CHAPTER 36.

IMPACT OF GLOBAL FINANCIAL CRISIS ON INSURANCE INDUSTRY IN SELECTED WESTERN BALKAN COUNTRIES[1]

Jelena KOČOVIĆ[2]
Milica KOČOVIĆ[3]
Marija JOVOVIĆ[4]

Abstract:

The chapter analyses the effects of the global financial crisis on the insurance market of selected Western Balkan countries, taking into account their characteristics, the achieved level of development, frameworks within which they function, and emerged tendencies on the world insurance market. The impact of the crisis is considered with respect to both business and investment side of the insurance company results. In addition to identifying existing problems of insurers during the crisis, warns of upcoming issues expected in the post-crisis period are indicated and possibilities for overcoming them suggested. Useful recommendations for further conduct and development of insurance operations are provided on the basis of comparative analysis of the insurance industry performances in time segments before and after the onset of the crisis.

Key words: *financial crisis, insurance, investments, Western Balkan countries*

INTRODUCTION

Compared with other types of financial institutions, the range of the impact of insurance companies on the occurrence of the global financial crisis in 2008 as well as the range of influence of the crisis on their operations is significantly limited. However, business and investment results and patterns of these

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[2] Jelena Kočović, PhD, Full Professor, Faculty of Economics, University of Belgrade
[3] Milica Kočović, Institute of economic Sciences, Belgrade
[4] Marija Jovović, MSc, Teaching assistant, Faculty of Economics, University of Belgrade

companies before and after the crisis are different. Taking into account realistic expectations for aggravating the crisis in the forthcoming period, as well as the particular problems that transition economies are facing, the study of the crisis impact within their insurance markets is a specific research challenge which gives a new dimension to the issue that has so far been examined from the general aspect.

The aim of this chapter is to identify the realized and potential effects of the global financial crisis on the insurance companies, as well as to indicate the measures that will enable their adequate mitigation on insurance markets of selected Western Balkan countries.

The chapter will firstly provide a brief review of the demonstrated effects of the crisis on the world insurance market in relation to the business and investment results of insurers, highlighting the emerging challenges for the insurance companies on a global level. Preview of macroeconomic environment and development level of insurance markets of selected countries of Serbia, Croatia and Slovenia will serve as a starting point for a comparative analysis of insurance performances before and after the occurrence of crisis in 2008. The analysis will cover the crisis effects on both operating revenues and expenses of insurers, for the market as a whole, and also for individual types of insurance that proved to be particularly vulnerable in a crisis atmosphere. The effects of the crisis on the investment activities of insurers in selected countries in terms of return on investment, the coverage of technical provisions by prescribed types of assets, as well as the investment portfolio structure will be discussed in the continuation of the chapter. The results of the performed analysis should point to the appropriate insurance business model in the current circumstances in order to alleviate existing and to prevent new crises impacts.

IMPACT OF THE GLOBAL FINANCIAL CRISIS ON THE WORLD INSURANCE MARKET

The recovery of the world economy from the crisis consequences, fueled by credit spreads narrowing, corporate sector profitability increasing and relaxing of bank borrowing requirements is not realized in the expected extent, as evidenced by slowing the real growth of world GDP (from 4.1% u 2010 to 3% u 2011).[5] In adverse economic conditions, insurance industry on a global level records a negative real premium growth in 2011 in the amount of 0.8% (while life

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[5] Swiss Re. (2012). "World insurance in 2011: Non-life ready for take-off". *Sigma*, No. 3/2012, Zürich, p. 3.

insurance premiums shrank 2.7%).[6] Even after more than three years from its occurrence, the impact of crisis on world insurance market is evident, with an expected further aggravation of operating conditions for insurers. Historically low interest rates in the recession are a special challenge for the investment results of life insurers. At the same time, non-life insurers are facing with exceptionally low demand in conditions of economic activity stagnation and living standard decline. The European debt crisis represents a unique threat to insurers due to their interdependence with the banking sector and pronounced tendency to invest in government bonds

Unlike banks, insurance companies do not create sub – prime mortgage loans, therefore they did not directly contribute to the emergence of the financial crisis. On the contrary, performing functions of improving financial stability and safety both at individual and national level, encouraging and stimulating savings and efficiently allocating collected funds, insurers act as negative crisis effect absorbers in the financial and real sector. Relatively less exposure of insurers to losses from the crisis in comparison to other types of financial institutions are explained by stable sources of financing, investment portfolio diversification and by the fact that insurer bankruptcies are far less correlated than banks failures.[7] Nevertheless, the insurance business is not quite immune to the negative impacts from the socio-economic environment in times of crisis. The effects of the global financial crisis on their financial performance can be identified both in the field of insurance operations, as well as in the area of investing raised funds.

