Smith SA, Khandheria BK, Shen WK, Torchia ME, Berry DJ. Clinical consultations using store-and-forward telemedicine technology. *Mayo Clin Proc*. 1999 Aug;74(8):764-9.
- [13] Ian Jardine and Bruce A Swanson Reconfiguring health systems *BMJ*, Mar 2003; 326: 599
- [14] Johnson P, Andrews DC, Wells S, de-Lusignan S, Robinson J, Vandenburg M. The use of a new continuous wireless cardiorespiratory telemonitoring system by elderly patients at home. *J Telemed Telecare* 2001; 7(suppl 1): 76-
- [15] Kokesh J, Ferguson AS, Patricoski C. Telehealth in Alaska: delivery of health care services from a specialist's perspective. *Int J Circumpolar Health*. 2004 Dec; 63(4):387-400.
- [16] Kovai L, Lonari S, Paladino J, Kern The Croatian telemedicine *Stud Health Technol Inform*. 2000, 77:1146-50
- [17] Legris P, Collerette P. A roadmap for IT implementation: integrating stakeholders and change management issues. *Project Management Journal* 2006; 37 (5); 64-75.
- [18] Latifi R, Muja S, Bektashi F, Reinicke M. Use of information technology to improve quality of healthcare: Kosova's telemedicine project and international virtual e-hospital as an example. *Stud Health Technol Inform*. 2004;104:159-
- [19] Loane MA, Bloomer SE, Corbett R, Eedy DJ, Hicks N, Lotery HE, Mathews C, Paisley J, Steele K, Wootton R. A randomized controlled trial to assess the clinical effectiveness of both realtime and store-and-forward teledermatology compared with conventional care. *J Telemed Telecare*. 2000;6 Suppl 1:S1-3.
- [20] Marcin JP, Nesbitt TS, Cole SL, Knuttel RM, Hilty DM, Prescott PT, Daschbach MM. Changes in diagnosis, treatment, and clinical improvement among patients receiving telemedicine consultations. *Telemed J E Health*. 2005 Feb;11(1):36-43.
- [21] Marsden C, Taylor S, Coker D. Implementing an electronic patient record for Leicestershire's therapists working in the community: 2002-2005. *British Journal of Healthcare Computing and Information Management* 2005; 22 (5); 20-2.

- [22] Pamela S Whitten, Frances S Mair, Alan Haycox, Carl R May, Tracy L Williams, and Seth Hellmich Systematic review of cost effectiveness studies of telemedicine interventions *BMJ*, Jun 2002; 324: 1434 – 37
- [23] Paunkovic J, Doktor R, Paunkovic N, Whitton R, Garshnek V :An Electronic Thyroid Consultation Network to Optimize Patient Care. VIPSI-2008 CROATIA – OPATIA, April 2008 19-23
- [24] Person DA, Hedson JS, Gunawardane KJ. Telemedicine success in the United States Associated Pacific Islands (USAPI): two illustrative cases. *Telemed J E Health*. 2003 Spring;9(1):95101
- [25] Reider J. Cedar–Sinai Medical Center suspends CPOE. January 2003.
- [26]Ryder-Smith J. The secret of good conversations: investing in success. *Health Manpower Management* 1998; 24; 38–40.
- [27] Smith A, Preston D. Communications between professional groups in an NHS trust hospital. *Journal of Management in Medicine* 1996; 10; 31–8.
- [28]Statistics Canada report: Wulong Gu and Surendra Gera. (Nov. 2004). The Effect of Organizational Innovation and Information Technology on Firm Performance.
- [29] Steven M Edworthy Telemedicine in developing countries *BMJ*, Sep 2001; 323: 524 - 525.
- [30] Weinstock MA, Nguyen FQ, Risica PM. Patient and referring provider satisfaction with teledermatology. *J Am Acad Dermatol*. 2002 Jul;47(1):68-72
- [32] Wild E L, Hasting T M, Gubernick R, Ross D A, Fehrenbach S N. Key elements for successful integrated health information systems: lessons from the states. *Journal of Public Health Management Practice*
- [33] Witchalls, Clint. "The art of change management." *Computing*. (June 28, 2007): 33.
- [34] Wolf E J. Critical success factors for implementing CPOE. *Healthcare Executive* 2003; 18 (5); 14–19.

Social Dialogue for More Effective Education and Human Resources Development in Montenegro

Mladen Perazić¹

ABSTRACT – *The participation of employees and employers' organizations, together with the representatives of governments, in shaping the social and economic policy is considered as being vital for the stability of the society, the competitiveness of individual economies and for maintaining social peace.*

In social dialogue with purpose to increase human resources development in Montenegro are involved representatives of employers – the Union of Employers of Montenegro and representatives of employees – the Association of Unions of Montenegro and Chamber of Commerce of Montenegro. Its role is important in process of reform of education system and in development of workforce. At this moment we can say that social partnership should have appropriate role in identifying needs for vocational education and training in enterprises. Improving coordination among individual segments of the system is very important for needs assessment for the purpose of easier collection and better utilization of relevant facts. Center for Vocational Education and the Department for Adult Education works on development of adult education and works on promotion of lifelong learning, and makes efforts to involve all participants of social dialogue: representatives of employers, union, state institutions, non-governmental organizations.

Social dialogue in Montenegro is necessary in order to establish system to provide more information and education and employment policy, rising awareness of importance of long life learning and involvement of all stakeholders in education reform process, human resources development and employment.

Description of the institutions involved in social dialogue relating to education and human resources development in Montenegro

Representatives of employees, Association of Unions of Montenegro and as representatives of employers: the Association of Employers, the Chamber of Commerce of Montenegro, and Montenegro Business Alliance are involved in social dialogue with a goal to increase system of education in Montenegro and create more effective workforce.

The Association of Unions of Montenegro (AUM) is a voluntary interest-based organization of workers, organized in independent occupational Unions, which are grouped into the Association based on the acceptance of the Programme and the Statute. The employed join the Union on a voluntary basis, regardless of political or religious affiliation, national belonging, occupation, and gender. The employed join the Union through the Union's organization. While the Statute of the Association is the fundamental organizational document which provides essential definitions, some of the main issues related to the position of the Union's members are more precisely regulated by Statutes of Branch Unions and the rules regulating the work of the Union's organizations. The main tasks of the Union's organization involve the following: signing of Collective Agreement with employers, negotiations with employers, monitoring execution of the Collective Agreement, addressing requests related to interests of members, dealing with protection at work and the conditions of work, informing members about actions and the policy of the Union and the Association, preparing and organizing collective industrial activities, making decisions upon joining the Union, making decision on authorizing persons registration into the Register of the competent Government body and the Union's Register, etc.

¹ Mladen Perazić, Education Department of Chamber of Commerce of Montenegro

Currently, the Association of Unions of Montenegro is composed of around one thousand and two hundred registered entities: Union organizations, independent branch unions and branch unions. The overall activities of the Association of Unions of Montenegro, unions involved in the Association, and municipal union fiduciaries, are monitored by the Unit of the Association, which is organized at the level of sectors. Association is one of founders of VET Centre of Montenegro. Association delegates representatives in Managing Board of VET Centre, Council for Vocational Education, Council for Adults Education and Council for Higher Education, Managing Board of Employment Agency, VET School Boards, Council for Radio and Television of Montenegro (public services –national radio and TV) etc. Association of Union gathers around 60.000 members. Priorities for future are to involve more women organisation and young people in various activities of Association and engage more experts for a system of Association education.

The Union of Employers of Montenegro (UEM)² is a non-political and non-profit organization, based on voluntary membership and established in compliance with international rules and standards, and the standards of the International Labour Organization (ILO). UEM is officially recognized by the Ministry of Health, Labour and Social Welfare as a representative organization of employers in social dialogue and negotiations (General Collective Agreement). The main and priority task of the UoEM, as a legitimate representative of employers, is to participate in social dialogue and to support approach to the social dialogue as a system for linking employers, the Government and Unions and to support establishment and development of social dialogue towards general democratization of society and achieving balance between market economy and social justice. The membership of the Union of Employers also involves small and medium enterprises, large economy systems and associations at local and branch level. UEM supports development of micro, small and medium enterprises in Montenegro by offering free legal services (free legal advice, assistance in preparing labour legislation, and assistance in interpreting legislation related to activities of members), free pages on the web-site of the UEM, consultancies, translation services (legal documents, economic analysis, scientific presentations in various economy activities, and in areas which relate to social dialogue and collective negotiations), education and training, opportunity to receive quality business information and opportunities to receive information about laws important for businesses, participation at international fairs and gatherings under preferential conditions, etc. The Management Board of the Union of Employers of Montenegro established various Commissions in December 2004. UEM is involved in social dialogue as a representative of employers in negotiations for Collective Agreement together with Association of Unions of Montenegro and Government of Montenegro (Ministry of Health, Labour and Social Welfare).

The Montenegro Business Alliance (MBA)³ was established in September 2001 with the objective to link businessmen, who organize to improve the situation in economy and to influence development in a way, which fosters rapid economic development of Montenegro. Objectives of the Montenegro Business Alliance are defined by the separate document – the MBA Business Agenda, which is adopted at the regular annual Assembly Session. Development of the Business Agenda involves all members of the Montenegro Business Alliance. Long-term objectives of MBA involve: education and training, human resources development, providing support to creation of sound work environment for private business owners, who are the main pillar of Montenegrin economy, improvement of investment environment, ensure better involvement of private sector in preparing new legislation, taking part in the enforcement of new reform laws, leading the process of reaching national consensus on the priorities of future economic development of Montenegro, continuous expansion of the range of services provided to its members, increase the number of members.

In March 2004, MBA signed the Protocol on Cooperation with the Parliament of the Republic of Montenegro, which allows involvement of the MBA representatives in the work of the Board related to the procedure of reviewing laws and other legislation, which are essential for economic and business system of Montenegro. MBA, as a member of the Commission for Economic Freedom, suggested changes to the Law on Concessions in the section which relates to higher involvement of private sector

² www.upcg.cg.yu

³ www.visit-mba.org

in provision of public services. For the purpose of efficient and rational implementation of public services, MBA advocates more active involvement of the private sector in matters, which contribute to development and implementation of functions of the State Administration. MBA gathers approximately 500 companies. Each company is a member of Assembly of MBA as the most important body.

The Chamber of Commerce of Montenegro (CCM) is a business, professional and interest-based organization of enterprises, banks and other financial organizations, insurance organizations and entrepreneurs, who have their businesses in Montenegro, who became members based on the Law on the CCM. The work of the Chamber is managed by its members through their representatives in the Chamber's bodies. They initiate, propose and decide upon establishing organizations and the work within the Chamber. The CCM works together with the Government on implementing reform processes in economy on one side, and on the other hand, the task of the Chamber is to work on economy infrastructure within these processes, to work on its adequate transformation, to encourage entrepreneurship and to provide education to staff in economy. Organization forms and forms of work in the Chamber, through which the Chamber does its work are associations, boards, councils, directorates, groups, sections, communities, branch offices abroad, consortiums and specialized organizations for providing expert assistance and certain business services. Association is the basic form of organization and work of functionally and branch linked members of the Chamber aimed at conducting activities of the Chamber and it is organized for one or more economy branches or groups and sub-groups. The activities and responsibilities of the Association involve: monitoring and analysing economic trends in a certain economy sector and proposing measures for improvement of working conditions of its members, monitoring achievements worldwide in the field of technical and technological development in some economy sectors and their application in the country, proposing initiatives and proposing measures to remove monopoly on the local market, working with the Chamber bodies on all issues related to vocational and adult education, etc. Sectors and Units are organized in the Chamber for the purpose of conducting professional, other administrative and supporting activities. The following sectors are represented in the Chamber: Sector for Associations and Economic Development, Sector for International Economic Relations and European Integrations, Sector for Informatics, Marketing and Public Relations, Sector for Education, Sector for Legal, Financial and General Affairs, Unit for Quality.

The CCM has established cooperative partnership with the Government of the Republic of Montenegro. Using opinion and proposals of its bodies as a starting point, the Chamber proposes its economic policy measures to the Government. The Government representatives attend the Chamber Assembly sessions and are involved in discussing these measures. Based on the partnership with the Government of Montenegro, the CCM plays a significant role in the reform of the educational system of Montenegro. Among other things, the Chamber is one of the founders of the Centre for Vocational Education, together with the Government, Association of Unions of Montenegro and the Employment Agency of Montenegro. Chamber delegates representatives in Managing Board of VET Centre, Council for Vocational Education, Council for Adults Education and Council for Higher Education, Managing Board of Employment Agency, VET School Boards, various state working groups in process of accession to EU, Council for Radio and Television of Montenegro (public services –national radio and TV) etc.

Organisations which are involved in social dialogue in Montenegro participate in creation and managing of education policy. They are partners with a purpose to improve process of education reform. On national level, institutions which are involved in social dialogue, have representatives in Managing Board of VET centre, Council for Vocational Education, Council for Education of Adults, Council for Higher Education (Chamber of Commerce and Associations of Unions) , in Commission for Control of States Aid (Montenegro Business Alliance) and in a process of collective negotiation (Union of Employers and Association of Unions) etc.. On the local level social partners have representatives in VET school boards. In a sphere of employment social partner institutions participate in creation of employment policy through its cooperation with Employment Agency. They have representatives in Managing Board of Employment Agency (Chamber of Commerce, Union of Employers and Associations of Unions).

