

## Competitiveness and Development of National Economy

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**ABSTRACT** – *This paper examines the relation between the two, may be the most pressing, phenomena of the world economy: competitiveness and development. Of course both can be interpreted in several ways, but the most operative way is to consider competitiveness by the methodology of the World Economic Forum's Global Competitiveness Index, and the development by the gross of domestic product per population. The intent is to determine what is the connection between these two indicators in general, and to pass the question in such a way, and to establish a methodology for further analysis of individual groups of countries considered in the report of the World Economic Forum's Global Competitiveness in the world. Therefore, we use correlation analysis between the observed indicators for the economy after 2005, since the above-mentioned study and implement competitiveness, with an accent on the last mid-term because of current events. The answer to the question: what is the relationship between these indicators in the timeline for all countries concerned is expected. It is also important for the countries of the former Yugoslavia as a guide in the efforts to retrieve the position in the world economy.*

**KEY WORDS:** *competitiveness, development, correlation, crises*

### Introduction

Economic development is the eternal subject, not only in the economy, but in the history of mankind in general, as a necessary prerequisite to any other progress of human civilization. It is the same in the twenty-first century. As always, this issue is permanently actualized by possible recession, which has larger proportions, and is often called the global crisis. Such is the case today, when the world economy still is not fully recovered from the initial shock of the crisis, which was conceived in the U.S financial sector at the end of the year 2007.

As usual, the disorder is the system of concentric circles spread to other developed countries, and according to the conditions of globalization of the world economy, affecting virtually every corner of the globe. Although the deepest recession in most countries recorded in the period 2008-2009, the recovery does not run at the desired speed. Problems of economic development are even more important for the country's late transition to make an effort to get closer to the developed economies of Europe, and those are the economies of the Western Balkans. Suggested as a general prescription is competitiveness increasing.

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In the world of science, competitiveness is a category of newer, more specifically defined in the modern form at the end of the last century. It was the last decade of the twentieth century, the strong momentum of science and the development of global markets, highlighted as never before, the issue of competition in both at micro, and as the newer phenomenon, and competitiveness at the macro level, and there are several different concepts about it.

## Literature review

In theoretical sense, in terms of country competitiveness report, the foundation was laid by profesor Porter (Rakić, 2003). According to him, the main segments which determine competitiveness of countries and companies in terms of business are:

1. Factors of conditions;
2. Terms of demand;
3. Related and supporting industries;
4. Strategy, structure and rivalry companies.

*Factors of conditions* which may be natural (inherited) or produced (acquired) were divided into five categories, namely:

1. Human Resources;
2. Physical resources;
3. Knowledge;
4. Capital;
5. Infrastructure.

Under section two, we have something what we call in other words: the characteristics of the goods and services. According to this view, the market is the engine because progress is the only force that compels companies to technical progress and innovation in business. *Demand conditions* can be further decomposed into the following factors of competitiveness:

1. The structure of domestic demand;
2. The size and rate of growth of domestic demand;
3. The rapid growth of the domestic market;
4. Way of directing local products and services in foreign markets.

*Related and supporting industries* are element of competitiveness of a country which has rounded, while diversified economic structure. In this way, the export companies, which are at the end of the value chain, have advantages over foreign competitors, because of the better local support. Local support is the most effective of all related and supporting industries, due to geographical proximity, as well as due the common cultural milieu in which they operate. Contacts and co-ordination of business partners are much better and always first established between companies within the national economy.

*Strategy, structure and rivalry of companies* are last, but not the least, important link in the chain of this kind of competitive states. Considering the fact that this concept is not given explicitly, quantify the impact of several groups of factors, one can reasonably expect that equal importance is granted for all. Speaking about the strategy and structure which prevailing in the individual countries, which are caused by specific and different factors, but



relatively stable categories, it is pointed out that different countries are suitable, or unsuitable for the successful development of the various activities.

On the other hand, the mutual rivalry of local companies is generally the most important factor in increasing the productivity and competitiveness of the one country. This is, of course, related to the size of an economy, and the prevailing economic system.

Reputable international organizations are dealing with regular monitoring of competitiveness and business conditions in different countries. The regular annual reports are the most valuable, which include smaller or larger number of indicators relating to the state of the economy in the surveyed countries. We would here pay attention only to the literature that has global scope and ambition of the regular annual reporting. In the first place we will point out the World Economic Forum and its regular annual report on competitiveness in the world which covers more than 140 economies in terms of comprehensive measurement of competitiveness of individual countries. Afterwards we will highlight the World Bank, whose annual "Doing Business" report includes even more of the 180 countries where the regulatory framework is evaluated in terms of ease of doing business. Transparency International, publishes every year a list of countries according to the index of corruption in which is also achieved a great coverage of nearly 180 countries. Subject of research is limited exclusively to corruption in the public sector. The World Bank monitors the level of economic knowledge to over 140 countries worldwide. In the ability of selected countries it is estimated in the generating and adoption of the economic knowledges (Peter Sanfey and Simone Zeh, 2012). We also should mention the regular annual report of Heritage Foundation which now includes nearly 170 countries, and refers to the assessment of economic freedom for each of them (The Heritage Foundation, 2014).