Phenomena accompanying the economic recession may significantly increase intensity and frequency of claims, but also reduce the demand for the insurers' services, thus bringing into question their ability to meet liabilities to policyholders. Underwriting business has been affected by the crisis in two ways: directly, through the deterioration of operating results in certain types of insurance, and indirectly, through its impact on policyholders, banks, capital market and supervisory authorities. Business segments that proved to be the most sensitive relate to credit insurance, directors and officers liability insurance, as well as liability insurance for errors and omissions of entities that are connected in various ways with the problems occurred on the financial markets. It is very difficult to estimate insurers liabilities in the given types of insurance that are associated with the current financial crisis and it will take several years until their complete materialization.

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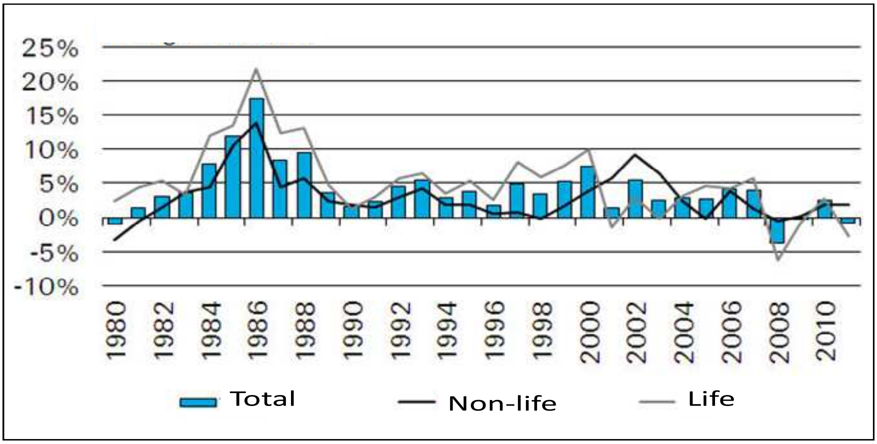
[6] Ibidem, p.6.

[7] See more in: Kočović, J. (2009). „Insurance and the global financial crisis" in Daykin, C., Baskakov, V. (ed.) (2012), *Insurance and the global financial crisis*. Serbian Actuarial Association, Publishing Centre, p. 43.

Simultaneously, insurance companies are confronted with a significant decrease in demand for insurance due to a drop in living standards from rising unemployment and decreasing wages of employees, as well as due to fall in the volume of activities, insolvency, bankruptcy and liquidation of many undertakings. For the first time since 1980 a global insurance premium in 2008 declined in real terms, with non-life premiums drop of 0.8% and even faster fall of life insurance premiums of 3.5%.[8]

Figure 1: Real global insurance premium growth (1980-2010)



