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Relevance of the Insurance Organizations on the Financial Market

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ABSTARCT *– Financial markets in Serbia are characterized by the under development of the capital market and more than poor offer of all financial instruments. Besides this, great level of risk is present and non market control of risk management in the insurance sector is visible. Insurance organizations in Serbia are mostly visible on the currency market, in its by far most expensive segment – credit-deposit market. Reason for this can be found in the fact that low degree of development of life insurance sector (below 10%) which is a sign that the insurance organizations in Serbia have very modes financial means.*

KEY WORDS: *financial markets, Insurance sector, life insurance, development, financial instruments*

Introduction

Modern financial markets are being characterized by several processes: globalization, internationalization and deregulation. Apart from this we have witnessed mergers and acquisitions for the financial institutions. Classic banks are slowing die away and letting new institutionalized investors in this field, with insurance organizations as their flagships. Due to more and more severe consequences of natural disasters, as well as due to terrorism related risks, we are witnessing mergers of capital on the insurance market. In that way, the overall role and importance of the insurance organizations as institutionalized investors has been dramatically increased, thus influencing the current flows on the capital market.

The position of insurance organization on the financial market can be roughly introspected from two aspects – aspect of the insurance organization as investor, i.e. as investor in paper bonds issued by other organizations and from the aspect of actuator of means by issuance of its own bonds, stocks or instruments of debt. In the first case, which will be the object of our examination, the organization is dealing with the investment risk, just like any other investor, while in the second case; the organization becomes an investment risk, bigger or smaller, for other investors.

Risks in the insurance organizations management

Insurance organizations are being exposed to numerous risks, which can be adequately ranked into three categories:

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1. Technical risks
2. Investment risks
3. Nontechnical risks (they don't belong into any of the two mentioned groups)

Income from the premiums is still the main source of income of every insurance organization, but, with time, they tend to more and more focus on the income of investing their financial equities (funds) on the market of capital. During the "stock exchange boom" in the 1990's capital of the insurance organizations shifted (its larger portion) into stock and bonds of other corporations, thus increasing the investment risk, and on top of it, one should add substantial non-credit sales based on financial derivates.

Besides all this, the organizations started issuing specific bonds and its derivates in order to finance certain types of risks covered by the insurance policies, most commonly catastrophic risk (so called "catastrophe bond, catastrophe swaps etc.). Due to the constant turbulences on the stock exchanges, capital of the insurance organizations started to shift to the financial instruments with fixed dividends (state issued bonds), reducing the investment risk on that way, but the income as well, looking at the trend of low interest rates.

Investment structure of the insurance companies differs from one country to another, but it differs as well from the type of insurance that is offering. The process of risk management comprises mainly from:

1. Risk evaluation (with the faze of risk analysis which has risk identification, description and rate of risk, and risk recalculations)
2. Offers on how to treat the risks (choosing the correct measures and approaches which can be used on managing the risk)
3. Decision making
4. Report (external and internal) and communications concerning the risk
5. Monitoring and re-evaluating the entire risk management process

Well designed and structured investment has to incorporate the following steps:

1. Formulating and development of the strategic and tactical investment policy
2. Enforcement of the investment policy in the adequate organization based on clear and precise investment mandate
3. Control, measurement and analysis of previously achieved investment score and undertaken risks
4. Feedback in terms of the entire process enforcing

In managing investments of the insurance companies, we can use standard portfolio management. It represents a continuous evaluation, changing and readjusting the portfolio (its structure) according to the investor's aims and goals. Integral parts of this dynamic process are the portfolio analysis and portfolio selection.

Through portfolio analysis we can get to see determination of future risks and dividends of specific bonds and stocks, as well as the overall effect in term of dividends and risks of specific groups of bonds and stocks taken into account all together.