When all from the above is taken into consideration, for the purposes of this paper we are choosing "Report on the Global Competitiveness" of World Economic Forum and the "Doing Business" of World Bank as the most appropriate. It is because the both reports include a number of indicators, and by elaborated methodology provide the most complete picture of the majority of the competitiveness of the national economy.

Although these documents are valuable to the all investors in the world, as well as for officials involved in improving the competitiveness of their national economies, we should be aware of some of their limitations. Usability of Competitiveness Report of the world in the mentioned sense, especially its reliability may be limited for small economies due to the extremely small sample available when determining the number of parameter values. Similarly, the objectivity can be problematic considering the fact that about 60% of the score is based on surveys, rather than on the exact parameters. Regarding the Business, in addition to the lack of reliable data for individual countries, the methodological problem is that the final score is based mainly on existing regulations, not in their factual implementation in practice, which is certainly more important for the potential users of the report.

Despite these objections which relate primarily to the useable value of the two, in our opinion, most comprehensive reports, which relate primarily to their practical utility value to potential investors and government officials in the national economy, they are the the most relevant research links between competitiveness and the development of the national economy in global.



## **The World Bank Report**

Regular annual report "Doing Business" issued by the International Bank for Reconstruction and Development is mainly engaged in administrative, legal and financial conditions. It is relatively dynamic and could be changed in a relatively short period of time, unlike the competitiveness factors in Porter's theoretical propositions.

The approach is based on private business (entrepreneurship) as the main propelling force of the economy and liberal conception that stands for active, but a neutral role in the economy of the state bureaucracy. The philosophy is based on the fact that, first, the role of the state in the economy is very significant in terms of establishing the so-called legal state, which means the rule of law, to be precise, appropriate and stable legal norms which will be effectively implemented in practice, which means, expeditious and non-discriminatory. In this way, the state would guarantee a stable and orderly economic milieu in which it could develop free competition of business. Action of the state is appreciated by its efforts to result a strong focus in that direction and, thus, actively promotes the economic growth and development.

On the other hand, its activity should be as neutral as possible in the sense that the action set out above is not privileged in any way. In fact, in the general approach, and in the methodology of the report, "Doing Business" starts implication of this neutral role of the state.

Framework for assessing the competitiveness of this aspect includes 10 indicators:

1. Incorporation;
2. Permissions (time and complexity);
3. Hiring (and firing) employees;
4. Registering property;
5. Getting credit;
6. Protection of investors;
7. Payment of taxes;
8. The possibility of trade with foreign countries;
9. Contract compliance;
10. Closing a Business.

Each of these criteria is treated in triple ways. Specifically, each item is considered in terms of how long it takes, on average, from the beginning to the end of the administrative procedures, then, how the procedure is complex, as the stage is made, and at the end, what is the amount of total taxes and general expenses to complete one of the following procedures.

The value of research is large as it is based on facts that are collected on a standardized methodology in all countries, and the comparability of the results is credible. The research is usually based on a hypothetical example of a small company with a pre-defined legal status, size, location and type of activity. All 10 indicators are considered, by all three mentioned parameters, and are evaluated by means of standardized parameters. The work done by 7000 local experts in the field which are experts in the listed 10 areas (lawyers, accountants, architects, government officials, consultants, etc.), which provide specific factual information for each area of the study.



Thus, the entire approach of the World Bank in a study of competitiveness "Doing Business" is based, as it is already mentioned, on the analysis of relationships and institutions in one country which are relevant to business firms in it. If the number of administrative procedures is smaller, their duration shorter and costs lower, the more competitive is the industry.

### **Global Competitiveness Index – GCI**

Reports of The World Economic Forum with their comprehensiveness, both in number of countries, and the number of indicators, provide a complete analysis of the competitiveness of the economy, both in absolute terms, the value of the indicators themselves, as well as relative, enabling comparison with the other countries. According to the Global Competitiveness Index and the individual elements of competitiveness, provide detailed analysis and draw conclusions that should be the basis for corrective action. In addition, the following values of these indicators from one year to another, it could be, in general, as well as, by individual indicators, monitored the development trend of competitiveness of countries in absolute and relative terms. In this way it can be concluded about the state and prospects of the economy of a country and to identify basic deficiencies of the system, and the development and economic policies that should be corrected.