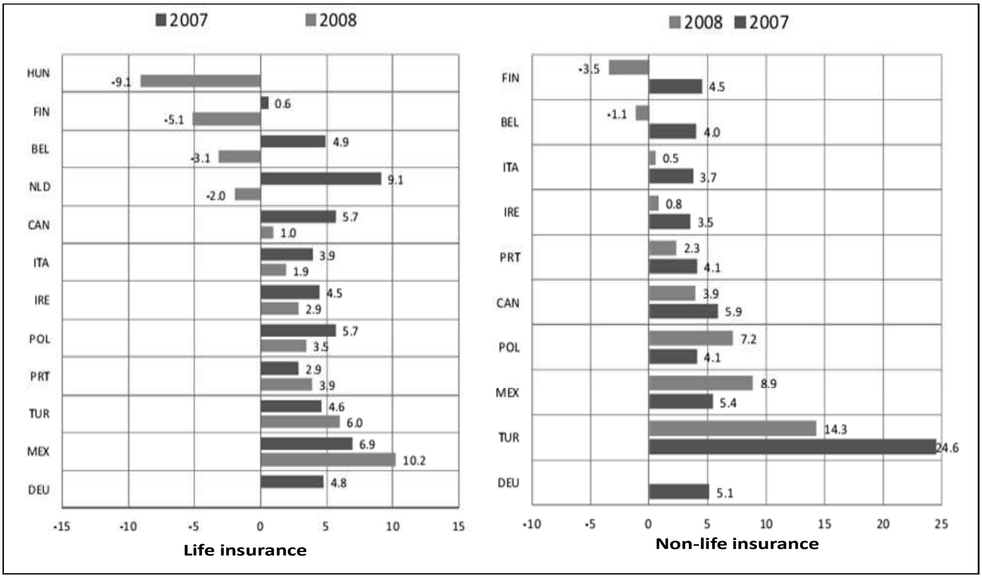
Source: Swiss Re. (2012). "World insurance in 2011: Non-life ready for take-off". Sigma, No. 3/2012, Zürich, p.6.

The crisis influence on insurance is also reflected indirectly by the increased exposure to insurance frauds in adverse economic conditions. According to estimates of the Insurance Information Institute, average annual costs of non-life insurers from frauds in the period 2001-2011 amounted to 30.5 bill. USD. Significant deviations from the stated average are attributed to exactly two years with pronounced crisis effects: 2008 in the amount of USD 34.3 bill. USD and 2011 in the amount of 34.8 bill. USD.[9] European insurers are also facing with rising frauds in insurance in critical conditions, primarily motor insurance. Pursuant to estimates from 2011 year, the share of speculative in total claims in a given type of insurance on the Italian market, for example, reaches up to 10%.[10]

[8] Swiss Re. (2009). „World insurance in 2008: life premiums fall in the industrialised countries – strong growth in the emerging economies". *Sigma*, No. 3/2009, Zürich, p. 9.
[9] Weisbart, S.N. (2012). „Insurance Fraud: Are Policyholders the Only Victims". Presented at *Conference of State Governments*, Atlantic City, 21 July 2012, p. 3.
[10] *World Insurance Report 2012*. Capgemini, EFMA, 2012, p. 15.

On the side of investment activities, insurance companies suffered losses due to a drop in the market value of their investments and because of the failure of issuers of debt instruments (borrowers) to pay the principal and/or interest. The assets risks also increased because of the direct impact of sub-prime mortgage loans, as well as because of the fact that banks to with insurers were linked through their deposits and investments in securities were also affected by the crisis. Companies dealing in financial engineering, which involves speculative risk, such as American International Group – AIG, suffered particularly huge losses.[11] In 2008 compared with 2007, insurers in most OECD countries recorded a significant drop in average net return on investment, both in the field of life, and non-life insurance, whereas in countries such as Hungary, Finland, Belgium and the Netherlands this returns became negative.

Figure 2: Average nominal net investment return of insurers in selected OECD countries in 2007 and 2008 (in %)



Source: OECD. (2011). The Impact of the Financial Crisis on the Insurance Sector and Policy Responses. Organisation for Economic Co-operation and Development, Paris, p. 21.

Investment losses, followed by worsening business results from the fall in demand for insurance, loss of policyholders trust, catastrophic losses and the

[11] Kočović, J., Rakonjac Antić, T., Jovović, M. (2011). „The impact of the global financial crisis on the structure of investment portfolios of insurance companies“. *Economic Annals,* Vol. LVI, No. 191, p. 147.

special vulnerability of certain types of insurance, forced many insurers to restructure their investment portfolios. In the structure of investment placements of European insurers, for example, the share of debt securities and other fixed income securities increased by 17% in 2008, while the share of variable income securities share decreased by 20%.[12] At the same time, the share of long - term bonds in total investments of life insurance companies in the United States increased by 9%, while the share of stocks decreased by 23%.[13]

IMPACT OF THE GLOBAL FINANCIAL CRISIS ON THE INSURANCE MARKETS OF WESTERN BALKAN COUNTRIES

Decline in real economic activity, living standards and of the world stock market indices, reflected to greater or lesser extent on the results of operations of insurance companies around the globe. However, the level of development of the insurance as well as financial markets in the Western Balkan countries, determine specific way of the crisis effect manifestation on the insurance business in them. Consequently, consideration of the crisis impact on the insurance markets of the respective countries should take into account their characteristics, the achieved level of development, as well as the framework in which they function.