General portfolio strategy can be based on regular purchase and sell of different kinds of financial equity depending on the belief whether the price of that equity id bigger or lesser than real price (active investment strategy) and on the expectation of profits by gained difference and scope of trade, i.e. on the belief that the current prices of equity are real ones (passive investment strategy) while keeping existing equity on the long run in conviction that the positive effect will be achieved by selling later in the future.

Portfolio selection represents a choice of specific bonds and stocks in which would be prudent to invest, as well as the setting up the ratios between certain groups of stocks and bonds in the entire investment volume.

In the portfolio selection we conduct a periodic measurement of the results according to some specifically determined parameter or standard (for example, stock exchange index) and if the results are not satisfactory, a change of profile is being initiated.

Risk can be measured as a relatively measurable probability of creating losses of profits in the value of acquiring certain paper bond. There are different kinds of risks (interest rate, currency, risk of payment, inflation), but we can distinct system risk of the market which is associated with the global market trends. In the portfolio analysis β – ratio represents the most common measurement of the system risk, and it measures relative discrepancy of the price of paper bonds in relation to some specific reference market average.

The concept of managing resources in the insurance organizations itself, thus investment management, has more evolved in terms of concept of synchronized management of both equity and passive balance, i.e. means and obligations. Analysis of liability management is, in fact, management of business, so the decisions about means and passive balance are coordinated and represent a permanent process of formulation, implementation, monitoring and re-evaluation of strategy which deals with equities and passive balance with the aim of acquiring financial goals in the framework of given set of tolerances and risk limitations.

Role of institutionalized investors on the world market

In the main concept of capital market development, one of the key positions is reserved to founding and further development of the financial institutions like stock exchanges, institutional investors (investment funds, privatization funds, pension funds, insurance organizations), broker – dealer houses, central clearing agencies, agencies for settlement and transfer of paper bonds. In almost every highly industrially developed country, institutionalized investors are holding more than 50% of all issued paper bonds. Clearly visible rapid economic expansion of institutionalized investors during the last 50 years is based on their potential of minimizing the risks.

Decline in the significance of individual investors and strengthening positions of institutionalized investors does not necessarily mean a decline in number of individuals who own bonds and stocks. On the contrary, there has never been, in the entire history of capitalism, such dispersion of stocks at such a large number of small stock holders. The reason for this can be found in that they are not showing up in person on the market, but rather leaving institutionalized investors to invest on their behalf. Whether we are talking about fiscal or political reasons, it doesn't really matter, but in the baseline lays the fact that institutionalized investors are far more successful in stocks and bonds trading than individuals.

Investment funds and investment organizations, as institutionalized investors of non deposit nature, represent the purest financial intercessor who are dealing with the aim of strengthening the competition, increase of depth, or capacity of secondary market, mobilizing and collecting the capital from wider and more diversified sources, small investors, owners of capital, and their investment into diversified portfolio of paper bonds, all in order to reduce the risk of small investors investments. This position of investment funds, with the goals mentioned above, which is being accomplished during their operations, puts them into position of institution that has enormous influence on the development, stability and increase of the paper bonds capital market. This is not the case just in the countries with the well established paper bond markets, but it is being implemented in the countries that are still in the beginning faze of market operation (like the countries that are in transition, for example).

The role of foreign investment funds in the countries that are in transition is a question of its own. So far, experiences have shown that foreign investment funds are, in fact, risk and full of speculative capital, and using their position on the new market they are acquiring stocks of more prospect organizations. Countries that are in transition have dissimilar ideas when it comes to these funds. Even though they can bring substantial amounts of highly needed foreign capital, often necessary, one should exercise extreme caution. Let's examine what happened in Russia.

When they first arrived on the market of this country, Moscow has "flourished", but, when they, under the influence of the market fall, withdrew quickly with their capital, they've left shattered capital market. In the countries with highly developed market economy, pension funds are being considered as the most significant institutionalized investors which are, tending to fulfill the most significant goals (safety and liquidity of the investment), investing via capital market it larger portion of available means into paper bonds, while, on the other hand, part of means are being invest directly into companies through means of credit, or as mortgage over real estates.