Professor Sala-i-Martin at the beginning of this century constructed GCI (Global Competitiveness Index) that connects the micro-and macro-economic factors of competition, and it was adopted and used by the World Economic Forum since 2005 in its report on global competitiveness (Global Competitiveness Report). In this report, national competitiveness is defined as "... a set of institutions, policies and factors that determine the productivity of a country." (Schwab, 2010.p 4). Competitiveness is assessed by considering the 12 pillars of competitiveness.

### **Sustainable Competitiveness Index– SCI**

Three decades ago, the term sustainable development appeared in the economy. This theory has been developed since the 80s decade of the last century and is widely accepted by the world's most distinguished institutions in monitoring the global economy. And in the Global Competitiveness Report 2011-2012 we also can find the treatment of the problem by the World Economic Forum. It is concluded that the GCI does not respect the long-term perspective of competitiveness, but only measure the current performance of each national economy.

Next step is designing the index of sustainable (long-term) competitiveness - SCI (Sustainable Competitiveness Index). It includes factors that determine competitiveness in long term, even if some of them are not covered by GCI. This, so to say, a broader concept of competitiveness is preliminarily defined "... as the set of institutions, policies and factors that determine the level of productivity of a country, while ensuring the ability of future generations to meet their own needs." (Schwab, 2011. pp 51)

In the next Global Competitiveness Report 2012-2013 by the World Economic Forum has continued to work on further development of this indicator. The basic idea in designing the SCI is to show the relationship between economic development, environmental management and social sustainability. It means that the long-term competitiveness is considered as a kind



of correction GCI indicators related to the management of environmental and social sustainability. Since this correction is a maximum of 20%, we can conclude that GCI is the basic determinant of the sustainability and competitiveness.

Pilot study was carried out in 79 countries, in accordance with the available data. In any case, we have to wait a while before using this interesting and useful Competitiveness Index come in practical use. If this is implemented, it might be worth in the future in its domain, as much as it is today in its most authoritative GCI.

### **Problems of economic development**

Defining the level of development of an economy is complex, mainly because of the definition of the term and answer of the question: What exactly is the economic development? Obviously the answer to this question is very complex, and there is no one generally accepted and answers that would be given once and for all. Surely that this definition could include the provision of material conditions of life for all citizens above the subsistence level, the realization of self-worth and independence of the nation, as well as allowing individual freedom of choice (Dragutinović et al., 2005)

As we can see, all of this is not only difficult to quantify in a theoretical sense, but, perhaps more importantly, ensuring that the process of globalization of the world economy, especially the other determinant. However, no matter how it may sound idealistic, "Economic development can be defined as a process of long-term sustainable growth in output and income with structural improvements in its creation and distribution, and which results in the long term in a general increase in living standards, financial independence and political freedoms of population." (Dragutinović, 2005. pp 255).

Without a detailed justification of this, for the purposes of our study satisfactory definition, it should be emphasized as an important element of its economic structure changes. In fact, as national economy is more developed, the dominance of the sector in employment and creation of domestic product gross moves from the primary sector, through secondary to tertiary. This is particularly important because that guidelines and statistics are more accessible for verification from, for example, political freedoms.

## **Methodology data**

### **Competitiveness measuring**

If we want to look at the relation between competitiveness and development of the national economy, we will allocate to our starting point the World Economic Forum reports that deals with the global competitiveness of the global economy. As a basic methodological approach to assess competitiveness we will select Global Competitiveness Index (GCI). Our selection is based on the fact that many of the competitive assessment contained in the second most important tracking of competitiveness in the world, "Doing Business", published by the World Bank methodology incorporated into the global competitiveness index.

The base for the preparation of the Report is standardized survey, which each year includes increasing number of representative companies in every national economy.