Role of social dialogue in education, training and workforce development policies

Having in mind that the quality of the education system is one of the main factors specifying employment of youth and adults, the reform of education system in Montenegro started in 2000. The main development directions and the educational vision are set out by the Book of Changes⁴, the strategic document that the Government approved at the end of 2001. The work on the Book of Changes involved representatives of the Ministry of Education, teachers, the Chamber of Commerce, the Association of Unions of Montenegro, the University and the Employment Agency of Montenegro. The Book of Changes sets out a framework of the overall educational system, from preschool education to training of adults and promotion of lifelong learning, where the previous practice and tradition and positive experiences, experiences of European countries and goals to be achieved are used as a starting point. According to commitments, concepts and principles of the Book of Changes, a set of 6 Laws has been developed: General Law on Education, the Law on Preschool Education, the Law on Elementary Education, the Law on Gymnasium, the Law on Vocational Education and the Law on Adult Education. These Laws are adopted in the Parliament in 2002. The Law on Education of Children with Special Needs was adopted in 2004. These Laws are based on the general principles of educational systems and involve: a universal approach to quality education, implementation of European standards, flexibility and decentralization of the system, horizontal and vertical mobility within the system and possibility of recognition of previously acquired knowledge.

All these principles are essential to creating an employable workforce, but also for personal development and active involvement in social life. The Laws, in the essence, enable and assume approximation to European norms, approximation to solutions, which should allow every individual to be faster, in a better way and with more opportunities involved in the labour market due to the knowledge and competencies acquired by education and, consequently, to fulfil what is expected by the society, along with the quality of personal life.

The Book of Changes⁵ clearly indicates the importance of encouraging social dialogue in all segments of changes. The involvement of stakeholders in educational process was analysed within the phase of developing the Book of Changes and while defining the concept of changes. The analysis showed that there is a noticeable difference in the involvement of social partners in planning, organizing and funding of education in Montenegro compared to educational systems of developed countries. Following up on positive examples in vocational education and training in developed European countries, the Ministry of Education and Science decided to decentralize the system in terms of administration and to transfer a part of its responsibilities to other institutions. To that end, the following institutions have been established: the Bureau for Educational Services, the Examination Centre and the Centre for Vocational Education. Centre for Vocational Education was founded by Government, the Association (Chamber of Economy of Montenegro), the Union (The Associations of Union of Montenegro) and the Employment Agency of Montenegro⁶.

In May 2003, the Government established the Centre for Vocational Education, as a public institution, together with the Chamber of Commerce of Montenegro, the Association of Unions of Montenegro and the Employment Agency of Montenegro with the goal to encourage social partnership and develop vocational education of youth and adults to the University level in all areas of work. The Centre for Vocational Education is managed by the Managing Board, which involves a representative of the Founder and a representative of employees. The Centre for Vocational Education conducts development, advisory, researching and expert activities related to vocational education and training and adult education.

The central Government or the local government body establish public institutions, which provide initial vocational education. These institutions are managed by School Boards. The number of members on the School Board is defined by the Statute of the institution, subject to the size of the institu-

⁴ Ministry of Education and Science, Book of changes, Podgorica, 2001.

⁵ Ministry of Education and Science, the Book of Changes, Podgorica, 2001, page 190

⁶ General Law on Education, "Official Gazette of the Republic of Montenegro", no. 64/02 and Official Gazette of the Republic of Montenegro", no. 49/07

tion (number of classes). There are nine members on the School Board of a public institution, which provides initial vocational education. In accordance with the General Law on Education, the School Board of a public institution in vocational education is composed of: three representatives of employees, two representatives of the Ministry of Education and Science, and two representatives of local community for the institutions established by local communities, two representatives of the Centre for Vocational Education, one representative of social partners and one representative of parents. The representative of employees is nominated by the Union of Teachers, or the Panel of Teachers. The representatives of parents are nominated by the Council of Parents⁷.

The General Law on Education allows establishment of private institutions, which may provide initial vocational education. A private institution can be established by local and international legal or private entity. Institutions can start providing services when the Ministry of Education and Science verifies that the respective institutions meet the establishment requirements and issues a License in accordance with the Law and specific regulations of the Ministry of Education and Science.

Private institutions have management bodies, and the Founder decides upon the way and the procedure of making decisions by the management bodies.

For the purpose of making decisions on vocational matters and for the purpose of providing expert assistance in decision-making process and preparation of regulations in education and upbringing, the Government established the Council for Vocational Education and the Council for Adult Education⁸ at national level. One third of the members of the Council for Vocational Education are nominated by the Ministry of Education and Science, the Centre for Vocational Education and the Ministry competent for labour and social welfare affairs, Association of Employers (Chamber of Economy of Montenegro) and the Union (The Associations of Union of Montenegro). One third of the members of the Council for Adult Education are nominated by the Ministry of Education and Science and the Bureau for Educational Services, the Centre for Vocational Education and the Ministry competent for labour and social welfare affairs, Association of Employers (Chamber of Economy of Montenegro) and the Union (The Associations of Union of Montenegro). The Law on Adult Education⁹ has laid foundation for organizing continuous vocational education. "Adults may acquire the education according to the curricula for primary education and secondary education adjusted to the needs and capacities of the adults (formal education) though the organized process of education with the organizer of education (schools, specialized institutes for the education of adults). The adults can be educated, advanced trained and specialized, and their knowledge and skills can be supplemented according to the parts of formal curriculum (module) and also according to particular curricula of study for the achievement of knowledge, skills and competences that can be organized with the organizer of education referred to in paragraph 1 of this Article, as well as with other organizers of education out of the formal education."¹⁰ The same Law envisages that Employer may, for the purpose of adjusting to market requirements and changes, new technological and work processes, organize various forms of training and professional development of employees in line with defined catalogues of knowledge standards. Adults, who are trained this way, can give evidence of the acquired knowledge and skills with the Examination Centre, who will issue an appropriate document thereof, in compliance with a separate Law.¹¹

Continuous Vocational Education and Training (CVET) in Montenegro is provided by vocational schools, enterprises, Employment Agency, training centres, People's Universities, non-governmental organizations, Associations of Employers, and Unions.

⁷ General Law on Education, "Official Gazette of the Republic of Montenegro", no. 64/o2, "Official Gazette of the Republic of Montenegro", no. 49/07

⁸ General Law on Education, "Official Gazette of the Republic of Montenegro", no. 64/o2, "Official Gazette of the Republic of Montenegro", no. 49/07

⁹ Law on Adult Education, "Official Gazette of the Republic of Montenegro", no. 64/02 and 49/07

¹⁰ Law on Adult Education, "Official Gazette of the Republic of Montenegro", no. 64/02 and 49/07, Article 6

¹¹ Law on Adult Education, "Official Gazette of the Republic of Montenegro", no. 64/02 and 49/07,

Social dialogue and lifelong learning

Montenegro recognizes the need for lifelong learning and all strategic documents set out the goal of developing and promoting knowledge, skills and competencies through educational system, which are needed by every individual for the purpose of professional development and ensuring competitiveness on the labour market, but also for satisfying needs, interests, wishes of every individual in terms of further learning and personal satisfaction. This should support development of economy and development of the society as a whole.

In March 2006, the Government of Montenegro prepared the Strategy for Adult Education for Montenegro for the period 2005 - 2015. The Strategy was prepared by the National Team for Development of the Strategy for Adult Education for Montenegro, which involved representatives of the Employment Agency of Montenegro (Team Leader), various ministries, Association of Unions of Montenegro, Chamber of Commerce of Montenegro, Union of Employers, and Centre for Vocational Education. Within the Strategy formulation process, the National Team organized consultations, meetings and workshops on issues, which are important for adult education and collected feedback and suggestions by using targeted questionnaire. The Strategy was prepared under the expert and financial support of ETF – European Training Foundation.

This Strategy¹² identified the following objectives:

- Improve the level of knowledge and skills of the employed to achieve more rapid economy growth.
- Improve the level of knowledge and skills of employed to support their quicker employment.
- Improve social involvement through adult education.
- Achieve the values of democratic society through adult education.
- Improve environment protection through adult education.
- Use other forms of education towards personal development.

The Strategy sets out that the “overall responsibility for successful implementation of the Strategy is on the Government of the Republic of Montenegro, who should create the environment for a wide range of stakeholders (public, private and non-governmental sector) to implement tasks and objectives of the Strategy within their respective competencies. Individual strategies of partners within the implementation of the Strategy for Adult Education in Montenegro must be harmonized with all the planned activities, regardless whether it is a Government body or an independent organization.”¹³

Given still a large number of unemployed and redundant workers, priority activities in 2007, among others, are reflected in various forms of vocational education: acquisition of the first occupation, re-qualification for jobs in demand on the labour market and professional development.

Generally, current investments in adult education are relatively small and do not support the Strategy implementation. In these terms, it is necessary to ensure higher total investments in this field. Currently, adult education is financed by:

- the Government,
- private employers,
- individuals,
- non-governmental organizations,
- international institutions and foundations.

During the professional discussion, which was organized on 26.10.2007 on the “Role of social partners in education policy and employment“, and which was attended by employers’ representatives, schools, Centre for Vocational Education and the Employment Agency of Montenegro, one of the conclusions was that successful operations of enterprises on increasingly demanding market are substantially influenced by the quality of skills and motivation of individuals/ employees for continuous learning. There

¹² Strategy for Adult Education 2005 – 2015, Government of the Republic of Montenegro, March 2006

¹³ Strategy for Adult Education 2005 – 2015, Government of the Republic of Montenegro, March 2006, pp. 3

is a different approach of enterprises to vocational education, so investments in education and training of staff is less and less seen as expenditure, but rather as investments in development of human resources, which will contribute to the development of enterprises.

There are various activities in Montenegro, as in other countries in the region, which are aimed at promotion of lifelong learning and establishment of National Qualifications Framework. Working Group composed of the representatives of the Ministry of Education, Ministry of Labour, University, Chamber of Commerce of Montenegro, Association of Unions of Montenegro, Employment Agency of Montenegro, Centre for Vocational Education, Bureau for Educational Services and the Examination Centre, has prepared under the support of ETF and Kultur-Kontakt Austria, a draft document titled "Development of the National Qualifications Framework".¹⁴

The goal of drafting the Law on National Vocational Qualifications is to enable individuals, youth and adults to acquire recognized national vocational qualifications, which will be publicly valid and equally valid as qualifications acquired by formal education if based on the same occupational standards. This will be the way to build a comprehensive and uniform system of vocational qualifications, which are acquired through formal, informal and non-formal learning. The Law on National Vocational Qualifications supports principles of lifelong learning. The Draft Law envisages that national vocational qualifications may be acquired:

- through educational programmes,
- through modules, i.e. sections of educational programmes,
- after completion of specific programmes of education and training if envisaged by such programmes,
- by direct assessment of previously acquired knowledge, skills and competences, regardless of the manner of their acquisition.

For the purpose of monitoring the enforcement of the Law and for further development of vocational qualifications, the Draft Law envisages establishment of the National Commission for Vocational Qualifications, which would be composed of the representatives of the Ministry of Education and Science, Ministry of Health, Labour, and Social Welfare. Chamber of Commerce of Montenegro, authorized Association of Employers, Council for Vocational Education, Council for Adult Education, Council for Higher Education, education organizers, Centre for Vocational Education, Examination Centre.

Role of social dialogue in employment policies

The foundation for achieving fundamental social interests, and therefore a successful Labour Market Policy, is possible only in cooperation with all partners and if based on social dialogue¹⁵. The economic and social-related Laws are expected to allow broader coverage and to provide a possibility to harmonize various opinions and to establish wide negotiations foundation aimed at addressing issues within the social dialogue. One of the important issues is also the role of social partners in the Employment Policy.

According to the data of the Employment Agency of Montenegro, there were 28.458 unemployed in Montenegro on 10.11.2008. The unemployment rate is 10.78%.

According to the estimation of the Employment Agency of Montenegro, "the proportion of persons difficult to employ is around 30%. More than 50.000 non-residents are employed during this period in the fields of construction, tourism, catering, agriculture and trade. In the period from 01.01.2007 to 09.11.2007, 56.712 of vacant positions were advertised. 43.502 vacant positions were advertised in the same period last year. The demand is the result of higher investments, production growth, trade growth and increased number of small and medium enterprises"¹⁶.

¹⁴ Development of the National Qualifications Framework in Montenegro - Draft, Podgorica, December 2005

¹⁵ Round table: "Role of social partnership in more efficient education, training and employment", 26.10.2007, Podgorica

¹⁶ www.zzzcg.org, Vukica Jelić, »Značaj ljudskih resursa za privredni razvoj Crne Gore«, Career ways, 13.11.2007.

The Ministry of Health, Labour and Social Welfare and the Employment Agency of Montenegro are making efforts within their competencies to follow the Employment Guidelines of the Council of Europe (Luxembourg, November 1997), and the recommendation is that the Guidelines¹⁷ will have to be incorporated into National Employment Action Plans drawn up by Member States. The guidelines are centred on four main lines of action, one of them being improving employability of population, and the guideline no. 4 relates to development of social partnership towards improved employability.