A logical starting point when considering economic crisis impact on the insurance companies is a review of macroeconomic environment in which they operate. The values of selected macroeconomic variables for Serbia, Croatia and Slovenia indicate considerable differences in the performances of their economies before and after the occurrence of crisis in 2008.[14] Particularly worrying is the tendency of further deterioration in values of indicators such as unemployment and inflation rates, which limits the possibilities of development of long - term insurance forms. Given the empirically confirmed causal relationship between economic and the development of insurance market, it is reasonable to expect a consistent deterioration in insurers' operating results in the observed period.

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[12] European insurance and reinsurance federation – CEA. (2010). „European Insurance in Figures, Data 1999-2008“. *CEA Statistics*, No. 40, Brussels

[13] Authors' calculations based on http://stats.oecd.org.

[14] See more in: Jovanović Gavrilović, B. (2012).“Macroeconomic framework of insurance market development in Serbia over the last decade”, in Jovanović Gavrilović et al. (ed.) (2012), *Achieved Results and Prospects of Insurance Market Development in Modern World*. Faculty of Economics, Publishing Centre, University of Belgrade, pp. 3 – 18.

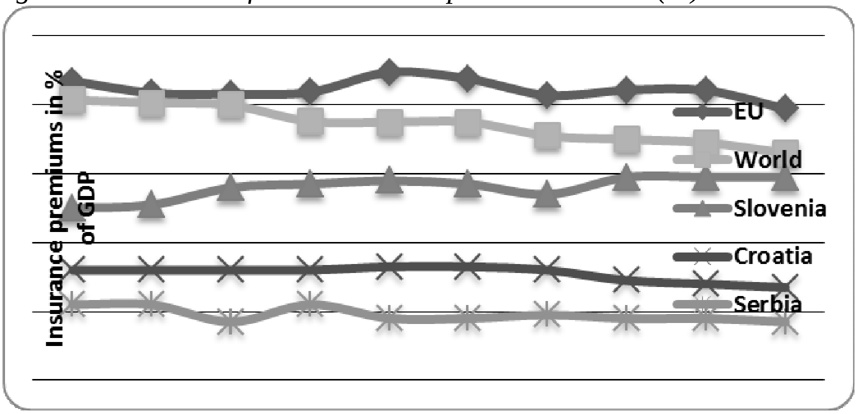
Table 1: Selected macroeconomic indicators for the Western Balkan countries (2004-2011)

Indicator	Country	Year							
		2004	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
GDP, real growth (%)	Serbia	9.3	5.4	3.6	5.4	3.8	-3.5	1.0	1.9
	Croatia	3.7	4.3	4.0	5.6	2.5	-5.8	-1.2	0.5
	Slovenia	4.2	4.0	5.2	6.8	4.7	-8.1	1.4	1.6
Inflation rate (%)	Serbia	12.0	16.2	11.6	7.0	11.7	8.6	6.8	10
	Croatia	2.1	3.3	3.5	2.9	6.1	2.4	1.1	2.5
	Slovenia	3.6	2.5	2.5	3.6	6.0	0.9	2.1	2.5
Unemployment rate (%)	Serbia	19.5	21.8	21.6	18.8	14.7	17.4	20.5	23.6
	Croatia	13.8	12.7	11.1	9.4	8.2	9.0	12.2	13.2
	Slovenia	6.3	6.5	6.0	4.8	4.4	5.9	7.3	8.1

Source: www.swissre.com/sigma, www.hnb.hr, www.stat.si and http://www.oanda.com/currency/converter

The achieved level of development of a particular insurance market is viewed through the prism of relevant general indicators that include the level of insurance premium per capita and the percentage of insurance premiums in the gross domestic product as well as through their trends over time. In view of the percentage of insurance premiums in the gross domestic product (i.e. insurance penetration), Serbia has much less favourable results in comparison with Croatia, and especially with Slovenia, which is consistent with the values of macroeconomic indicators for this countries. According to the value of this indicator, with the amount of 1.7%, in 2011 Serbia was on 65th place in the world, while for the EU the same indicator is 7.89% on average. Given the same indicator, in 2011 Slovenia ranked as the 23rd, while the position of Croatia worsened from the 45th (in 2002) to the 51st place in the world (in 2011). Starting from 2008, the value of a given indicator in Serbia and Croatia continually decreases referring initially to the relatively faster decline and then to the relatively slower growth of the insurance market in relation to the economic growth of the respective countries in the observed period. On the other hand, after the initial "shock" in the year when the crisis started, Slovenia records increase in the same parameter value in the following period.