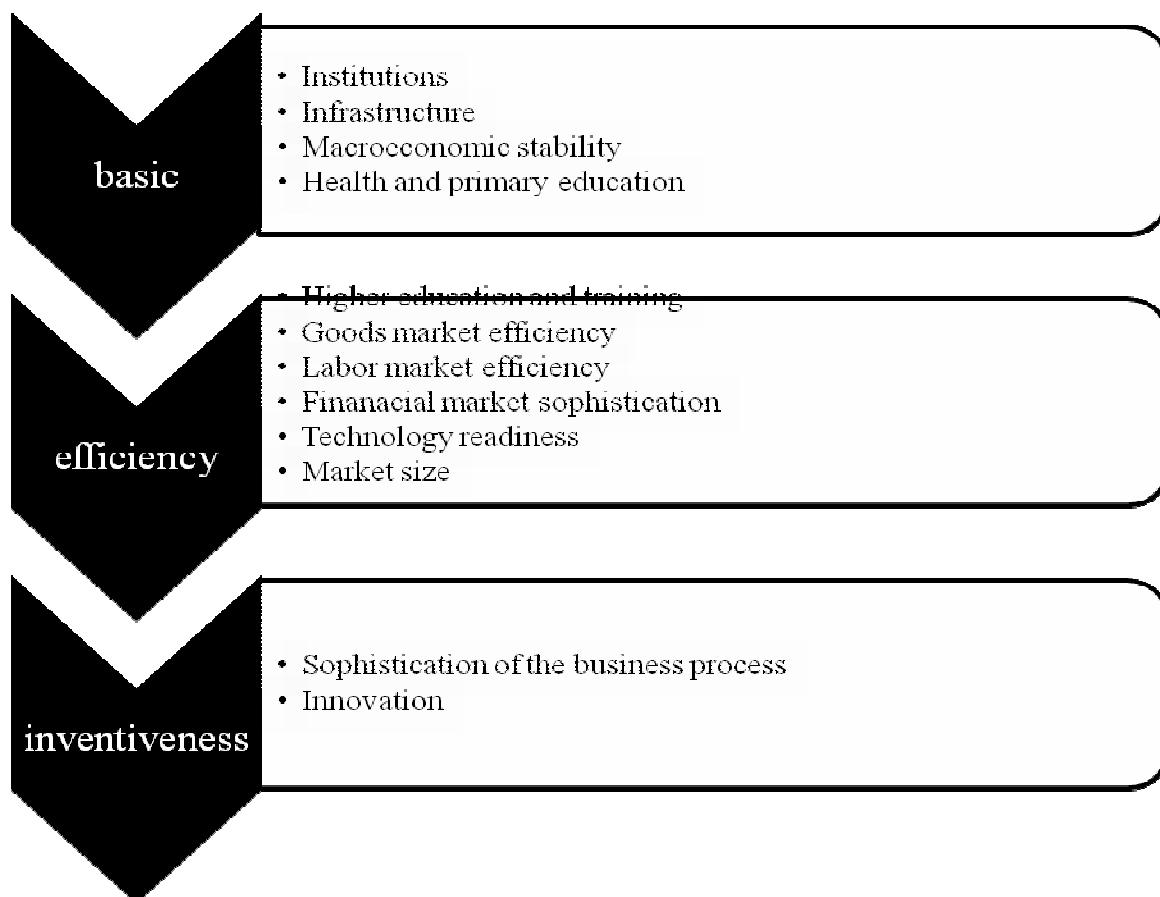


Executive managers, according to the majority of indicators, assess economic conditions ranging from 1 (worst) to 7 (best). This approach is very important because when calculating the Global Competitiveness Index (GCI), survey data participate in approximately 60%.

In calculating the GCI, according to the above mentioned primary sources, the secondary sources also must be used, meaning, the official sources of information which can not be collected in the manner described-by interviewing the managers of the economy. These are various statistics such as, for example, the number of installed computers and Internet connections, phone lines, data on education and health, monetary and fiscal data, GDP, demographics, etc.

Combining these data 12 columns of competitiveness were constructed, which can be grouped in three sections, and all together they make a synthetic GCI.

Figure 1. Factors and columns of competitiveness



Source: Schwab, K. (Eds.). (2010). *Global competitiveness report 2010-2011 Geneva: World economic forum, (pp 9).*

This methodology is based on basic division stages of development of any economy, the beginning, intermediate and advanced. According to the initial setting, which can certainly be accept by the fact that in practice is verified in most cases, developing countries base their chance to escape from poverty on exploiting the basic factors such are natural resources,





labor and capital. For the countries at this stage of development, the competitiveness of the economy depends mainly on improving the following columns: institutions, infrastructure, macroeconomic stability, health and primary education.

At the second stage of the development, economic growth must be based on increased efficiency, considering the fact that in this situation, economic growth can no longer be based on the increased quantum of engagement of basic factors of production, but on their more efficient use. It is important to set out that the share of these columns of competitiveness is estimated on 50% in the designing of the overall competitiveness of the national economy in the central stage of development, and what is particularly important is identical share for the developed countries.

Competitiveness of developed countries, according to this methodology, is based mostly on business sophistication and innovation.

1. *Institutions* - are the first, and therefore probably the most important pillar of the global competitiveness of each national economy. This term means legal and administrative environment in which private firm operates in cooperation with the state achieving a certain level of welfare in society.

2. *Infrastructure* - This column represents the basic material precondition of economic development and business conditions similar as previous column represents in the "immaterial" effect. High-quality and extensive network of all forms of transport and communications in the country, and its relationships with other countries, are indispensable convenience in locating economic activities and significant impact on the cost of investment and operation.

3. *Macroeconomic Environment* - It is a very important pillar of competitiveness that can often undermine economic growth in developed countries, not only of the poor, who are certainly more vulnerable in practice and more exposed to this type of risk. A stable macroeconomic environment is the healthiest condition for doing business, especially in terms of interest rates. Also, inflation has to be tightly controlled if we want a competitive economy. Especially in modern conditions, for almost all states very important problem of public debt, which oversizing threatens the possibilities of anti-cyclical economic policies of each country.