We can discuss the significance of the pension funds as the institutionalized investors through the example of the U.S. In the U.S. there are over 20.000 pension funds, with only one holding more than 10$ dollars, and has more than 65.000 participants, while 30.000 people are receiving pensions based on the right gained by long term investments. We may find interesting the portfolio of this fund ant the main investment lines. They are investing primarily in the bonds and stocks of American companies, government issues state bonds, 17% is being invested outside US, primarily in Japan and Germany, while there is just a small portion that is being invested into lesser developed countries.

One can discuss about the role, possibilities and limitations of the insurance organizations as institutionalized investors by examining the data saying that overall sales of insurance organizations in the 2005. excided roughly $10 dollars worldwide. Quality means from life insurance are participating with almost 4/5 in the overall sales.

In the investment portfolio of world known insurers, 50-60% is taken by paper bonds with fixed dividends and loans (except mortgage). After them there are bonds and stocks and funds with 15-20%, while the mortgage loans are visible with 10-15%. Almost 90% of overall investments are covered with these three types of insurance investments worldwide. With the countries with slightly distinct inflation in the last 7-15% are investments in real estates.

While the private pension funds and insurance organizations are the main participants on the capital market in the countries of highly developed market economy, they are not playing an important role on the financial markets of the countries that are in the process of transition.

Investing the means of insurance companies in the world

Insurance organizations as the institutionalized investors are very important participants in the financial market, primarily on the capital market. Based on the data of investment means overall of all investment organizations worldwide from 1998 until 2007. (Table 1) we can grasp their significance as participants on the financial market.

Table 1. Overall investment means of the companies worldwide (in EUR)

Year	Investment means
1999	*170,4*
2000	*200,9*
2001	*232,2*
2002	*221,3*
2003	*215,4*
2004	*208,2*
2005	*198,5*
2006	*183,9*
2007	*190,4*
2008	*206,7*

Level of development of financial market in one country dictates the structure of investment of insurance organizations. More developed financial markets with bigger number of different financial elements are offering much wider scope of possibilities for adequate investments. In the following table (Table 3) structure of investments by top 10 insurance organizations worldwide will be shown (ING Group, Assicuracionni Generali, Nippon Life Insurance, Aviva, Dai-ichi Mutual Life Insurance, Meiji Yasuda Life Insurance, Sumitomo Life Insurance, Met Life, Prudential).

Table 2. Structure of investments (%) by top 10 insurance organizations worldwide

Year	Bonds	Stocks	Real estate	Loans	Commercial papers	Other	Total
1999	68,7	14,0	7,8	1,8	6,8	0,9	100,0
2000	70,6	12,8	6,6	1,9	7,2	0,9	100,0
2001	72,5	12,4	5,5	2,1	7,2	0,3	100,0
2002	71,9	14,1	4,4	1,8	7,4	0,4	100,0
2003	71,4	17,2	4,0	1,5	5,6	0,2	100,0
2004	69,0	20,9	3,8	1,7	4,4	0,2	100,0
2005	65,1	25,4	3,6	1,1	4,3	0,5	100,0
2006	67,3	24,6	3,4	1,2	3,1	0,4	100,0
2007	69,2	22,2	3,4	1,1	3,4	0,7	100,0
2008	69,5	22,6	3,2	1,4	2,8	0,5	100,0

Source: Insurance information institute

As for real estate in the portfolio of these insurance organizations, a tendency of constant fall can be noticed. Loans followed that same tendency, and so are the commercial papers. We can conclude from this table that bonds are taking larger portion of the portfolio, but significantly less than life insurance specialized organizations. Here we have larger portion of corporate and short term bonds. There is a significant increase in share trading, which of course, affects the risk of the portfolio. There are no drastic changes with the loans and commercial papers.