The Employment Agency of Montenegro has incorporated these guidelines into the National Employment Strategy. "The National Employment Strategy assumes active social partnership at several levels. Social partners shall ensure active social dialogue and active professional and financial contributions of social partners to planning, monitoring implementation of the Employment Strategy and the National Employment Action Plans. In 2006, Montenegro had spent around 1% GDP for active employment measures. The funds for implementation of the Active Employment Policy programme would gradually increase over the next years. Given the raising importance of human resources development, it will be necessary to ensure additional public and private funds for investments in human resources over the forthcoming years. A significant role in the implementation of this National Programme may be played by the funds of social partners and local communities."¹⁸

The Ministry of Health, Labour and Social Welfare, in accordance with the Regulation on the Work of Public Administration, addresses issues related to labour relations, employees' rights assumed by work, Collective Agreements and regulates relation with social partners, protection at work, employment policy, unemployment insurance, etc. Employment Sector is organized within the Ministry of Health, Labour and Social Welfare, and deals with normative, legal, administrative, professional and other matters related to regulating, monitoring and improving the employment system and addresses unemployment, labour and labour relations issues. The Ministry of Health, Labour and Social Welfare manages the Employment Policy, monitors its implementation, monitors its legality and cooperates with the Employment Agency of Montenegro.

The Employment Agency is the main institution, which creates and implements the Employment Policy. Functions of the Employment Agency are defined by the Employment Law.¹⁹ The Employment Agency is managed by the Management Board, composed of a tripartite basis, one of the first such Boards in Montenegro. It is composed of the Government representatives, authorized Unions, authorized employers' organizations, Chamber of Commerce of Montenegro and a representative of employees.

According to provisions of the Employment Law, Active Employment Policy and funds for its implementation are defined by the Programme prepared by the Employment Agency, which is approved by the Government of Montenegro. The National Employment Strategy 2007-2010²⁰ was developed to address the problem of unemployment. The measures and activities, which are defined in the Strategy, should reduce structural misbalance on the labour market. The Strategy is approved by the Government. The Strategy was the basis for developing two-year Employment Action Plan²¹, which provides specific dimensions and timelines for some measures set out in the Strategy.

The Employment Agency envisages that the "implementation of new projects and programmes, which support creating new employment opportunities, primarily through providing financial support to self-employment and small-scale entrepreneurship, will influence reduction of unemployment. In-service, vocational and technical training, with higher involvement of advisory and educational content, will contribute better employment opportunities. Efforts will be made towards establishing tighter interdependence of labour market and Educational Enrolment Policy. Opportunities will be reviewed for expanding the network of advisors, who will work with the unemployed, organization for development of human resources and the network of concessionaires – specific agencies. Measures will be imple-

¹⁷ Integrated guidelines for growth and jobs (2005–08), European Commission, 2005

¹⁸ "National Employment Strategy 2007 to 2010", Employment Agency of Montenegro, 2007, pp. 71.

¹⁹ Employment Law, "Official Gazette of the Republic of Montenegro", no. 2/2002

²⁰ "National Employment Strategy 2007 to 2010", Employment Agency of Montenegro, 2007

²¹ Employment Action Plan, ZZZCG, 2007.

mented against gray economy and unregistered employment. The system for providing data and information on labour market will be improved to comply with international standards. Innovations to the labour-related laws and other legislation will continue, which directly or indirectly influence employment.“

Within the CARDS project’s “Reform of Labour Market and Workforce Development“, funded by the EU, and managed by the European Agency for Reconstruction, and implemented by the WYG International (VB), Working Group composed of representatives of key stakeholders in social and economic development: Ministry of Health, Labour and Social Welfare, Ministry of Education and Science, Ministry of Economic Development, Ministry of Finance, Employment Agency of Montenegro, Statistical Office of Montenegro (MONSTAT) and the Directorate for Development of Small and Medium Enterprises, in consultations with social and economic partners of the Government, has prepared the “National Employment Policy and Development of Human Resources 2007 to 2011“. The objective of this Strategy is to raise the level and the quality of employment in Montenegro through measures and activities, which are designed following provisions of the Agreements on Stabilization and Accession”, which are related to preparations for involvement of Montenegro in integrated social and economic EU policies and adoption of *acquis communitaires*. The Strategy is a direct continuation and updating of the National Employment Strategy, which was adopted by the Government of Montenegro in the first quarter of 2007.

The Strategy, among other things, says: “It is necessary to improve involvement of private sector and social partners in developing and planning training programmes. Also, there should be a mechanism for identifying needs of enterprises for specific human resources, and a mechanism for evaluation of training programmes, with the main goal being the improvement of guidance and efficiency. Partnerships should be built to address labour market issues. This should assume better coordination of activities and shared responsibility in terms of creating new employment opportunities between the Employment Agency and local authorities, schools, private sector and non-governmental institutions.”²²

The Strategy envisages implementation of programmes aimed at preparation for employment (training, additional qualification, re-qualification, specialization) for the purpose of improving the quality of supply of workforce, while taking into account reduction of the regional misbalance on the labour market. The strategy of working with vulnerable groups is in the development process. Employment of the so-called “marginal groups” will be encouraged, through co-financing of wages or fiscal liabilities assumed by wages for the employment period of such individuals⁸¹. All these planned measures and activities are being implemented as planned²³.

Intellectual capital of human resources is the main lever of modern societies, and its quality is directly dependant on the concept of lifelong learning and involved institutions.

Montenegro is oriented towards Europe and developed countries, and its future depends on the success of implementing that orientation. Social partners have an active role in the process of social transformation, which are based in educational system in these transitional times, which by their role should be future-oriented. Therefore, continuous development and education of employees contribute to sustainable national development, and permanent development of individuals.

²² National Employment Strategy and Development of Human Resources 2007 to 2011“, CARDS Project “Reform of Labour Market and Development of Human Resources“, 2007.

²³ Employment Programme for 2007, Employment Agency, January 2007

References

- Development of the National Qualifications Framework in Montenegro - Draft, 2005. Podgorica
- General Law on Education, "Official Gazette of the Republic of Montenegro", no. 64/02, 2002. Podgorica
- General Law on Education "Official Gazette of the Republic of Montenegro", no. 49/07, 2007. Podgorica
- Employment Law, "Official Gazette of the Republic of Montenegro", no. 2/02, 2002. Podgorica
- Employment Action Plan, ZZZCG, 2007. Employment Agency, Podgorica
- Integrated guidelines for growth and jobs (2005–08), European Commission, 2005, Bruxelles
- "National Employment Strategy 2007 to 2010", Employment Agency of Montenegro, 2007 Podgorica
- "National Employment Strategy and Development of Human Resources 2007 to 2011", CARDS Project "Reform of Labour Market and Development of Human Resources", 2007. Podgorica
- Strategy for Adult Education 2005 – 2015, Government of the Republic of Montenegro, 2006. Podgorica
- The Book of Changes, Ministry of Education and Science, 2001. Podgorica
- www.zzzcg.org Vukica Jelić, »Značaj ljudskih resursa za privredni razvoj Crne Gore«, Career ways, 2007.
- www.visit-mba.org
- www.upcg.cg.yu

Corporate Social Responsibility and Stakeholders Theory in Context of Transitional Countries

Bahrija Umihanić¹, Dijana Husaković²

ABSTRACT – Corporation and its relationship with stakeholders are in the focus of Corporate Social Responsibility. According to the traditional view, the sole responsibility of corporation is to maximize financial returns to shareholders. Modern view sees corporation as a set of complex relationships with all stakeholders, not just shareholders, expanding its responsibility beyond the basic maximization of profit in accordance with legislation and ethical customs.

Therefore, to be socially responsible, company should include interests of all the stakeholders - any group or individual who can affect or is affected by the achievement of the organization's objective, such as shareholders, employees, customers, local community, etc. Since Corporate Social Responsibility is done on voluntary basis, stakeholders and their power of influence are of paramount importance in order to ensure socially responsible behavior of companies.

Having in mind that stakeholders, as well as their power to influence decision making of company, could differ from one company to another, and also from one country to another, this article explores the question of stakeholders with special focus on countries in transition. The article addresses the issue of stakeholders and their power to influence the behavior of the companies doing business in specific environment of transitional countries by comparing it to the settings of developed market economies, contributing to the researches in this particular field.

KEY WORDS: corporate social responsibility, stakeholders theory, power, stakeholder management

Introduction

Corporate Social Responsibility has been the top issue in the recent management literature, especially after several major scandals in corporate sector, which vividly pointed out that maximizing the profit as the exclusive goal of the company could bring severe problems to the management of the company, exposing it to the scrutiny of the legislators, media and community. Crashes of Enron and WorldCom started lively debate about whether Friedman's point of view on shareholders, as the only stakeholders companies are responsible to, is still acceptable. Even the former UN General Secretary, Kofi Annan has presented a vision of corporation held accountable for creating sustainable value for shareholders, customers, employees and community (Huse, 2003).

Increased public sensitivity for social issues such as environmental pollution, child labor, toxic products, genetically modified food, discrimination based on nationality, religion or gender, corruption, etc., highlights the question of companies not just making the profit but also on how these profits are made. Suddenly, it appears that the goal of a company is not only profitability for shareholders above all, but it has been shifting towards optimization of interests of all the stakeholders, not just the shareholders.

It could be said that corporate world today faces two main challenges: providing the high return to corporations' shareholders by making the company competitive in the world economy on one hand; on other hand, being socially responsible towards the community in which the organization operates (Husaković, 2008). Thus, to be socially responsible, company should include interests of all the stakeholders - any group or individual who can affect or is affected by the achievement of the organiza-

¹ Bahrija Umihanić, Faculty of Economics, University of Tuzla

² Dijana Husaković, Faculty of Economics, University of Zenica

tion's objective, such as shareholders, employees, customers, local community, etc. Since Corporate Social Responsibility is done on voluntary basis, stakeholders and their power of influence are of paramount importance in order to ensure socially responsible behavior of companies.

While in advanced market economies inclusion of interests of all stakeholders and being held accountable for business conduct outside of traditional responsibility towards the shareholders is becoming a code of conduct for many companies, in transitional countries the situation seems to be a bit different. Therefore, the article is designed to provide an insight into a corporate social responsibility and stakeholder theory in context of transitional countries, by addressing the issue of stakeholders and their power to influence the behavior of the companies doing business in specific environment of transitional countries, as well as some explanatory remarks.

Definition of Corporate Social Responsibility

Defining the concept of Corporate Social Responsibility (CSR) is not an easy task, given the number of existing approaches to the subject. There is not a single, commonly accepted definition which could express different perspectives on social responsibility of a company. Basic reasons for such a situation could be, not just complexity of the concept or its relatively recent inclusion into mainstream management literature, but also general lack of clarity about of idea of "social" responsibility of a company. Number of synonyms used, such as corporate citizenship, corporate sustainability, corporate sustainable development, etc., illustrate that situation quite well.

Some authors (e.g. Friedman, 1970) argue that the only social responsibility of a company is basically profitability plus compliance with relevant legislation. Some see CSR as traditional responsibility plus philanthropy, while others (e.g. Freeman, 1999) emphasize the inclusion of additional aspects, such as the wider economy, stakeholders other than shareholders and the environment. Similarly, Andriof and Waddock (2002) see corporate social responsibility as companies being more aware of and understanding the societies in which they operate. Accordingly, Zadek (2001) advocates that corporate citizenship is about business taking account of its total impact on society and the natural environment. Krkač (2007) concludes that CSR could be defined as responsibility of company to, by maximizing profit, maximizes positive impact on society and environment. The World Business Council for Sustainable Development defined Corporate Social Responsibility as the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large.

In sum, Corporate Social Responsibility recognizes that besides economic dimension, manifested through maximization of profit, there are also two other important dimensions which are relevant to company's performance, namely social and environmental dimension (Elkington, 1994). Thus, it is important to point out that companies engaged in CSR also have profitability as their main goal. However, in doing so, they also contribute to some aspects of social and environmental development, within and outside of the firm, simply by taking into account interests of other stakeholders³, not just the shareholders. Therefore, Corporate Social Responsibility is about business recognizing and taking into account people and organizations, other than stockholders, who are affected by the operations of the company and, more importantly, who can affect the organization's financial performance. Based on these definitions, it is clearly noticeable that the key word for Corporate Social Responsibility is the stakeholder.

Defining the concept of stakeholders

Even there is no universal agreement on definition of corporate social responsibility, there is no doubt that most authors see stakeholders as the core issues of CSR. According to Freeman (1984), who is generally considered as author of stakeholder concept, company's stakeholder is (by definition) any group or individual who can affect or is affected by the achievement of the organization's objective.

³ Including the environment

The notion of stakeholders takes into consideration that any single group or individual who is affected or can affect the company's performance has a stake in it, which is multidimensional and not necessarily measured in dollar terms. The organization must not leave out any group or individual who can affect or is affected by organizational purpose, because that group may prevent the organization from accomplishing its goals (Freeman, 1984).