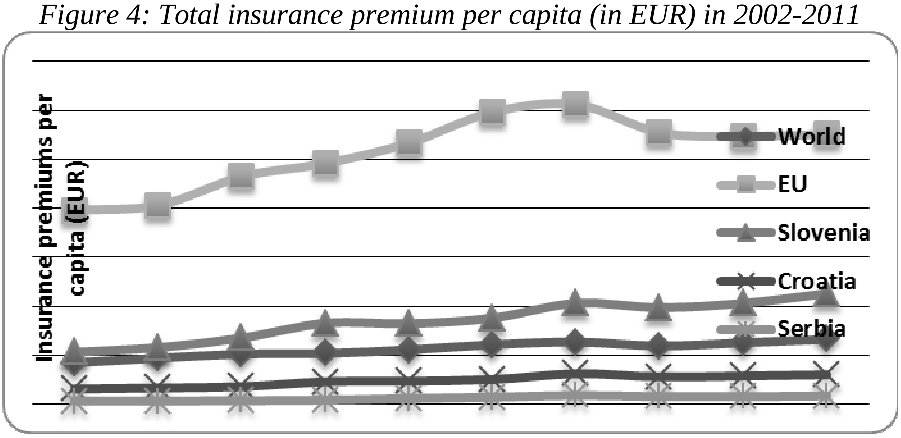
Figure 3: The share of total insurance premium in GDP (%) in 2002-2011



Source: Prepared based on www.swissre.com/sigma

Total insurance premiums per capita (i.e. insurance density) in Serbia have more than doubled in the observed period (from 31 EUR to 83 EUR). However, on the global scale (where Serbian insurance market occupies 66th position according to this indicator), but in comparison with Croatia and Slovenia as well, the progress achieved is relatively small. In Slovenia, during the observed period, the total insurance premium per capita rose from 531 EUR to 1,130 EUR. This indicator in Croatia amounted to 154 EUR in 2002, and it increased to 300 EUR in 2011. The underdevelopment of Serbian insurance market becomes all the more apparent if we bear in mind that the same indicator in the EU countries is on average 2,757.[15]

Figure 4: Total insurance premium per capita (in EUR) in 2002-2011



Source: Authors' calculations based on www.swissre.com/sigma and http://www.oanda.com/currency/converter

[15] Swiss Re. (2012). "World insurance in 2011: Non-life ready for take-off". *Sigma*, No. 3/2012, Zürich, p. 38.

The situation on Serbian market is even more unfavourable in terms of the degree of the life insurance development. The level of life insurance premiums per capita is extremely low, although it recorded a significant growth in the observed period from less than one euro, as recorded in 2002, to around 13 EUR in 2011. The same indicator in Slovenia grew from 120 EUR at the beginning, to 354 EUR at the end of the period. In Croatia, life insurance premiums amounted to 32 EUR per capita in 2002 and increased in 2011 to 80 EUR. It is interesting to note that on average more than four times the amount per capita is allocated to life insurance in Slovenia compared with total spending on insurance in Serbia, per capita. Subsequently, although the share of life insurance in total insurance portfolio in Serbia is growing, it is still (17.4%) significantly less than in Croatia (22.9%) and especially Slovenia (29.2%)[16].