4. *Health and primary education* - Both elements concerning the most important factor of production-labor. Health is the basis of the productivity of employees, and if it is bad, there are frequent absences from work and efficiency of the work involved people is reduced. In addition to health, the quality and quantity of basic education which covers the population of a country is the basis for each individual worker productivity, and global competitiveness of the economy as a whole.

5. *Higher education and training* - Modern economy requires a workforce capable of adapting quickly to dynamic technical progress, which is impossible without quality education and appropriate specialized training.

6. *Goods market efficiency* - Countries which own effective market of goods are in a position to produce goods and services in quantity and quality that is maximally aligned with the needs of local customers, so they could be easily implemented in the market. Healthy market competition in the domestic and international markets is important to the





growth of market efficiency and business productivity, to increase microproductivity, producing goods for the market and growth of prosperity.

7. *The efficiency of the labor market* - labor market through its efficiency and elasticity should ensure the optimal allocation of labor and to encourage the workers to actively participate in finding their optimal work engagement, and effective use of working time. Labor market provides an ideal turnover of staff, but without socially unacceptable consequences. A particular problem is the high youth unemployment, which can lead to serious social unrest, and the current challenge to the labor market in most countries of the world. It is particularly important in this area, to provide gender equality in the field of labor relations, as well as opportunities for the realization of extremely talented individuals all of which enhance the global competitiveness of any economy, and it is especially important for the medium and high levels of development.

8. *The development of financial markets* - last depression of the world economy that started actually in the banking sector in the most developed countries of the world shows the importance of this particular market segment for global competitiveness. Only an efficient financial sector allows rational allocation and efficient use of economic resources. Efficient financial market provides an entrepreneurial, non political investments and direct equity in projects where the highest rate of return, returning deadline is the shortest.

9. *Technological readiness* – in the era of globalization, technology is the basis of the progress of each company. This column reflects the openness and competitiveness of the economy's willingness to quickly adopt and implement new technological solutions to increase productivity, meaning competitiveness. This is particularly important in the field of information and communication technologies (ICT), which have unlimited use in all cells of economy and society, which represent the current technological revolution.

10. *Market size* - This column of competitiveness allows companies lower costs per unit due to the use of economies of scale, and therefore they price-competitive. Despite the increase in the international trade and the globalization of the world market, most companies have made their first steps at domestic level, and often under the auspices of their government, so that the market size of one country has a significant impact on global competitiveness. Therefore, the small countries are quite limited in terms of the competitiveness and they try to make up for foreign trade, but regardless, there are much more favorable conditions for business development in the countries that have a large domestic market. EU-type economic integrations are suitable for small countries because they allow them to strengthen the pillars of competitiveness through the institution of a common market.

11. *Business sophistication* - This column includes business practice that enables the efficient production of goods and services. It includes features of the economic environment in the country and the activity of the companies themselves. This aspect, which is very important for national productivity, is reflected in the quality of their business networks, supporting industries, the number of domestic companies and their business partnership. It includes a highly desirable cluster formation which involves cooperation between companies on a common geographical location in order to encourage innovation. In addition, the sophistication of business in a country reflects the activities of individual companies,



through their branding, marketing, distribution channels, business process sophistication, uniqueness and perfection of products and services offered in the market.

12. *Innovation* - Technological innovations are the last pillar of competitiveness, which, together with the previous, are the most important factor of competitiveness in developed countries and are certainly basis for global domination of the economy. The value of all the listed pillars of competitiveness in the long term can be valorized only with constant technological advances. Technical progress is the ultimate goal of improving competitiveness, but also the basic condition for the maintenance of a high level. Innovation means that the business knowledge and technology in society are adaptable to thenological changes, and quickly integrated into the economy. However, countries which want to reach the highest level of productivity, in addition to the monitoring of technical progress, must trough the development policy to force the more technologically advanced activities, and, in accordance with their capabilities, to contribute to the technological progress.

### **Measuring of development**

On the other hand, we need an indicator of development suitable for the study of the economy, whose competitiveness follow the way described above. Of course, the economic development is one multi-dimensional problem and it could be traced through complex series of indicators. Methodology used to measure it here is not going to be treated widely because the topic is old, and that there is an extensive literature about it. Emphasis is placed on the methodology of measuring the competitiveness of the national economy as a contemporary phenomenon.

However, regardless of the all said above, for the purpose of analysis we need a representative indicator of development. It is certainly hard to find it, especially since it must meet some requirements of methodological correctness as the availability in the first line for all countries included in the ranking of competitiveness by the World Economic Forum. So if we want just one indicator of economic development, which would result in connection with the GCI individual national economies the best is, especially because of the availability of data, and analytical value, since we choose only one indicator, to opt for the traditional gross domestic product per capita (GDP per capita). We are aware of its shortcomings from which the most important are the following: it is about nominal, not actual sizes, it reflects statistic, not dynamic, it is not showing the distribution, etc.