Therefore, to be able to achieve goal of satisfying interests of all corporations' stakeholders, or at least the most important ones, one must first know who the companies' stakeholders are. Since the definition is quite broad and companies today mostly do business in global market, number of those affected (indirectly or distantly) by any given corporation could include almost everyone, it is essential for corporation to identify various stakeholders, in terms of primary and secondary stakeholders, their interests and power to influence corporation's decisions. Typical examples of groups that are influenced by the corporation's decisions are: shareholders (including financiers), customers, employees, suppliers and the (local) community. These groups are mostly referred as primary or internal stakeholders. However, the traditional picture of firm consisting of customers, employees and owners has to change to encompass environmentalists, consumer advocates, media, governments, NGO's, etc., which are commonly known as the secondary or external stakeholders. Some authors include the competitors (or competition) in this group as well, yet as Freeman and Harrison (1999) argue stakeholders theory is quite good and efficient in context of monopoly too. This general stakeholders' structure could be applied on any type of organization. In addition, since each corporation is specific to some extent, other stakeholders could be identified in each particular case as well.

When it comes to the interests of stakeholders they could differ too. However, as Kercher (2007) argues, regardless of a type of corporation, stakeholders' interests could be generalized as well. For instance, shareholders are typically interested in growth and income, as well as in high return on their investment; employees are interested in job security and pension benefits; customers in quality of products for their money; suppliers in a stable customer; the local community in a reliable employer, while governments has an interest in what the firm does because it affects them in some way, even if not in market place terms. Based on the interest or stake stakeholders have in corporation, the other, quite interesting categorization of stakeholders could be pointed out, where stakeholders could be presented in three groups: owners (equity stake), customers and suppliers (market stake) and government (influencer)⁴.

However, one must have in mind that each corporation has a specific map of the stakeholders, which must be identified, together with their interests in the company. Determining who are the key stakeholders as well as who are the groups with little or no impact on the corporation is important part of stakeholder management, due to the fact that no organization could serve interests of all affected groups, yet it prevents leaving out the once who can affect the company's performance (Husaković, 2008). Also, it is important to remember that stakeholders change over time, and their stakes change depending on the strategic decision of the company under consideration.

Stakeholders in developed market economies

During the years status of stakeholders has changed, from groups whose interests should be considered as part of good management practice, to groups entitled by their stakeholders' status to influence the operation of business, or at least have it influenced in their interests (Sternberg, 1999). Since 1960s the business landscape has dramatically changed, marked with consumers and environmental movements, which triggered recognition that other people and organizations can affect or are affected by business activities and, at some level, triggered a sense of empowerment for actors in those other institutions in society (Marsden and Andriof, 1998).

Consumers have become more sensitive not just about adulterants in their food or dangerous defects in the products they buy, but also more aware of the fragile nature of the environment and importance of human rights. Consumer Product Safety Commission has a power to recall a product from the market,

⁴ For more detailed discussion see Freeman (1984)

so in the 80s the US automotive industry withdrew more cars than they produced. Similar situation happened in 2007 when Mattel, the world's largest toy maker, for the second time in the same year, had to recall 9 million Chinese-made toys because of dangerous lead paint and tiny magnets that could be swallowed. Nike Inc., the world's biggest sneaker and sportswear maker, admitted in 1998 that it found falsified documents, underage workers and unpaid wages at suppliers in China, which caused falling stock prices and weak sales. In addition, it turned the company's reputation into one of the biggest sweatshop regimes in the fashion industry.

The emergence of NGO's as "civil regulators of corporations" (Zadek, 2001), through public campaigning and other forms of pressure, is one of the notable features of the last decade, which have driven the process of popular education and political and economic mobilization around social and environmental issues more than any other institution (Husaković, 2008). Some of them, such as Greenpeace, Transparency International, etc., act against environmental pollution, violation of human rights and other issues of public interest, on a global scale.

Further more, street demonstrations against the WTO, G8 and others as well as the success achieved in opposing the Multilateral Agreement on Investment (MAI) initiative, which was obstructed by a global alliance of activists using electronic mail and the World Wide Web to disseminate the information to numerous organizations, commencing a chain reaction that involved more than 600 groups worldwide⁵, show that civil society has converted into a new category of actor on the global scene, the implications of which are still being played out.

Case of opposing MAI Initiative is interesting from another aspect as well. It highlights the role and power of media and current technologies, such as internet. The electronic media and communication sector, which ranges from telecommunication networks and the Internet, through to radio, television and film, is a powerful agent in the transformation of social, cultural and political structures, making the voice of public being heard. When Enron scandal happened, it was reported in the media all over the world, which resulted in a decline of public trust in accounting and reporting practices.

Moreover, business transparency and accountability have become more important than ever not just for consumers but for other stakeholders as well. UK Business Respect in August 2007 published a research which shows that nearly half of young professionals would choose to avoid working for an employer that shows poor social responsibility with more than one third of respondents stating that working for a responsible employer was actually more important to them than the salary they earn.

Hence, business operations today are to a larger extent exposed to public scrutiny and more vulnerable to a public pressure. Financial performance, and also share prices, has started to be vulnerable to public outcry. Any case of a violation of human rights, discrimination, child labor, environmental pollution, corruption, etc., could cause companies to lose their workers, consumers, investors or license to operate⁶. The bottom line is that with increased sensitivity over social behavior of the companies, stakeholders have transformed into the active players in the companies' decision making process, simply, through their power to influence the financial performance of the company they have stake in.

The role of stakeholders in transitional countries

With the open economies and open markets for FDI, there are a growing number of international and multinational companies present in transitional countries. Their stakeholders have the same interests as in any other country, yet their power to influence companies' behavior, or have them changed in their interests is much smaller than in developed economies. On the other hand, there is even greater need to pressure some companies into socially responsible behavior, given the number of cases of environmental pollution, underpaid workers, discrimination, violation of workers rights reported in these countries. As Zadek (2001) stated, the New Economy offers many opportunities for business to behave

⁵ Eventually action was significant enough to generate attention in the mainstream media and alert a wider public to the issues. The result was that the MAI was stopped at the time.

⁶ E.g. case of Coca-Cola in India

unethically, to drive down labor standards, to minimize tax contributions, to exert undue influence over governments anxious to attract their investments and the job opportunities they bring with them.

Unlike in developed countries, stakeholders in transitional countries do not have the same sense of empowerment and notion that they can make a difference. Workers and their unions are facing a termination of contract in case they actively try to seek their rights, such as parental leave, paid vacations, or right to join a union. Recent reports of Benetton violating labor rights in Croatia shows that even rights guaranteed by law could be obstructed in a case of powerful company. Similar reports are coming from ArcelorMittal in Bosnia and Herzegovina, with compromised safety at work and workers performing unpaid overtime in steel factory.

High unemployment rate in countries in transition⁷ could to some extent collaborate the assumption that, even though no research has been done on this matter so far, most of the young professionals would choose to work for an employer even if it shows poor social responsibility. Therefore, there is a little possibility that the companies with poor social record would lose their qualified prospective employees. Yet, retaining motivated work force could be an issue.

Consumer associations are at the begging, and have no real power and popularity among the consumers to influence the behavior of a company, such as recalling the unsafe products. The similar situation is with the environmental movements. Recent call for demonstration against excessive air pollution in Zenica, where ArcelorMittal factory operates, gathered only few enthusiastic people, while the quality of the air dramatically decreased after ArcelorMittal started their production without environmental license.

Suppliers as the stakeholders are in the same situation as well. In the 2004, Oxfam report “Trading Away Our Rights”, argued that companies such as Tesco, Taco Bell and Wal-Mart are using their power at the top of global supply chains to squeeze their suppliers to deliver, especially in developing countries. Local communities, based on their specific economic situation, either cannot or do not want to hold companies accountable for their poor social record. Most of these companies have solved problem of high unemployment, which is a pressing issue in transitional countries, by opening a factories in the local communities. Therefore, the local communities are giving them a license to operate on account of environmental pollution or workers rights, even though in developed countries these two are not mutually excluded. NGOs are also, when compared to the ones in advanced market economies, powerless to change, even though they frequently report on violation of questions of public interests.

However, some companies invest in their relationship with local communities such as through sponsoring local sport clubs, scholarships, donating money for charity causes, etc. Yet, most of these actions could be characterize as “greenwashing”, defined as spreading information aiming at making a good image of a company to cover up misuse of environment and violation of human rights (Mušura, 2007), which could explain the fact that most of the companies whose names are relating to the corporate scandals in transitional countries have good Corporate Social Responsibility reports representing them as a good corporate citizens (e.g. Coca-Cola, ArcelorMittal, etc.)

In sum, when speaking of stakeholders in transitional countries, it is noticeable that the only important ones are the shareholders whose interest of a high financial return are actually taken into account, while the others, even though some companies recognize their existence, are not included at all. The reason which contributes to the situation, as argued by Krkač (2007) is the fact that socially irresponsible behavior of a company does not affect share price or their reputation at all.

Concluding remarks

Corporate social responsibility has become an important way of doing business in global economy. Most companies, such as Shell, are incorporating CSR as a core business strategy, which could bring benefits in terms of attracting qualified and motivated human capital, ensure good relation with investors, good image, risk management and license to operate⁸. Even though engagement into CSR is

⁷ E.g. official unemployment rate in Bosnia and Herzegovina is approx. 40%

⁸ For more detailed discussion on business case for CSR see Husaković (2008)

mostly done on voluntary basis, in advanced economies, the companies are forced to act in socially responsible manner due to the large pressure of the media, different NGOs, consumers and environmental groups. These are all stakeholders, which interests should be taken into account in decision-making process of a company, simply because they have power to influence the financial performance of a company.

In transitional countries, even though the stakeholders have similar interests in companies, their power is not strong enough to force companies into adopting CSR principles of doing business. In most case, even if companies recognize their role, their interests are not taken into account. Companies still do business according to the Friedman's motto of maximization of profit for shareholders, while interests of other stakeholders are not taken into the account, mostly because they do not have power to influence the financial performance of the company.

Having in mind the need for the improvement of the current situation of CSR in countries in transition, possible suggestions could be pointed out: first, urge consumers and civil society groups to replicate the role they play in the West in pushing companies to pursue more responsible business practices; second, increasing the common understanding of CSR through education on importance of all stakeholders and their interests for a company's success, and third, achieving for better transparency of business practices in these countries.

References

- Andriof, J. and Waddock, S. (2002): "Unfolding Stakeholder Engagement", in J. Andriof, S. Waddock, B. Husted and S. Sutherland Rahman, ed.: "Unfolding Stakeholder Thinking: Theory, Responsibility and Engagement Volume 1", London: Greenleaf Publishing, pp. 19-42
- Elkington, J., *Towards the Sustainable Corporation: Win-Win-Win Business Strategies for Sustainable Development*, California Management Review, 1994.
- Freeman, R.E. and Harrison J.S. (1999): "Stakeholders, Social Responsibility and Performance: Empirical Evidence and Theoretical Perspectives", *Academy of Management Journal* (October 1999): 479-485
- Freeman, R.E. (1984) *Strategic Management: A Stakeholders Perspective*, First Edition, Boston: Pitman
- Friedman, M. (1970) "The Social Responsibility of Business is to Increase Its Profits" *New York Times Magazine*
- Huse, M. (2003) "Renewing Management and Governance: New Paradigms of Governance?" *Journal of Management and Governance* (July 2003): 211-221
- Husaković, D. (2008) "Unfolding Corporate Social Responsibility: Theoretical Considerations", ICES 2008, Conference Proceedings, Sarajevo
- Kercher, K. (2007) *Corporate Social Responsibility: Impact of Globalisation and International Business*, *Corporate Governance eJournal*
- Krkač, K. (2007) *Temeljna pitanja korporacijske društvene odgovornosti*, u K. Krkač, ed.: *Uvod u poslovnu etiku i korporacijsku društvenu odgovornost*, MATE/ZŠEM, Zagreb, pp. 219-263
- Marsden, C. and Andriof, J. (1998): "Towards an Understanding of Corporate Citizenship and How to Influence It", *Journal of Citizenship Studies* (December 1998): 329-352
- Mušura, A. (2007) *Korporacijska društvena odgovornost i održivi razvoj*, u K. Krkač, ed.: *Uvod u poslovnu etiku i korporacijsku društvenu odgovornost*, MATE/ZŠEM, Zagreb, pp. 437-461
- Sternberg, E. (1999): "The Stakeholder Concept: A Mistaken Doctrine", *Foundation for Business Responsibilities* (November 1999)
- Zadek, S. (2001) *The Civil Corporation: The New Economy of Corporate Citizenship*, Earthscan Publications, London

Development of Industrial Frame for Corporate Governance in Bosnia and Herzegovina

Zdenko Klepić¹, Josipa Grbavac², Nikola Papac³

ABSTRACT – Corporate governance in particular countries include application of supranational documents which that country accepted and their national institutional frame relevant for corporate governance.

In transitional countries, so in Bosnia and Herzegovina, beginnings of corporate governance relate on process of privatisation of companies. So, process of privatisation, also as development of private ownership and modern corporations, make corporate governance in Bosnia and Herzegovina more significant.