Impact of the crisis on the insurance business in Serbia, Croatia and Slovenia

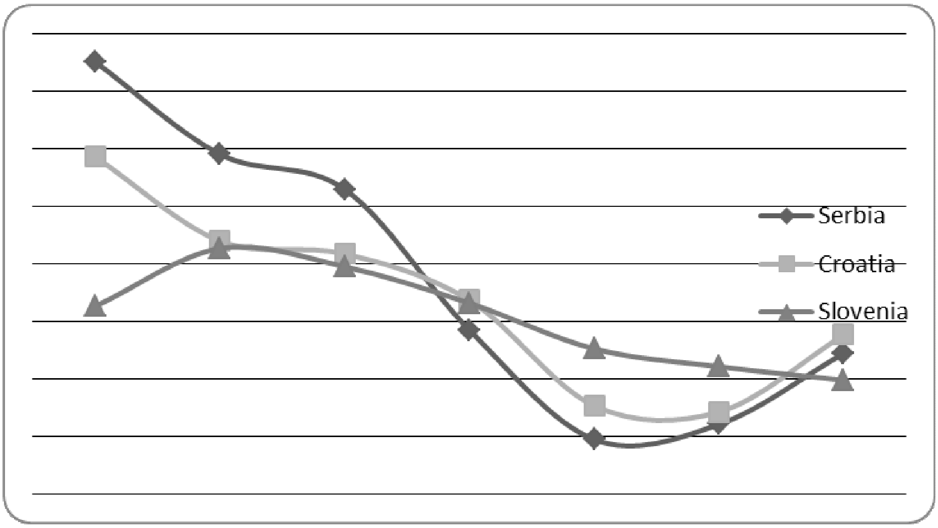
Types of insurance with the most direct exposure to the crisis in the developed countries, demonstrated in a drastic rise in the number and amount of claims in them, do not have an important role in the insurance portfolios of the Western Balkan countries.[17] Therefore, it is logical to consider the crisis impacts on the insurance business in these countries primarily in terms of the fall in demand and the consequent fall in premium income. Because of different volumes of the observed markets, as measured by total insurance premium revenues, annual growth rates of insurance premiums are more appropriate measure in order to compare developments on them in times of crisis.

Total revenues response to the impact of the economic crisis on insurance markets of Serbia and Croatia followed immediately after its occurrence. Already in 2009 this markets recorded a negative growth rate (of -5.3% in Serbia and -2.3% in Croatia), which abruptly terminated a long-standing trend of their slow but continuous growth. In 2011 both countries achieved positive growth rates of insurance premiums, but many times lower in comparison with the beginning of the period. The effects of the crisis on the total insurance premiums in Slovenia have emerged with significant time lag and in much lesser extent. It was not until 2011 that these revenues started to stagnate in Slovenia, and their annual growth

[16] Slovenian Insurance Association. (2012). *Statistical Insurance Bulletin 2012*, Ljubljana, p. 50.
[17] The share of credit insurance, for example, in the total insurance portfolio insurance amounted to 0.26% in Serbia and 1.3% in Slovenia in 2008 (respectively 0.16% and 1.4% in 2011).

rate in the entire period of observation had shown less volatility compared with Serbia and Croatia.

Figure 5: Annual growth rates of insurance premiums in the Western Balkan countries (2004-2011)



Source: Authors' calculations based on www.nbs.rs, www.hanfa.hr, www.zav-zdruzenje.si and http://www.oanda.com/currency/converter

The analysis of data on premiums and claims by individual insurance classes provides a deeper insight into their specific vulnerability to the economic crisis impact. Consumer priorities and attitudes toward money are changing in the crisis. Insurance companies' clients are trying to save by giving up voluntary forms of insurance first, and after those mandatory forms of insurance. The reduced number of insurance contracts signed compared to the previous period and the problem of premium collection from insolvent companies, significantly reduces the income of certain lines of business. Decline in the annual growth rate of insurance premiums in 2008 compared to 2007 is obvious in almost all major types of insurance in selected countries, on the basis of Table 2.[18] However, the data according to which the annual premium growth rates for most types of insurance in 2011 were not only less in comparison with 2008, but also became negative, although they had previously been positive are of greater concern.

[18] An exception to these trends is the motor third party liability insurance in Serbia, which achieved a premium increase of 52.7% in 2008 compared to 2007, on the basis of the action of re-registration of vehicles from the Republic of Montenegro.