Regarding the methodological correctness, we decided that the selected indicator should be used from same reports on competitiveness by the World Economic Forum in which we use the information on GCI. We are going on this way, not only because of the availability of data, but also because many above mentioned shortcomings of this indicator in our approach does not come into play, that does not affect the accuracy of conclusions. For example, we track the ranking of several successive reports which completely eliminates the need for a more realistic indicator of the dynamics of economic development.

In this way we will, in the most objective and methodologically correct way, try to discern the relationship between development and competitiveness at the global level as it was presented in the last five reports. So, we start the analysis of the Report on the Global Competitiveness 2008-2009, and finish with the Report of 2012-2013. Please note that in any report data on GDP per capita at current prices in U.S. \$, are related to the previous year.



However, this can not affect the objectivity in research, considering the fact that the study takes a five-year period. Also, results can be considered quite reliable considering the fact that the report covers more than one hundred major economies, and that the coverage is approximately the same in all reports, with no major fluctuations.

### Correlation analysis

In studying the relationship between competitiveness and development of the world economy we will use correlation analysis. Since the countries are ranked according to both traits, and the rank is more important than the feature value, we decided for the rank correlation. Since we consider the two characteristics, it is common to use Spearman correlation coefficient (Kvrđić, 2013)

$$r_s = 1 - \frac{6 \sum_{i=1}^N d_i^2}{N(N^2 - 1)}$$

Here D denotes the difference between the rank order of the  $i$  element in relation to the characteristics of X and Y, and N is the number of elements.

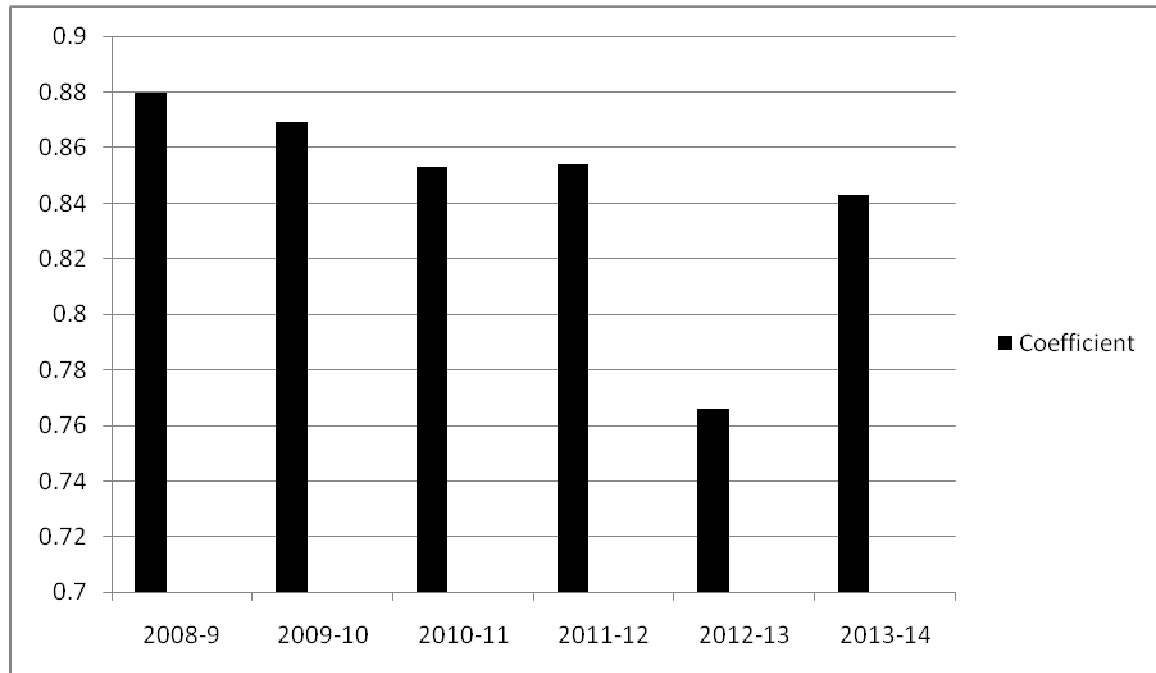
### Data analysis

The Global Competitiveness Report 2008-2009 includes 134 countries. So, in each of these reports we will calculate the correlation rank of countries by development and competitiveness, because these markers are more important than the value of GCI and GDP per capita. This, because the essence of these macroeconomic indicators is reflected precisely in their relative comparability. They do not show much, but they do so in the context of comparisons with the other economies. So simply, we want to show how big is correlation of the development rank and competitiveness of the national economies towards the last five reports on world competitiveness published by the World Economic Forum. In the other words, to answer the question of whether more developed economy also means more competitive economy. In the case of the first report of the considered rank correlation is very high, the ratio is as high as 0.880.