Development of good corporate governance is condition of companies' success on global market. Good corporate governance helps companies to get capital by better conditions, to achieve competitive advantages and enables development on market. On the other side, countries with develop corporate governance stimulate investment in private sector, direct investment and faster economic growth.

In this paper authors will preset supranational frame for corporate governance also as analyse of institutional frame for corporate governance in Bosnia and Herzegovina.

The main aims of this paper are to research a degree of development of institutional frame of corporate governance in Bosnia and Herzegovina, to analyse it's harmonization with supranational regulations, and to give some recommendation for future development of corporate governance in Bosnia and Herzegovina.

To research this aims the authors put these Hypothesis: "The institutional frame for corporate governance in Bosnia and Herzegovina isn't on high degree of development and isn't harmonized with supranational regulation".

As a conclusion of this paper the authors will give future perspective for corporate governance development in Bosnia and Herzegovina as on important factor in development of economic systems and it's convergence with EU.

KEY WORDS: corporate governance, supranational regulation, harmonization, Bosnia and Herzegovina

Introduction

Corporate government, in the broadest sense, represents a relation between the manager (the governance) and the people or the institutions which invested the capital in the corporation. The theory of corporate government is getting more and more important because of the large corporations whose income is significantly above GDP of many countries and the fact that the government is daily getting harder and more complex because the issue of separating the ownership and the government in large corporations is emphasized daily. The necessity for corporate governance reached its peak after the ruination of large global corporations followed by the malversations of management and crises and turbulences on global market (ENRON and WorldCom in USA and Parmalat in Italy).

In countries in development the routs of what is now called corporative government lay in the initiatives for privatization which grew stronger from late 70s and during 80s till today. Transformation

¹ Ph.D. Zdenko Klepić, Faculty of Economics, University of Mostar

² M.sc. Josipa Grbavac, Faculty of Economics, University of Mostar

³ B.sc. Nikola Papac, Faculty of Economics, University of Mostar

(privatization) of state or social ownership to private ownership is one of first and very important steps or phases in the whole process of transition or changing the state-planned and administratively regulated economy to market economy.

Corporative government in one country consists of laws and other rules that regulate this field, these are the formal rules, and of the informal rules which are defined inside of or between corporations by various contracts and agreements.

This paper will analyze corporative government in B&H, i.e. it will analyze the institutional or the legal frame of the corporative government in B&H. The goal is to show the state and the perspectives of institutional or the legal frame of the corporative government.

The legal frame for corporative government in B&H is determined by entity laws. The existing laws which regulate this issue offer only partial and incomplete solutions and are not completely harmonized with the supranational regulations and recommendations.

The exploring methodology

The basic hypothesis of the paper

Corporative government represents a group of relations between the owners, shareholders and other groups interested. It is in fact a group of relations between different participants in the corporation, who, together, determine the course and the successfulness of the corporation. Corporative government is determined by a group of laws and sub law acts which regulate this field and represent the formal basic.

The institutional basic determines the system of corporative government of a country, and the development of the institutional system determines the development of the corporative government itself.

The main hypothesis of our paper is: “institutional or legal frame of corporative government in Bosnia and Herzegovina is not harmonized with the international, supranational recommendations and acts”.

The secondary hypothesis is: “the improvement of the system of corporative government would help attract foreign investors, increase the efficiency of local corporations and would secure a stabile growth”.

The methodology of exploring and analyzing data

The research in this paper is based on the analysis of the existing legal regulations concerning the corporative government in the Federation of B&H and the Serbian Republic. The basic for choice and analysis of particular laws were the guidance of European Commission and OECD's principals of corporative government.

The Brčko District of B&H was excluded from the research because it represents an individual legal system, similar to entities, but because of its size and economic meaning it does not have a significant influence on the economic movements in B&H.

The definition, role and the meaning of corporative government

The term firm/ business/ company/ enterprise can be defined as an independent economic, technical and social whole in the ownership of certain subjects which produces goods or services for the need of the market using available resources and bearing the economic risk with the goal of making profit and accomplishing other economic goals.

The corporation (in B&H dioničko društvo) is a legal person and represents the most complex organizational form in market economy. The company's capital is shared on stocks and one may become a co owner by buying stocks on the market. The owners of the corporation, i.e. its stock-holders, have a

limited responsibility, i.e. they are responsible for the corporation's business success only to the level of their capital invested in the stocks.

According to Demb and Neubauer⁴ corporative government is a kind of process in which corporations respond to rights and wishes of its interested groups – the stockholders.

According to the definition of the Organization of Economic Cooperation and Development (OECD)⁴ the corporative government consists of “group of relations between the management, the direction, the board of directors, stockholders and other interested parties. Corporative government also represents a structure inside which the goals of corporation are set as well as the patterns for accomplishing these goals and monitoring the results. Good corporative government should be a stimulus to board of directors, the direction and the management in accomplishing the goals which are in the best interest of both - the corporation and the stockholders and should ease efficient monitoring for them. The existence of efficient corporative government inside a particular corporation and the entire economy helps secure a degree of trust necessary for proper functioning of the market economy.”

Making an efficient corporative government includes three fields: (1) management control – management board controls the choice of directors and evaluates the work of directors; (2) reports to stockholders – audit and including them in important decisions of the owner; (3) monitoring and the evaluation of long-term strategies and evaluation of company's work.⁵

Empiric researches show correlation between the quality of corporative government and the performance of the company measured by financial indicators, innovation rate, market share, the time necessary to put out a new product on the market, satisfaction of the clients and the employees, etc.⁵

An important indicator of the real value of corporative government is the readiness of investors to pay higher price for stocks of corporations that have excellent corporative government.

Systems of corporative government – the influence of legislative or institutional frame on the model of corporative government in B&H

The system of corporative government is determined according to the person which has the leading position and role on the relations in the corporation. The systems of corporative government are differentiated by the system of allocation of power, the level of separating the owner and the management structure, and finally by the problem of efficient decision making. Considering whether the interior or exterior structures have the leading position, we differentiate an open and closed system of corporative government.

An opened system of corporative government

The basic quality of opened system is that surveillance over the management and the corporation is not in the hands of any interested influence-group, but the market of capital and the behavior of the investors, i.e. their expectations on the level of profit, have the leading role.

In literature this system is called by different names: market system or outsider system. Most often it is called Anglo-American system of corporative government because it is characteristic for the corporations in USA, Great Brittany, Australia and New Zealand. This system is characteristic for the corporations which do not have permanent stock-holders, i.e. the ownership is dispersed. This kind of companies even in literature are called corporation without permanent stockholders with high dispersion of ownership, and they are characteristic for the corporations in USA and Great Brittany.⁵ In this kind of systems the central role in corporative government is played by managers.

Basic characteristics of opened system are: (1) dispersion of stockholder ownership with large number of stockholders and high significance of institutional investors, (2) interests of stockowners are protected by corporation laws and regulations, (3) the accent in laws about corporations is on the protec-

⁴ Organisation for Economic Co-Operation And development, OECD Principles of Corporate Governance, OECD, 2004

tion of small stockholders and respecting their rights, (4) strict demands for continued informing of the market and market participants by the corporations.

A closed system of corporative government

This system is characteristic for the countries of central Europe and Japan. In literature it is often called interior or insider system, sometimes also continental or continental-Japanese system of corporative government. Basic characteristics of this system are opposite to the characteristics of opened system.

Basic characteristics of this system are: (1) creating pyramidal corporative structure, (2) agreements among stockholders, (3) discrimination of voting rights, (4) constant weakening of the influence of small stockholders.⁵

This system is characterized by group of stockholders that hold a high percentage of total amounts of stocks, they are the owners of a significant stock – package and they take an active role in the management and the surveillance of the company. Because of the increased role of the owners of major stock – package the position and the role of stock – markets is lot smaller than in the opened system, so the stocks are no longer markets for corporative control. It is easy to conclude that the main difference between these two systems is prevailing way of financing, in opened system it is done through the emission of stocks and in closed system with the help of banks.

There for, business banks have a very important role in closed system of corporative government, they are the creditors of corporations while in the same time the owners of the stocks of the company. Banks use several ways to control the politic of corporations: credit policy, the relations of lawn - givers and lawn – receivers, direct stock – holding, bank control of proxies and their representatives in the board of directors of the corporations which is also called cumulative power.⁶

It is considered that in the closed system of corporative government there is a high ratio of debt capital opposite to owner capital with a significant participation of bank credits in the total liability of the company. At opened system the situation is the other way around and there is a small ratio of debt capital opposite to owner capital with relatively smaller participation of bank credits in total liability.

Convergence of opened and closed system, their advantages and disadvantages

To claim that one of these systems is better than the other is very hard, first of all because they have developed in different situational frames, but also because partially they overlap in their characteristics. Based on everything said so far we can conclude that closed system is based on

Table 1. Comparison of opened and closed system of corporative government

	OPENED SYSTEM	CLOSED SYSTEM
Ownership	dispersed	concentrated
Concentration of voting power of stock - holders	Weaker	stronger
Control and ownership power	developed management	connected Owners of controlling packages of stocks and stock - holders
The role of owner in corporative management	Usually small because of the free-rider effect	Preferably high because of the no transparency
Instrument of corporative government	mostly external	mostly internal

⁵ Tipurić, D. et al: *Korporativno upravljanje*, Sinergija nakladništvo d.d., Zagreb, 2008., Page 54

⁶ Čengić, D.: *Problemi korporacijskog upravljanja u postprivatizacijskom razdoblju*, Društvena istraživanja, god. 7, BR. 6 (38), Zagreb, 1998., page 767-792

Interests of other interested influence-group	lesser level of representation	higher level of representation
Basic agency relation	Stock-holders vs. management	Major stock-holders vs. Minor stock-holder
Identity of stock-holders	Accomplishing the goals of management (preinvesting) at the damage of efficiency and profitability	Accomplishing the goals of major owners and other groups at the damage of interests of minor stock-holders
Market of capital	Institutional investors are prevalent and then the individual investors follow	First companies, then financial institutions and then individual investors
Market for corporative control	Very developed with primary role	Medium developed with secondary role
	It exists with a significant part of hostile takeovers	It does not have a relevant role, hostile takeovers are rare

Source: Tipurić, D.: Nadzorni odbor i korporativno upravljanje, Sinergija, Zagreb, 2006., page 88

After seeing all this we can conclude that the system of corporative government in B&H is closer to closed system. That can be the consequence of experiences gathered from central European countries, but also the low level of the development of financial market in countries with dominantly opened system of corporative government.

Supranational regulative of corporative government

Presupposition and the condition for quality corporative government is the existence of legal regulative and therefore most countries try to create these conditions through quality legal solutions and development of national codex of corporative government.

Regulation of corporative government at the level of European Union

By the regulations of the contract about the establishing of EU as the primary source, the frame of supranational regulative and the rights of corporation and corporative government are determined, as well as through numerous regulations of secondary legislative of EU and the verdicts of the court of EU.

Most of the initiatives at the level of European Union at the area of corporation and corporative government is based on the article 44. part 2. point g. (chapter 54.) of the Contract about the establishment of European Union. Article 43. of the contract about the establishing of EU regulates the freedom of corporation to establish daughter company, branches of a company or agency in another country-member. In the court practice of the Court of EU the establishment of a business is defined as “an actual performance of economic activity through constant business activity in another country-member through undetermined period”.⁷

The court of EU took a stand that it is an obligation of a country-member to admit the companies and their branches of a company established by the right of another country-member and to give them freedoms by the Contract about the establishing of EU.⁸ In the middle of the year 2003. the European commission issued a document titled “Modernization of the Rights of Companies and Improvement of Corporative Government in European Union – The Plan of Moving Forward” with the goal of advancing and equalizing the practice of corporative government in countries-members which have different systems of corporative government. This document is known in public under the title “Action Plan”. In Action Plan it is clearly stated that its intention is not to create a unique codex of corporative govern-

⁷ Mlikotin Tomić, D., Horak, H., Šoljan, V. i Pecotić-Kaufman, J.: *Europsko tržišno pravo*, Zagreb: Školska knjiga, 2006., page 35-37

⁸ Tipurić, D. et al: *Korporativno upravljanje*, Sinergija nakladništvo d.d., Zagreb, 2008., Page 199

ment at the level of EU, but to set some special regulations and principals and to coordinate national codex of government to encourage future.⁹

Tipurić and Horak¹⁰ emphasize the following directives, decisions and recommendations which, as secondary legal norms, regulate corporative government at the level of EU:

- Directive 2006/46/EC determines the obligation of reporting on financial and other crucial issues,
- Directive 2006/68/EC determines the conditions that must be fulfilled concerning the preservation of basic capital with the purpose of protecting the creditor and the principle of equal position of stock-holders,
- Directive 2004/25/EC gives a minimum of standard considering the matter of taking over the stocks of companies with stocks on the stock-market,
- Directive 2005/56 on international merging of corporation tries to solve the problems of international activities in European Union,
- Directive 2004/109/EC on harmonizing the demand for transparency of data about the issuers whose loan stock are part of trading on set market,
- Recommendation about the compensation to directors of corporation whose stocks are at the stock-market (Recommendation 2004/913/EC),
- Recommendation which determines basic principles of independence of auditors who perform legal audit of financial reports (Recommendation 2002/590/EC),
- On February 15. 2005 the European commission brought a recommendation on basic qualities that non executive members of board of directors must have.