Table 3. Structure of investments (%) by Swiss Re

	31.12.2004.	**30.06.2005.**	**31.12.2005.**	**30.06.2006.**
Bonds	81,18%	80,48%	85,64%	85,52%
Shares	7,65%	8,98%	4,87%	5,28%
Policy loans, mortgages and other loans	6,95%	6,75%	5,88%	5,72%
Investment real estate	1,85%	1,64%	1,57%	1,38%
Other investments	2,35%	2,15%	2,04	2,10%

Source: Swiss Re, Interim report 2006

Investment structure of Swiss Re shows that the highest portion in overall investment goes to bonds (average portion of 83.21%). Certain increase of investment in stocks is visible in the first part of 2007. In reference to 2007 of 5.28%. Also there is a notable tendency of fall of investments in policy loans, mortgages and other real estate loans.

Table 4. Structure of investments (%) by Lloyds

	31.12.2004.	**30.06.2005.**	**31.12.2005.**	**30.06.2006.**
Bonds	47,17%	50,89%	54.18%	53,83%
Shares	9,09%	6,66%	6,32%	5,68%
Policy loans, mortgages and other loans	4,68%	4,92%	3,21%	3,86%
Investment real estate	38,96%	37,30%	34,68%	34,16%
Other investments	0,10%	0,23%	1,61%	2,47%

Source: Lloyds annual report 2006

During the analyzed period there is a dominance of instruments with fixed income, 5% on average. After them, with average of 4% are investments in Shares.

Structure of investments depends highly on the level of economic growth and political factors, shows the outline of equities one of the most well known insurance organizations in Japan Nippon Insurance Company. We can observe this from the following table.

Table 5. Structure of investments (%) by Nippon Insurance Company

	31.03.2004.	31.03.2005.	31.03.2006.
Domestic bonds	32,61%	33,19%	34,53%
Domestic stocks	14,16,%	17,55%	17,56%
Foreign paper bonds	13,69%	13,67%	13,69%
Policy loans, mortgages and other loans	26,52%	24,32%	22,16%
Real estate	4,31%	4,06%	3,87%
Other investments	2,36%	1,77%	1,51%

Source: Nippon Insurance Company annual report 2006

From this table we can see that the average portion of stocks in the structure of Nippon Insurance Company portfolio is 33.48% which is on significantly higher level than Lloyds and Swiss Re. During analyzed period an increase of invested means into stocks of domestic organizations, which are giving good results in the given period. Based on the portfolio structure analysis of these three insurance companies for three years we can see that they invest means by taking into account the principle of safety, thus protecting their capital.

Base models and investment structure of US and EU based insurance funds

Soon there will be no distinct line between banking sector and insurance sector, for the banks are more and more taking an active role in the insurance field, while the insurance organizations are dealing with creating, production and trading of banking products. In the Western Europe, this aspect of institutionalized and business oriented interconnection of banks and insurance organizations created a whole new term: "Bank – Verscherungs" (Bankinsurance). Base models and investment structure based insurance funds according to the market limits in the US and EU for certain segments of financial markets. Would look something like this:

Table 6. Investment market limits (%) in the US and EU

Type of insurance	Limit in the US	Limit in the EU
Life insurance	Currency market – up to 10%	Currency market – up to 5%
	Capital market – up to 80%	State bond market – up to 80%
	Other markets – up to 10%	Other markets – up to 15%
Insurance of assets	Currency market – up to 30%	Currency market – up to 10%
	Capital market – up to 60%	State bond market – up to 60%
	Other markets – up to 10%	Other markets – up to 30%
Health insurance	Currency market – up to 40%	Currency market – up to 0%
	Capital market – up to 30%	State bond market – up to 90%
	Other markets – up to 30%	Other markets – up to 10%
Pension insurance	Currency market – up to 20%	Currency market – up to 0%
	Capital market – up to 70%	State bond market – up to 80%
	Other markets – up to 10%	Other markets – up to 20%

Source: World Bank

Models and patterns of insurance organizations investments are, by default, limited and conditioned with the character of their obligations, i.e. passive structure. Taking into account that in life insurance we have stable long term sources of means, it is natural for the investments organizations who deal with this category of insurance, to invest primarily on the capital market, on state bond market and mortgage market. In that way the due date of maturity of both equity and passive, with the steady income sources.