In the following report from 2009-2010, number of the countries is almost identical, one economy less is covered, but the rank correlation is only slightly lower and amounted to 0.869. In the 2010-2011 report, the number of economies surveyed increased to 139, but the rank correlation remains insignificantly less, is 0.853. In the Report 2011-2012, there are almost no major changes. Number of countries that are still analyzed gradually grows, so here reaches 142, the ratio is almost identical to the previous one 0.854. Nothing has changed dramatically even in the next case analyzed. The Global Competitiveness Report 2012-2013, the research included an even larger number of countries (144), but rank coefficient between the competitiveness and development is the smallest, but still very high at 0.766. In the Report for 2013-2014, rank correlation for 148 countries is 0,843.



Figure 2. Correlation between competitiveness and development



In 2008 the world economy has experienced a series of quakes. The mortgage crisis upgraded the credit, followed by the inflationary pressures which the suppression of a drop in demand, slowdown and uncertainty. The crisis began in the previous year, aroused a great loss in the financial sector where it originated, but it shook the developed countries considering the fact that there has been a general loss of confidence in the financial sector as a whole, which is one of the most important elements of competitiveness. Underdeveloped countries were in a especially difficult position because of the growth of world energy and food prices. At the same time, attempts inflationary stimulating economic growth in some developing countries only increased the poverty of the population. Although the crisis initially emerged in the United States, it is expanded both to other developed countries, and on the whole world because of the great influence of this powerful economy. This year, the bearers of national economic policies were in particularly difficult position because of high instability and unpredictability of the international economic environment, which could also jeopardize the competitiveness of most economies. However, regardless the start of the global financial crisis, globally, we can see strong positive correlation between competitiveness and development. This confirms that institutional reforms and economic policies significantly affect the performance of most economies in the world.

In the coming year, there was a deepening of global economic crisis. It started as a financial crisis in developed countries, but in the 2009 it was definitely spilled into the real sector of the world economy. In addition to rising unemployment in the world, it is especially worrisome decline in consumer installment demand and growth of protectionism that threatened competitiveness, and is consequently disposed to overcome the crisis. Developing countries are particularly affected by the fall in demand for their exports, reduced remittances and decline in FDI. "Specifically, the capital that cannot be characterized as speculative is attracted by the conditions that are conducive to long-term



profit maximization, and that conditions are favourable business climate, competitive free market, simple bureaucratic procedures, legal certainty, and macroeconomic and political stability.”(Knežević 2013, pp 10). The globalization of the world economy has made the consequences of the crisis to be felt in all countries of the world. In terms of general uncertainty it is very difficult to devise economic policies to create competitive conditions for economic growth and development. Although it is still globally strong and positive correlation between competitiveness and development, in terms of strengthening protectionism in world trade, as well as threats of action even in the most liberal market economies, there is, as expected, a slight weakening of the correlation.

The main characteristic of the global economic crisis in 2010 was economic activity in less developed parts of the world inhabited by those in developed countries. Government in developed countries have tried to mitigate the recession by encouraging spending, but that yielded tangible results, mainly due to high and rising unemployment. Special problem with euro-zone countries was budget deficit and foreign debt. Now Europe is in the earthquake financial crisis. Most countries do not have an exit strategy from the crisis because of the limited political and social situation in which they find themselves. This year, only BRIKS countries achieved satisfactory economic growth and development. In this way, as leaders of the world economy are promoted the countries whose competitiveness is not significant, which is all set to further decline in the influence of the correlation coefficient between competitiveness and development of the national economy, regardless of the relationship remains strong and positive.

This year 2011, after several years of crisis can be called stagnant in global terms as a significant encouragement. Halted of the decline in economic activity, and slight signs of the recovery at the global level are encouraging, however they are not equally represented in all national economies. Still with this aspect we have a better situation in the developing countries than in developed, regardless of the presence of certain inflationary pressures. Developed economies still have a problem with unemployment, low purchasing power and sensitivity of the financial sector. The crisis in the euro - zone, caused external debt of some major economies undermines the confidence of foreign investors and makes it difficult to overcome the crisis. Most developed countries have tried to create an environment for economic growth, but it is an aggravating circumstance, as a rule, the budget deficit. Similar to the stagnation of the world economy in this year is recorded a fall arrest coefficient of correlation between competitiveness and development. And the WEF by itself, as it considers it necessary to expand the concept of the competitiveness of the national economy in order to facilitate political and business leaders around the world to bring their economies out of the crisis to long-term sustainable development.