Besides numerous directives and recommendations in the field of trade law, finances, accounting, audit, etc. which contain regulations directly linked to corporative government in European law, there is a regulation on importance of corporative government called Directive of EC Council (EU) numb. 2157/2001 October 8. 2001 on the statute of European company.¹¹ European company is corporation whose capital is shared on stocks, and the company is based on the frame of European supranational law. The regulation clearly determines the organization of the company. Obligated organs are determined, but the choice is left between monistic and dualistic government system according to national regulations. Along with the regulation a Directive, that complete Statute of European Company about joint decision-making, was brought.

OECD's principals of corporative government

Organization for Economic Cooperation and Development (OECD) gives the most important stimulus to building of good practice of corporative government on global level through representing non obliging standards¹², practice and instructions for implementation that can be adopted to specific circumstances of individual countries and regions.

OECD brought the Principals of corporative government for the first time in 1999, but they are revised to adopt to changes and in 2004 new were adopted.

The principals are not obliging, they are based on the principals and recommendations that do not determine anything strictly, and their importance is not slashed if social, economic or legislative context is changed. The forum for stability marked the Principals as one of twelve key standards for worthy financial systems.

⁹ Modernizing Company Law and Enhancing Corporate Governance in the European Union – A Plan to Move Forward, COM (2003) 284 final. Bruxelles: Commission of the European Communities, page 11

¹⁰ Tipurić, D. et al, 2008., Page 207-217

¹¹ Council Regulation 2001/2157/EC of 08 October 2001 on the Statute for a European Company SE, Official Journal of the European Union, 294, 10/11/2001, page 1-21

¹² Organisation for Economic Co-Operation And development, OECD Principles of Corporate Governance, OECD,2004, download from, <http://213.253.134.43/oecd/pdfs/browseit/2604021E.PDF> (12.09.2008)

The principals of corporative government are divided into two parts. The first part of the document considers I) securing basics for efficient frame of corporative government; II) the rights of stockholders and key owner structures; III) equal treatment of the stockholders; IV) the role of interested parties (stockholders); V) announcing the data and transparency; VI) the responsibility of the board. Every one of those six principals has several sub-principals. In the second part of the document the Principals are contain comments on principals and their intention is to help the readers to understand the argumentation.

Regulative of corporative government in Bosnia and Herzegovina

In countries in development the roots of what is now called corporative government lay in the initiatives for privatization that grew stronger from the late 70s, during 80s and are still lasting. The core questions related to the success of corporative government in countries in transition are: (1) transparency or opened access to key information related finances or business results, (2) conflict of interests which includes boards, directors and managers, (3) rights of owners, (4) corruption and stealing.¹³

Institutional basics of corporative government in one country consist of implying supranational documents that the state accepted signing certain international contracts, national laws and sub legal acts and other codex that regulate this field.

In B&H in the field of accounting there is a state Law on accounting and audit of B&H¹⁴, it determines the standards for performance of accounting and audit in B&H, the way of gaining certificate and training in your profession, harmonizing the executive regulations and activities in the entities and forming an independent committee for supervision and performance of standards in the entire B&H. Besides the mentioned law on the state level, there are entity laws, Law on audit and accounting in the Federation of B&H¹⁴ and the Law on accounting and audit in RS¹⁵.

International accounting standards, i.e. International standards of financial reporting are the basic for making our own accounting regulations which than regulate everything connected to making financial reports.

In the field of internal audit it is differently defined depending on the area of work. Laws on banks and Laws on public companies regulate obligated forming of the department of internal audit. If we observe public companies we must observe the structure of state ownership in public companies which also enforces the need for internal control and surveillance. Other companies, depending on their needs can form a department of internal audit.

The primary legislative frame for corporative government in Serbian Republic consists of: Law on companies in RS¹⁶, Law on public companies in RS¹⁷ Law on banks in RS¹⁸.

In Serbian Republic in 2006 the commission for securities has accepted and announced the codex of corporative government under the title: Standards of managing in corporation¹⁹. We could say that RS is in the process of regulating the corporative government ahead of the Federation of B&H. These codexes are made at the initiative of stock-market in Banja Luka and are mostly compatible with international standards. The primary legislative frame that defines this field in the Federation of B&H is a group of laws consisting of: Law on corporation²⁰, Law on banks²¹, Law on taking over corporation²².

¹³ Nezirić, D.: Korporativno upravljanje – pokretač razvoja tržišne ekonomije, Poduzetnička ekonomija, Volume IX, 12/2005, page 238-354

¹⁴ Zakon o računovodstvu i reviziji Bosne i Hercegovine, Službeni glasnik BiH, br 42/04

¹⁵ Zakon o računovodstvu i reviziji RS, Službeni glasnik RS, number. 67/05

¹⁶ Zakon o preduzećima, Službeni glasnik RS., br. 24/98, 62/02, 66/02, 38/03, 97/04

¹⁷ Zakon o javnim preduzećima, Službeni glasnik RS, br. 75/04

¹⁸ Zakon o bankama RS, Službeni glasnik RS, br. 44/03

¹⁹ Standardi upravljanja akcionarskim društvima, Sl. Glasnik RS, br. 3/06

²⁰ Zakon o gospodarskim društvima, Službene novine Federacije BiH, br. 23/99, 45/00, 2/02, 6/02, 29/03

Besides the mentioned rules for the field of corporative government in FB&H the Rules on managing corporation²³ are also important. With these regulations we determine faster the standards of managing corporation relating choosing and cancel of organs of the company, obligations and responsibilities of these organs and their members in managing and running the business of the company, and the rights and obligations of stockholders and other persons which have some influence in the company.

Federation of B&H does not have set codex on corporative government, and the regulations on managing of corporation have some common points with the codex but are significantly narrowed and simplified.

On July 25.2008, at the initiative of stock-market in Sarajevo, a Board for making a Codex of corporative government in FB&H was formed. Making a Codex for corporative government is planned by the end of 2008.

Conclusion

Legal frame has a great influence on the quality of corporative government through the protection of stockholders (especially minor), behavior of investors, behavior of management and the forming of national codex.

B&H does not have a harmonized interior legislative frame, but it is based on entity laws (RS and FB&H) which solve certain problems only partially. They are not harmonized mutually nor with the supranational standards. That is also confirmed by the fact that B&H has no established codex of corporative government, and in RS they are not harmonized with supranational recommendations and a model of regulation.

Observing the importance of corporative government we may conclude that the basic perspective in B&H is to make models and mechanisms that will enable stabile financial market and attract foreign investors. As basic presupposition we can take the making of joint Codex of corporative government and its harmonization with supranational codex and demands.

The importance of corporative government is in the core of development of market economy and the democratic society and it is there fore the foundation of economic and social development of B&H.

References

1. Buble, M.: Osnove menadžmenta, Sinergija, Zagreb, 2006
2. Channler, A.D.Jr.: Scale and Scope: Dynamics of Industrial Capitalism, Harvard University Press, Cambridge 1990,
3. Council Regulation 2001/2157/EC of 08 October 2001 on the Statute for a European Company SE, Official Journal of the European Union, 294, 10/11/2001
4. Čengić, D.: Vlasnici, menadžeri i kontrola poduzeća, Institut društvenih znanosti Ivo Pilar i Hrvatska sveučilišna naklada, Zagreb, 2001
5. Demb, A., Neubauer, F.: The Corporate Bord: Confronting Paradoxes, Oxford University Press, London, 1992.
6. Mlikotin Tomić, D., Horak, H., Šoljan, V. i Pecotić-Kaufman, J.: Europsko tržišno pravo, Zagreb: Školska Knjiga, 2006
7. Nezirić, D.: Korporativno upravljanje – pokretač razvoja tržišne ekonomije, Poduzetnička ekonomija, Volume IX, 12/2005

²¹ Zakon o bankama, Službene novine Federacije BiH, br. 39/98, 32/00, 27/02, 41/02, 58/02, 13/03, 19/03 i 28/03

²² Zakon o preuzimanju dioničkih društava, Službene novine Federacije BiH“ br. 7/06

²³ Pravila upravljanja dioničkim društvima, Službene novine Federacije BiH, br. 24/06, 30/07

8. Organization for Economic Co-Operation and development, OECD Principles of Corporate Governance, OECD, 2004
9. Tipurić, D. i suradnici: Korporativno upravljanje, Sinergija nakladništvo, Zagreb, 2008
10. Tschopp,H.G.: Corporate Governance – The Key to Success of Failure, Boardroom – Magazine for Corporate Governance, Leadership and Quality of Life, 1, 2005
11. White Paper on Corporate Governance in South East Europe - © OECD 2003
12. Laws and regulations in B&H

Business Operation and Technology Strategy

Besim Ćulahović¹, Zvonko Brnjas²

ABSTRACT – Generally, in a long run, the competitive position of companies depends on their capability to create, capture and deliver the values to the customers at the market. This capability on the great extent rely on the technology: corporations with inferior technology cannot compete with corporations utilizing superior technology. But to use effectively the technology as a competitive weapon, it is necessary to manage it as part of the business system. It is of utmost importance for the companies' performances to interlink their business and technology strategies. The purpose of business strategy is to gain a sustainable economic advantage. The purpose of technology strategy is to gain a sustainable technological advantage that provides a competitive edge. The two strategies must be closely intertwined and highly integrated.

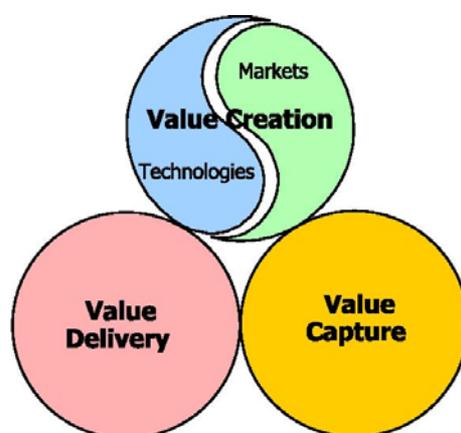
KEY WORDS: business strategy, technology strategy, tacitness and appropriability of the technology, innovation and knowledge based development, complementary assets, technology policy vs. technology management

Technology strategy: some key elements

Defining technology strategy: key foundation and questions

Conventionally, the broad objective of technology strategy is to guide a firm in acquiring, developing and applying technology for competitive advantage. A firm's technology strategy is also expected to serve its overall strategy in developing and exploiting firm specific advantage. In this sense, it is contingent on the firm to ensure a consistency between technology and business strategies. The economics literature has emphasized the role of technological capabilities in acquiring and sustaining firm level competitive advantage. These capabilities broadly relate to the ability of firms to handle technologies and cope with technological change; the ability to absorb and build on technologies. In this context, building such capabilities should be the focus of strategic technology management endeavors.

Figure 1. Three foundation of technology strategy



¹ Besim Ćulahović, University of Sarajevo Faculty of Economics and Business Administration, Sarajevo, Bosnia and Herzegovina

² Zvonko Brnjas, Belgrade Banking Academy, Belgrade, Serbia

At the firm level these strategic choices get translated into a variety of decisions which cut across functional boundaries. Need assessment, make-buy choices, identification of the technology and its source, selection of the collaborator if joint development is involved, levels and timing of R&D and associated investments etc. are all part of this complex decision process. Studies have shown that formulation and implementation of technology strategy are constrained/determined by a variety of features which distinguish technological activities from other activities and one industry/firm from the other. Following a recent analytical review of these issues, we summarize some of these features here.

Figure 2. Three key questions of Technology strategy



Effective technology strategy rest on three foundations: a) value creation, b) value capture and c) value delivery, i.e. on answers to these three key questions (see figures 1 and 2). The foundations and questions build capability to maximize value and profits. More formally, a technology strategy as a choice of capabilities to maximize profits given that:

- Profit is a function of value delivered and competitive offerings,
- Value delivered is a function of product attributes (in the broader sense),
- Product attributes are a function of technical capabilities and value chain,
- Technical capabilities are in house capabilities and partner skills, in an environment in which many of these relationships are not fully characterized and in which they will probably all change over time.

So, a central part of effective technology strategy is to use of effective tools to understanding evolution:

- The S curve and Dominant Design
- The evolution of markets
- Understanding competition
- Who will make the money?
- Appropriability and complementary assets
- Exploring organizational competence
- No one best way: organizational competence as a key strategic choice
- Putting the pieces together: the evolution of competition and competence over the life cycle.

Formulation of technology strategy

Technology is at the core of systems designed to satisfy societal or customer needs. Companies are formed to provide a structure and a mechanism that facilitate the spinning out of technology to satisfy

those needs. When a company has a vision and develops its mission statement, it is stating the reasons the company exists and the inherent values of the company. When the company develops a strategy and its associated plans of action, it creates the vehicle that moves it toward the fulfillment of its mission and the attainment of its vision. The purpose of business strategy is to gain a sustainable economic advantage. The purpose of technology strategy is to gain a sustainable technological advantage that provides a competitive edge. The two strategies must be closely intertwined and highly integrated. This requires extensive forethought about the firm's distinctive technologies, the products or services it can provide, the potential customers, and where the organization wants to be in the future. The company's technologies must be harnessed and exploited according to a well-designed plan. Effective technology management is based on successfully linking business and technology strategies.