When dealing with asset insurance, however, basic form of investment is stocks and corporate obligations. This is conditioned by the fact that they have smaller and more insecure reserves, with high risk of potential damages. Shares are favorable means for investments, for they have bigger dividends, especially shown through capital income.

In some countries these institutions are legally obligated to invest significant portion of their capital (even in some cases up to 90%) from the base premium reserves of all sorts, as well as from their other funds and reserves, into state issued bonds which have loan character with long term expiry date (in some cases dye date is longer than 50%).

Insurance sector in underdeveloped countries of the market economy is showing some degree of expansion, first exposition on the financial markets. Participation of the insurance organizations as institutionalized investors from the beginning of this century in overall transactions in the financial markets, have reached incredible 30% in the US and 22% in the EU. Based on these indices, a large number of conclusions can be drawn, but one is the most important: participation of the insurance sector in Serbia (with 1.8%) is 12 times smaller than the participation of the same sector in the EU, or 16 time smaller than the insurance sector in the US.

Insurance organizations equity management has two primary objectives. First, securing necessary level of solvency and financial stability through means of relation harmonization between equities and obligations. Second one is creating profits. Investment potential of the insurance organizations depends primarily from development of life insurance and pension insurance. Specific characteristics of these forms of insurances can be analyzed through long term duration of the insurance contracts, but they can be analyzed from the fact that integral part of commitments is largely very detached from the insurance premium deposits. This allows investing of the larger reserve share in short term instruments, which significantly diminish the necessity for the liquidity of investments.

In the US, there are more than 25% long term loans that are being supplied by the long term life insurance organizations, and ¾ of all insurance equities are originating from these organizations.

UK based insurance organizations own more than 20% of share capital of all organizations registered on the London Stock exchange. In large number of cases overall share packet owned by the insurance organizations does not exceeds 10% of the company's' share capital.

In a limited number of cases, the insurance organizations own control package of shares of large organizations. Besides this, insurance organizations are participating in financing ore management of these organizations through different means of investment organizations. Leasing operations are commonly used, in which they successfully compete against specialized firms. One of the conditions for approving mortgage loans is making insurance contract. Main reason for such a wide use of these operations was the tendency to widen the client structure.

Usually 10-20% of all asset insurance equities and 1-3% of life insurance equities are composed of highly liquid short term investments, such as currency means and their equivalents, short term bank deposits, deposit certificates, commercial bonds. Paper bonds with steady dividends are participating with more than ½ of all investments by the insurers in the US and in the large number of insures in Europe (Germany, France). Apart from all this, 50% of those investments are related to state and municipal bonds.

Investments of insurance organization means in Serbia

When investing means on the financial market insurance organizations can be faced with unpredicted increase of interest rates, which may lead to decline in value of their investment. Also, badly formed, or high risk portfolios of paper bonds will not ensure sufficient rate of income. Therefore it is of vital importance to carefully form investment portfolio, which will, with minimal risk, facilitate maximum rate of income, and in the same time guarantee certain level of liquidity of the insurers in the case of increased number of insurance based payouts in terms of those mathematically predicted.

Means of the insurance organization technical reserves in Serbia, according to the Insurance Act (subpart 114), can be invested into paper bonds issued by the state, central bank and international financial institutions, without any limitations. For investments in other activities, certain limitations apply.

Table 7. Investment market limits (%) for means of technical reserves in Serbia

Type of investment	Limitation
Stocks	30% organized and non organized
	25% organized
	5% non organized
Bonds	5% non organized
Real estate	10% non life
	30% life
Deposits	30%
	10% (in one bank)

Source: Ministry of finance, Republic of Serbia

Serbian capital market is underdeveloped, and there is no secondary market yet, therefore secondary stock sell does not exist, and privatization stocks are very risky for investments. Current legislative allows investments of the technical reserve means in stock with the 30% limitation. This kind of limitation, in this stage of development at least, is not necessary.