In the year 2012 economic uncertainty in the world is renewed, unlike last year when it seemed that the crisis has stopped. The difficulties of the financial sector in developed countries have not been overcome, as well as the crisis in the euro zone. The debt crisis in Europe and fiscal uncertainty in the U.S. definitely worried all businessmen. Slowed is even the economic growth of BRIKS, so it could not be seen the region's economic dynamism which would have beneficial effect on the faltering world economy. There is a general concern about possible significant drop in global trade, which would definitely mean a deepening and prolonging the crisis. To make the economy out of crisis and to open to itself



good long-term perspectives, it is essential that the public come out of depression and to develop the concept of sustainable competitiveness, which will take into account not only economic factors but also social and environmental issues. This period due to the decline of optimism in public, and the lack of vision of the leaders of the world economy led to the first significant weakening of the links between competitiveness and development. Achieved coefficient is positive medium, but it is a warning that we should move decisively in reviewing the ruling neo-liberal conception of the development of the world economy.

Next, 2013 year is giving, for first time since the outbreak of the global economic crisis, cause for optimism. In addition to further strengthening the role of the less developed countries, revives economic growth and reduce poverty at the global level. Progress has been slow and minimal, and it is absolutely difficult to make long-term forecasts, but it certainly has, after many years, the reason for guarded optimism in the global economy. Structural reforms and investments remain priority in order to reduce unemployment by almost all countries of the world. The road to the lasting prosperity of the world economy is back on innovation. New technologies and new products are the key to economic progress of any country in the long run. It seems that once again comes to the fore the idea that lasting economic growth and development can only be based on innovation, and that means improving education. So this is the way to revitalize the idea of the responsibility of the national leaders in actual creating of the conditions for the creation of conditions for the verification of the social equity. This also explains the re-growth of the coefficient of correlation between competitiveness and development on a global scale for the first time since the outbreak of the crisis. A strong positive relationship between these two phenomena was re-recorded.

## **Conclusion**

In this review, we gave an overview of development of the concept of competitiveness of national economies in a theoretical sense. Also mentioned are the world's most authoritative researches in this area. We opted for a more detailed overview of the methodology of the World Economic Forum and explained why we think is the most complete. Analysis of the medium term based on the Global Competitiveness Report published regularly by the institution, we found a high correlation between ranking of global competitiveness of individual economies and their development.

What we can conclude from all? Can we confirm the implicit assumption by the whole concept that increased competition leads to an economic development? It is definitely difficult based on such a brief overview. Limitations to make definitive conclusions are serious. Even if we include the review and the first three Reports, the series are small, and the period of time is short that so to could be observed regularities in the economic development of such a numerous very different economies.

However, it is true that the correlation of these phenomena is extremely high, and the correlation coefficient has an average value of up to 0,844 for the period, showing the global level, it is evident a strong link between these two phenomena. As higher is an economy ranked in terms of competitiveness, the development it is better ranked. Or maybe, opposite is the case: the more developed is an economy, it is more competitive. It remains eternally





opened as the question of what is cause and what effect. At this level of analysis it is very difficult to give a definitive answer because both, the development and the competitiveness are two extremely complex phenomena, and each specific industry is specific.

Considering such a high correlation between competitiveness and development, and the fact that many elements of competitiveness can be improved without significant investment, the creators of economic systems and economic policy actors should definitely work on improving the competitiveness of their economies. There is opportunity that they will, with no limitations, contribute to economic development.

In any case, this inspiring subject is expecting further investigations. It would be very interesting to analyze the relationship between competition and development for different groups of countries classified according to the level of economic development.

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## Konkurentnost i razvijenost nacionalnih privreda

**REZIME** – Ovak rad se bavi vezom između možda dva najaktuelnija fenomena svetske ekonomije: konkurentnosti i razvijenosti. Naravno da se oba mogu tumačiti na više načina, ali najoperativnije je konkurentnost razmatrati po metodologiji Svetskog ekonomskog foruma kroz Globalni indeks konkurentnosti, a razvijenost preko bruto domaćeg proizvoda po glavi stanovnika. Namera nam je da utvrdimo kakva je i kolika veza između ova dva pokazatelja u globalu, i na taj način otvorimo pitanje, i uspostavimo metodologiju za dalje analize kod pojedinih grupa zemalja razmatranih u izveštajima Svetskog ekonomskog foruma o Globalnoj konkurentnosti u svetu. Zato ćemo koristiti korelacionu analizu između ovih pokazatelja za posmatrane privrede nakon 2005 godine od kada se i sprovode pomenuta istraživanja konkurentnosti, sa akcentom na poslednjem srednjoročnom periodu zbog aktuelnosti. Očekujemo odgovor na pitanje kakva je veza između ovih pokazatelja u vremenskom sledu za sve posmatrane zemlje. To je značajno i za zemlje bivše Jugoslavije kao orijentacija u naporima za popravljanje pozicije u svetskoj privredi.

**KLJUČNE REČI:** konkurentnost, razvijenost, korelacija, kriza

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