Technology strategy is concerned with exploiting, developing, and maintaining the sum total of the company's knowledge and abilities. Many organizations still seem to underestimate technology's importance.

There are many factors that determine business success; although technology is a very important one, it is not in itself sufficient to ensure business success. Good business is about integrating technological innovation with production, marketing, finance, and personnel to achieve established goals.

Two commonalities among companies that use technology as a competitive weapon are:

1. Management views technology as a major competitive weapon but does not emphasize it at the expense of other areas.
2. The criteria used to support any project consist of (a) whether the project supports the business goal, (b) whether the project protects and/or establishes technological leadership, and (c) whether the project solves customer problems.

Technology gives a company a competitive edge. Corporations with inferior technology cannot compete with corporations utilizing superior technology. However, to use technology as a competitive weapon, managers must manage it as part of the business system.

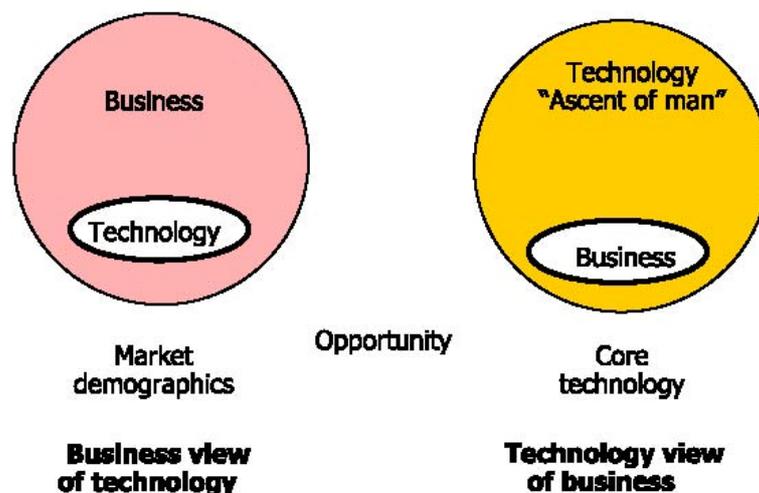
Michael Porter advocates that technology strategy be formulated within the larger context of business planning. Porter's approach to formulating a competitive strategy is to concentrate on optimizing the efficiency of the value chain. This implies developing and maintaining a competitive advantage by finding the most effective means of carrying out all the activities of the business process so as to offer the customer long-term value. Porter proposes that a technology strategy be formulated using the following steps:

- Identify all the distinct technologies and sub-technologies in a value chain.
- Identify potentially relevant technologies in other industries or under scientific development.
- Determine the likely path of change of key technologies.
- Determine which technologies and potential technological changes are most significant for competitive advantage and industry structure.
- Assess a firm's relative capabilities in important technologies and the cost of making improvements.
- Select a technology strategy, encompassing all-important technologies that reinforce the firm's overall competitive strategy.
- Reinforce business-unit technology strategies at the corporate level.

Linking technology and business strategies

Business success depends on the products or services brought to the market. As previously indicated, these have their base in technology. Organizations that know how to link their technology strategy with their business strategy will be more competitive in the global marketplace.

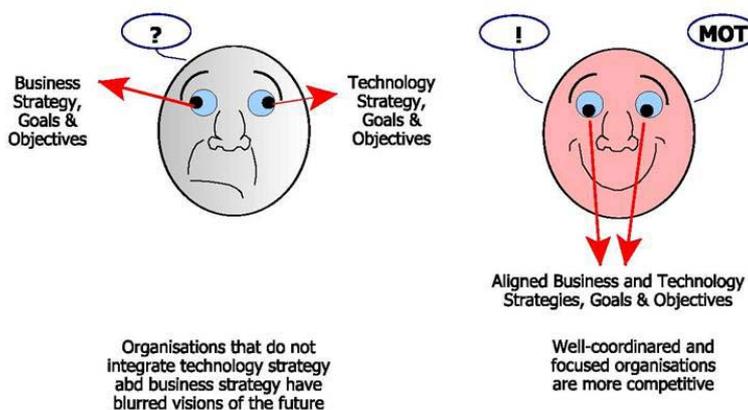
Figure 3. Framework for formulation of business set of priorities



Usually the business and technology strategies side perceives technology as a subset of business, while technologists perceive business as a subset of the general technological ascent of human beings, as shown in Figure 3. On one side, technology is a subset of a business enterprise. Market demographics influence the success of the business. Here, businesses tend to identify technologies relevant to creating business opportunities that satisfy market demands. On the other side, technology, through its role in the ascent of human beings, is the influencing factor in creating business. Business becomes a subset of technological advances that create significant opportunities for companies. For optimal results both sides must be integrated into one organizational strategy. Metaphorically speaking, integrating technology strategy and business strategy can be thought of as two sides of a coin: Either side is worthless without the other.

Companies that have a one-eye view toward business-oriented functions, such as finance, accounting, marketing, and sales, may face technical obsolescence or miss out on potential growth and profitability. Similarly, companies that focus entirely on technological development without effective strategy for exploiting the technology in a timely manner may not be able to sustain profitability. Management must be able to align its technology and business strategies to focus on achieving its goals and objectives. An interesting illustration of this concept is shown in Figure 4.

Figure 4. Integration of technology and business strategies



The technical community tends to hold the view that technical achievements by peers around the world often provide a more reliable guide to the future than do formally documented business forecasts. By contrast, the business-planning community usually looks at markets and other external trends

as a more obvious and direct source of business opportunity. These two perspectives need to be reconciled. The linkage between the goals and objectives of the corporation and its technological strategy is very important. Broad consensus and understanding must exist between business and technical managers throughout a company. A number of generic questions that should be addressed by strategic planners on both the business and the technical sides of the house:

Technology strategy features

Nature of technology and innovative activities

Few of many inter-related features of technology, technological change and innovative activities identified in the literature, which can impinge on firms' technology strategies are discussed here.

Tacitness: A significant part of knowledge developed by enterprises is tacit; it is difficult if not impossible to codify. This is particularly the case in the early phases of technology development and where circumstantial specificity is high. While it is difficult to make a general statement, among the three Ps, practice is likely to most tacit in nature. Tacitness has significant implications for the transfer and appropriability of technology. Broadly, as tacitness of a technology increases, appropriability goes up but transfer becomes increasingly difficult, requiring significant efforts on the part of the buyers and sellers of technology.

Differentiated and Cumulative Nature of Learning: Innovation related activities are highly differentiated. Specific technological skills in one field (e.g., developing pharmaceutical products) may be applicable in closely related fields (e.g., pesticides), but they are of little use in other fields (e.g., designing automobiles). Besides, technological change is often incremental in nature based on continuous cumulative learning; discrete/ quantum changes in technology are few and far between. However, the degree of specificity and cumulateness may differ across the three Ps and firms may consciously need to ascertain if learning on any one of the Ps could be generalized across technologies within the organization. Cumulateness like tacitness adds to appropriability of technology.

Technology Supply Chain: Technological inter-relatedness plays a crucial role in technological development. Linkages with upstream and downstream technologies (users) may hinder or induce technological change in a segment (see below). Such a network of "linked" innovators or the technology supply chain may also be important in another way. Often, the full benefits of new technologies are not reaped because all elements associated with the technology are not adequately implemented within the organization; product, processes and practices linked to a technology need to be embodied in the organization for good results. Traditionally, technology development has been analyzed within the boundaries of a firm. The role of input-output linkages the firm has with other entities is usually ignored. Suppliers of products and processes are, at best, seen as "borrowed blue-print makers" who would fabricate only on the basis of given designs. The problem with this approach is that innovation is viewed as a compartmentalized and discrete activity. However, empirical evidence suggests that successful development of technology, either in the form of products, processes or practices, has often involved interaction of firms across industrial sectors. Technology development in these supply chains takes advantage of the synergies of technological capabilities in their respective sectors. For example, improvements in weaving processes in a textile mill may call for a close interaction with a textile machinery firm which in turn may have to depend on the assistance of firms in machine tool and micro-electronics sectors. Technology supply chains form natural clusters for continuous improvement of products processes and practices. In economic terms, these technology supply chains can be seen to form the core incentive structures for technological activity. It is the joint interest of the suppliers and users of technology which induces continuous innovation.

Appropriability: Despite various legal provisions for protecting intellectual property, appropriability of an innovation is never complete. How far the results of the R&D activity be internalized and how far will they constitute a public good depends on a large variety of factors including tacitness, cumulateness and complexity of technology, market structure and access to complementary assets. What is

not appropriated by the innovating enterprise spills over? Technology spillovers in a sector determine the potential for imitation in that sector. We have already referred to the links between appropriability and technology specific features. It is the discussion of complementary assets that we now turn.

Complementary assets and technology strategy

In all these decisions, which are expected to develop firm specific competitive advantages, the issue of complementary assets will have to be tackled. In the absence of such assets, which include manufacturing and distribution capabilities, appropriation of new technologies may be rather limited. The earlier literature analyzed the role of complementary assets in the context of the technology life cycle: In the initial phases of new technology commercialization, competition is among designs. Uncertainties are about which design will emerge as dominant. It is of strategic relevance in this phase to make efforts to create the dominant (standardized) design closer to firm's specification. After the emergence of the dominant design, price (and delivery) competition becomes more relevant. Consequently, reduction in costs through process innovation, scale economies and learning becomes crucial. These processes get reflected in the empirical observation that when new technologies are commercialized, process innovation often follows product innovation. With the slowing of the rate of product innovation, designs tend to become more standardized, providing the opportunity for large scale production and the deployment of specialized assets.

While this perspective on the technology life cycle is instructive, it implicitly assumes that a breakthrough innovation underlies this transition. Recent developments and the success of the Japanese firms, especially in the auto sector, have challenged this linear-dichotomous (product versus process innovation; design versus price competition) characterization of the processes at work. Even during the phase of process innovation, significant product innovations may take place; firms compete on new variations of the old designs with significant reductions in lead times. Within the broad technology life cycle, product life cycles are increasingly becoming shorter with high rates of product obsolescence. Besides, both product and process innovations may require simultaneous attention for reaping full benefits of product innovations as an exclusive focus on product innovations may delay. Complementary assets can be generic, specialized or co-specialized. Generic assets are general purpose assets that do not need to be tailored to the innovation. Specialized assets are tailor-made for the innovation, and are necessary for the implementation of the innovation. Co-specialized assets are those for which there is bilateral dependence.

In any case most developing country firms are usually not dealing with breakthrough innovations. Therefore the role of complementary assets needs to be analyzed in a different context. In almost all cases, the successful commercialization of an innovation requires that the know-how embodied in the innovation be utilized in conjunction with such complementary assets as competitive manufacturing, marketing and after sales support. Whether the assets required for least cost production and distribution are specialized is important for strategic decisions regarding integration and collaboration. It has been suggested that when managers make R&D and commercialization decisions, they must identify, preferably ahead of time, the complementary assets that the innovation will need for success full commercialization. Contractual or collaboration alternatives will make strategic sense if the complementary assets are not specialized, or if the appropriability of the innovation is ironclad.

Collaboration/contract modes can also be acceptable if (i) the required complementary assets are not critical; or (ii) for assets which cannot be procured by the innovating firm due to lack of financial resources; or (iii) for assets in which imitators are already irrevocably better positioned. Otherwise, the integration (in-house availability of complementary assets) alternative ought to be preferred to capture the value of the innovation. Given limited appropriability of technology, strategies that employ co-specialized assets and other interdependencies are advocated to generate and protect the economic rents from innovation.

Manufacturing capability is often seen as one such asset. Empirical evidence has shown that competitive manufacturing provides significant learning potential and the associated cost, quality, delivery and flexibility advantages. Just like successful commercialization of certain innovations is dependent on

access to good manufacturing facilities, nature of existing manufacturing facilities can condition nature of innovation activities (even technology strategy) undertaken by the firm. Competitive manufacturing is also likely to be critical in many circumstances because technology and product (and industry) life cycles are not co-terminus; a given embodied technology may be able to provide various generations of new products. As the technology moves from early design to the stable stage, manufacturing ought to move through job shop, batch and continuous process modes. Depending on product variants and volumes, the focus of the manufacturing facility, capacity levels, and manufacturing infrastructure changes to meet the strategic technology needs. This, in essence, characterizes the manufacturing strategy of a firm. Sometimes, production capabilities provide strategic choices for in-house innovation for new product and process introduction.

Industry characteristics

Observed sectoral patterns of technical change are often seen as a result of the interplay between various kinds of market inducement, and opportunity and appropriability combinations. Structural and technological characteristics of industrial sectors affect opportunity and appropriability conditions and therefore, impinge on technological strategies of firms in these sectors.