In the following table we can analyze the legal limitations of guaranteed reserves means.

Table 8. Investment market limits for guaranteed reserves means (%) in Serbia

Type of investment	Limitations
Stocks	60% both organized and non organized
	10% organized (2% of one issuer)
Bonds	10% non organized (2% of one issuer)
Stocks and bonds	10% organized (of one issuer)
Real estate	30% non life
	60% life
Deposits	60% (20% in one bank)

Source: Ministry of Finance, Republic of Serbia

Financial markets in Serbia are characterized by the underdevelopment of the capital market and poor selection of financial instruments. Besides, there is a big factor of risk present, and the non market control in the risk management of insurance sector. Participation of the insurance sector on the financial market in Serbia is 12 times smaller than the participation of this sector in the EU. Insurance organizations in Serbia are primarily investing in short term financial market (75%), where that sector invests in the EU in the capital market (70%). Domestic insurance organizations are operating primarily on the currency market, in its most expensive and least transparent segment, bilateral credit-deposit market.

We may conclude that the portfolio of Serbia's insurance organizations investments very poor and unfavorable when contrasting to the structure of portfolio in more developed countries.

Insurance organizations and pension funds represent most significant institutionalized investors in more developed countries. In Serbia, insurance sector is not developed entirely; they have very limited capacity of the insurance organizations; with modest collection of insurance premium based means. Life insurance makes 12% at most in overall insurance portfolio, which is a cleat indicator that insurance organizations have on their disposal very modest means and cannot call themselves institutionalized investors. Apart from amelioration of life insurance distribution in the foreseeable period, it has to come to further development and expansion of the capital market, in order for the insurance organizations to operate sad the institutionalized investors.

According to the Act, means of technical reserves can be deposited and invested into:

1. Paper bonds issued by the state, central banks, international financial organizations
2. Bonds or other paper bonds, which are being traded with on the organized paper bond market, whose issuer is organization with residence in Serbia
3. Bonds, or other paper bonds which are not being traded with on the organized paper bond market, whose issuer is organization with residence in Serbia
4. Stocks which are being traded with on the organized paper bond market
5. Stocks which are not being traded with on the organized paper bond market, if their issuer is domestic organization and if they have been issued as paper bonds in accordance with the Paper bonds and other financial instruments Act
6. Depositing and investing with banks with residence in Serbia

7. Real estate and other real rights over real estates and assets

Means of technical reserve can be hold in cash in the register and in bank accounts. Current investment possibilities for insurance organizations on the Serbian financial market after adopting Insurance organizations Act and transfer of monitoring function to National Bank of Serbia made possible to regulate operations of these entities more thoroughly. On the other hand, by adopting Paper bonds and other financial instruments Act, Legal entities Act, forming the Paper bond Committee as a standalone institution, as well as enlisting larger amount of paper bonds to Belgrade Stock Exchange, conditions have been met for further development of financial market in Serbia.

Conclusion

Having in mind still turbulent and not enough developed financial market in Serbia, insurance organizations should exercise extreme caution, and with extended analysis to reach their investment decisions. In the case when they do not have adequate infrastructure for making sound decisions, due to legal obstructions, they should delegate this process, in accordance to the "Prudent investor rule", to licensed and competent organizations or individuals.

Even though investing in Serbia is still young and underdeveloped branch, without proper financial instruments, it is very promising, and with proper legislative, that follows positive trends from the foreign markets of the EU and the US, with input and understanding from the government, it can achieve excellence, while avoiding all traps and misleading from the process of transition, by looking and closely analyzing the mistakes made by other countries that have completed the process of transition.

With healthy financial climate, and the existence of financially strong, stable institutionalized investors, everybody can find this way of doing business useful, the government, the insurance institutions and shareholders.

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