Structural Features: Competition involves rapid imitation with innovations continuously superseding each other. Therefore, there is incentive to innovate only if one feels confident of being able to exploit that innovation rapidly. Monopoly or imperfect competition provides a better setting in which to exploit innovation. The Schumpeterian view is that monopoly power and large size of the firm facilitate/induce technological advance. This is so because the large oligopolistic firms are better able to internalize the benefits of innovation and are generally more certain of their environment. Such firms have the wherewithal to exploit new technology quickly largely due to better access to finance and complementary assets like manufacturing facility and capacity and marketing infrastructure. Therefore, oligopolistic industries are expected to be more innovative. Empirical studies, however, have not been able to discern any neat pattern of linkages between market structure and technological activity. While the importance of complementary assets cannot be denied for any innovation, the Schumpeterian logic is probably more apt for breakthrough innovations rather than continuous improvements of the Kaizen variety. It is not clear if the empirical investigations are able to make a clear distinction between these two types of innovations. Furthermore, differences across and within industries in terms of product/industry life cycles, can complicate empirical investigations. In any case, the implications of market structure may differ for the three Ps of technology: oligopolistic power may not be required for changes in practices and many incremental process (even product) innovations. The firms, especially in the developing countries, need to recognize such opportunities and benefit from them.

Technological Features: Many studies have emphasized the existence of significant inter-sectoral differences in the nature, sources, determinants and objectives of innovative activities and resulting innovations. On the basis of sectoral specificities observed in developed countries, Pavitt has identified five categories of these sectors: supplier dominated, specialized suppliers, scale intensive, science based and information intensive. Broadly, as compared to other sectors, technological opportunities are higher in science based firms (given munificence in underlying technologies) and in specialized suppliers (given continuous pressures to improve production efficiency in user sectors). The information intensity of many sectors is on the rise. It should be emphasized that these are not watertight categories and a firm may show features of more than one category. Besides, the characterization of these sectors can change over time. While the importance of product and process innovations may differ across sectors, the relevance of practice innovations is likely to be high in all the sectors.

Firm characteristics

A large variety of firm characteristics, impinging on technology strategies have been highlighted. It is not our purpose required to cover all these features; only a few points are made. The role of firm size has already been highlighted above. We only wish to reemphasize that large firms are often able to

internalize the benefits of innovation because of the access to complementary assets which include competitive manufacturing facilities, distribution and service networks and complementary technologies. A multi-product firm has opportunities for economies of scope based on transferring technologies across product lines and blending them to create new products. Despite the path dependent nature of technological change, the diversity of application areas for a given technology is often quite large, and it is often feasible and sometimes efficient to apply the firm's capabilities to different market opportunities. A multi-product firm, therefore, may have the opportunity to widely diffuse the innovations in the three Ps, especially practices.

Firms commonly need to form external linkages, vertical (both upstream and downstream), lateral, and sometimes horizontal in order to produce and market their products. For example, linkages are extremely important when there is vast consumption. In Supplier-Dominated Sectors, innovation is exogenous to the sector and is embodied in purchased inputs. R&D is low and mainly adaptive due to limited technological opportunities. Firms in the Specialized Suppliers sector focus on product innovations that enter other sectors as capital goods. Formal R&D is low but abundant innovation opportunities are exploited through tacit design and engineering capabilities. Innovation is endogenous to the Scale-Intensive Sector as part of production activities in large complex production systems. Production engineering and learning-by-doing are major sources of technology. R&D expenditure is high as these firms generate their own process technology in many cases and integrate vertically to make their own equipment. Innovation activity is endogenous to the Science-Based Sectors also but is located in labs and based on rapid developments in underlying sciences. Technological opportunities are high resulting in high R&D expenditures. Product innovations from this sector enter a wide range of sectors as capital or intermediate inputs. Technological accumulation in information intensive firms comprises the design, building operation and improvement of complex systems for the storage and processing of information. Improvements are incremental and experience based and emanate from operating experience in large user firms and suppliers of systems and application software.

Technology policy and its links with technology management

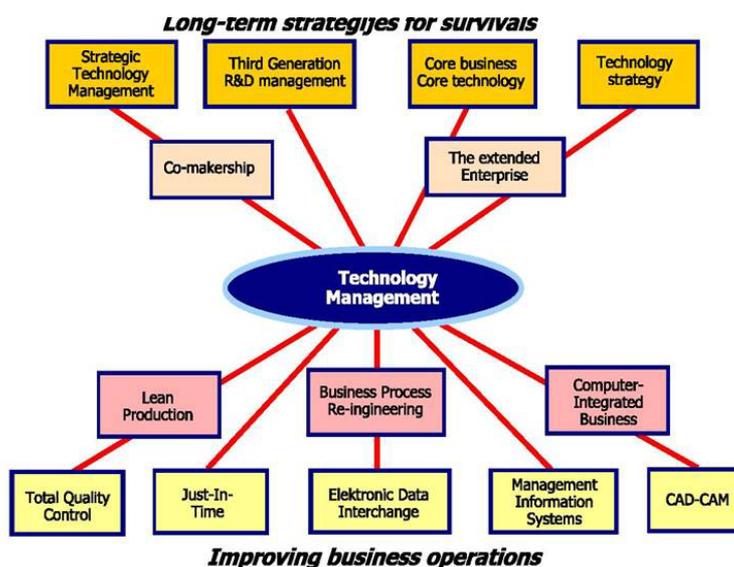
Technology policy in transition

Most advanced countries have established sets of policies which are directed towards the national capacity to produce and utilize technology in the interests of social and economic development. These include, most notably, incentives such as subsidies and/or tax concessions for firms investing in R&D or hiring research and engineering personnel. Although their roots can clearly be traced to science policies and they still share some of the same types of instruments, technology policies are now considered to fall into a specific and separate policy area. They tend to embody distinctive objectives (most notably the advancement of industrial competitiveness) and address particular problems (such as the uptake and utilization of technology by industrial firms). They reflect a perception that the world of technology, which is mainly the province of firms searching for profits, follows rules which are rather different from that of science, despite the fact that the two worlds are intimately associated and mutually dependent on one another.

Technology management: the emergence of the concept

The concept of technology management draws on the same roots as contemporary technology policies. Reflecting the principles, technology policy into the private sphere, technology management sees technology as a core strategic resource, with many systemic characteristics, which must therefore be considered from an integrated perspective. On the part of firms, technology management serves to ensure that the synergies between different technological capabilities and applications are fully exploited, and that the organization, skills, and other associated factors are in place to optimize the value of these resources. This obviously requires a sophisticated understanding of the nature of technology and the determinants of technological change.

Figure 5. *Technology Management: where long-term visions and short-term improvements meet*



Like business strategy more generally, technology management can be seen as a function at the interface between a series of bottom-up and top-down processes of organizational development, both of which serve to emphasize the growing importance of technology as a component of the way business is done. Technology management is the point at which long-term visions of research at short-term (continuous) improvements in products and process meet (see Figure 5).

The search for improved performance of existing business processes has, on the one hand, brought together methods at technologies that were previously separate: total quality management, just-in-time logistics, electronic data interchange, CAD-CAM, management information systems, etc. These partial improvements are being increasingly integrated into more comprehensive approaches requiring a strategic orientation over the enterprise as a whole: lean production, computer-integrated business, business re-engineering.

On the other hand, there is growing appreciation of the need to link research and development more closely to the long-term needs of the enterprise. This has led to a number of management approaches which link the firm's overall business strategy with its technological capabilities. The concepts of 'core competence' and 'core technology' are illustrative of this trend. Firms are increasingly thinking of technology not just as an internal factor which forms a major element of their specific competitive strengths, but as a means to leverage external capabilities, via strategic alliances and joint ventures.

An important impetus towards the technology-management approach comes from the lessons of failure in accommodating to technological change. Heavy investments in new production technology were made by firms in the 1980s with little understanding of their operational and strategic implications. They were driven by the perception that easy gains in productivity could be captured by introducing high technology automation such as robotics, and supported by various government initiatives. The widespread failure to realize the anticipated benefits has been well documented, and the lessons learnt have been a determining factor in developing the more sophisticated approach to technology associated with the notion of technology management. Technology management implies a movement from considering technology in functional terms or in relation to individual business processes, towards an overall appreciation of technology from a corporate perspective. It also reflects an appreciation that the fundamental and distinctive competences of firms are not static features which relate only to their present products and processes, but that they have important dynamic characteristics, at the same time allowing an accumulating innovative capability, but also constraining the direction of their future competitive development.

The rationale for technology management

The essential factors which make technology management so important for firms are fourfold: **First, the widespread and diversified impact of technology on competitive performance** - In practically all areas of business, technology has become a dimension on which firms are able to differentiate themselves from their competitors, whether their strategies relate to price, quality, speed to market, or other aspects of competition. This is no less true of service than manufacturing sectors: the information revolution has ensured that sectors like telecommunications and financial services are amongst the most technologically dynamic. Neither is the phenomenon restricted to high-tech industries; the sectors just cited, for example, carry out relatively little research of their own, and there are innumerable examples of where astute introduction of new process technologies has rejuvenated industries once regarded as mature. Technology management fills the need for a much broader concept than research management, which is relevant to the complete range of processes within the firm and practically all types of firm.

Second, the interdependence between technology, knowledge and skills. What the failures of the 1980s demonstrated above all was that the level of performance of complex technological systems is not an attribute of the hardware alone. Understanding and making use of the full potential of investments in technology depends upon complementary investments in the knowledge and skill of the people making use of the technology. This goes well beyond the workforce directly associated with the technology in question, and may affect all levels of management. The specific knowledge necessary to master complex technologies in a specific business context is rarely widely available, and accumulates only slowly. This means that firms are closely bound to the development paths that their previous history has prepared them for, and their business strategies need to be based on an understanding of the limitations of their own technological capabilities in the face of radical changes in the technological basis of their industries.

Third, the organizational implications of technological change - Exploiting in-house technological resources in the development of new products and processes depends upon an organizational capacity to transcend functional and divisional boundaries and thus bring together research activities from different product areas and put them in close contact with development and marketing activities, etc. Exploiting external sources of technology, on the other hand, can demand a capability to transform production processes to take advantage of the new possibilities opened up by the technology. Emerging management paradigms such as 'lean enterprise', 'core competence', 'business process re-engineering', and so on, can be seen to involve both organizational and technological components, closely linked.

Fourth, the limits to technological autonomy enjoyed by firms - The complexity of modern technologies and their intrusion into all aspects of business mean that even the largest and most technologically advanced firms depend quite extensively on technology sourced from outside. All firms face the need to monitor technological developments undergone by their suppliers, customers, and competitors. Increasingly, firms are thinking of leveraging their own technological capabilities by combination with those of other firms, through strategic alliances, joint ventures, and more informal networking arrangements. This brings additional organizational and skill-related problems internally, to manage a variety of external interfaces and assimilate the knowledge arising from them, whilst protecting against leakage of the firm's own intellectual property.

References

1. *A Social History of American Technology*, Oxford University Press, New York, 1997.
2. Bassala G.: *The Evolution of Technology*, Cambridge University Press, New York, 1993
3. J. Bradford De Long, Estimating World GDP, One Million B.C.-Present, <http://econ16i.berkeley.edu>)
4. Cardwell D.: *Turning Points in Western Technology*, New York, 1975;

5. Cowan R.S.: *A Social History of American Technology*, Oxford University Press, New York, 1997;
6. David P.: *Technical Choice, Innovation and Economic Growth*, London 1975
7. Freeman C.: *The Economics of Industrial Innovation*, Baltimore, 1974;
8. Gilfillan S.C.: *The Sociology of Invention*, Cambridge, Mass.
9. Gobac S.: *Tehnologija proizvodnih procesa*, Informator, Zagreb, 1987;
10. Hughes T.P.: *American Genesis: a Century of Invention and Technological Enthusiasm, 1870-1970*, Viking, New York, 1989; Mansfield E.: *Microeconomics*, New York, 1975;
11. Jones L.J.: *History of Technology*, Rupert Hall and Norman Smith, London, 1979.
12. Schumpeter J.A.: *The Theory of Economic Development*, Cambridge, Mass, 1934

INSTITUTE OF ECONOMIC SCIENCES

Zmaj Jovina 12, 11000 Belgrade, Republic of Serbia

Tel: +381 11 2622-357, 2623-055; fax: +381 11 2181-471

CIP – Каталогизација у публикацији
Народна библиотека Србије, Београд

336.76(4-664)(082)

336(497)(082)

007:004(082)

339.923(4-627EY:497)(082)

**CHALLENGES of Economic Sciences in the
21st Century** / editors Jean-Paul Guichard . . .

[et al.]. - Beograd : Institute of Economic
Sciences, 2009 (Beograd : Čigoja štampa). -

XII, 801 str. : ilustr. : 30 cm

«International scientific conference
'Challenges of Economic Sciences in the 21st
Century' held in Belgrade on 4th and 5th
December 2008» . . . --> Preface. - Tiraž 200. -
Str. 11-12: Preface / Jean-Paul Guichard ...
[et al.]. - Napomene i bibliografske
reference uz tekst. - Bibliografija uz svaki
rad.

ISBN 978-86-80315-79-9

1. Guichard, Jean-Paul [уредник] [аутор
додатног текста]

а) Финансијско тржиште - Земље у
транзицији - Зборници б) Финансијски систем
- Балканске државе - Зборници с)
Информациона технологија - Зборници д)
Европа - Интеграције - Балканске државе -
Зборници

COBISS.SR-ID 155984396