Table 2: Annual growth rates of insurance premiums in selected types of insurance (in %)

Line of business	Serbia			Croatia			Slovenia		
	07/06	**08/07**	**11/10**	**07/06**	**08/07**	**11/10**	**07/06**	**08/07**	**11/10**
Personal accident insurance	22.0	13.1	9.9	5.0	4.0	-3.0	5.8	3.4	-3.2
Voluntary health insurance	37.8	-18.6	-5.0	14.0	12.0	-1	9.2	5.9	2.7
Land motor vehicles insur.	33.9	27.9	-5.7	12.0	7.0	-10.0	14.8	14	1
Insurance against fire	5.1	5.6	-7.3	14.0	6.0	-1.0	7.2	5.1	4.3
Motor third party liability insur.	15.9	52.7	-0.5	11.0	7.0	2.0	4.4	1.9	-6.4
Life insurance	22.1	11.6	6.8	7.4	2.5	-05	12.7	5.5	-8.6

Source: Authors' calculations based on www.nbs.rs, www.hanfa.hr and www.zav-zdruzenje.si

The consequence of these trends in the insurance premiums development is the change in total insurance portfolio structure in favour of compulsory insurance types. The share of motor third party liability insurance in total premium on the Serbian insurance market, for example, has increased from the initial 32.1% in 2007 to 40% in 2009 (although in 2011 it regained the level that it had just prior to the crisis).[19]

Claims occur independently of a reduced premium volume which causes a real threat of achieving negative technical result in certain types of insurance. To this should be added the tendency of claim escalation in a crisis atmosphere, behind which potentially lies the insureds' affinity towards speculative behaviour and insurance frauds. These tendencies are supported by data on changes in the number and amount of claims before and during the economic crisis in some types of insurance. The annual growth rate of the number of claims in Casco motor insurance on Croatian market, for example surged from the original 7% in 2007 to as much as 17% in 2008. In the field of insurance against fire and other

[19] www.nbs.rs

hazards the same market recorded an annual growth rate of claim number of 15% 2008, while in 2007 this rate was only -4.8%.[20]

Table 3: Annual growth rates of claims in selected types of insurance (in %)

	Serbia			Croatia			Slovenia		
Line of business	**07/06**	**08/07**	**11/10**	**07/06**	**08/07**	**11/10**	**07/06**	**08/07**	**11/10**
Personal accident insurance	6.1	9.1	12.3	1.1	7.6	-15.3	-6.0	3.5	-5.7
Land motor vehicles insur.	-4.2	33.2	-6.9	6.9	12.8	-10.8	16.0	28.8	-8.6
Insurance against fire	-3.2	18.0	-33.6	-8.1	5.8	2.4	42.2	101.1	-22.8
Motor third party liability insur.	37.	20.7	8.06	-0.6	3.4	-0.6	6.4	1.2	-8.2

Source: Authors' calculations based on www.nbs.rs, www.hanfa.hr and www.zav-zdruzenje.si

Measured by the increase in the total amount of claims settled, the effects of the crisis are particularly evident in the casualty insurance, Casco motor insurance, property insurance against fire and other hazards, and compulsory motor third party liability insurance on the observed markets. However, in contrast to the insurance premium developments, after an initial dramatic jump, the annual growth rates of claims amount in later years generally do not exceed the levels of the pre-crisis period.

The inevitable consequence of the movement of inflows and outflows of insurance resources in the opposite directions is deterioration in the operating results of insurers. The claim ratio on the insurance market of Slovenia, for example, has increased from 54% in 2007 to 59.6% in 2008, and then even reached 62.8% in 2011.[21] By reducing the gross premium, the current crisis has also caused the reduction of expense loading, as part of gross premiums intended for covering insurer's operating expenses. Thereby, the problem of its overdraft, which already existed in certain types of insurance before the occurrence of the

[20] www.hanfa.hr

[21] Slovenian Insurance Association. (2012). *Statistical Insurance Bulletin 2012*, Ljubljana, p.4.

crisis, is further deepened.[22] Companies incite the expense growth in an attempt to increase their own market share by increasing the commissions to the external distribution channels, which is particularly evident in the motor third party liability insurance. This mode of operating, which is not in the function of long-term ability to timely meet liabilities to policyholders, is just being intensified in the crisis conditions, when the competitive battle on the market exacerbates. The average expense ratio on the Croatian insurance market, for example, was 40.2% in 2007, while in 2010 it reached a value of 44.27%.[23] Considered tendencies of the claim and expense ratios lead to a relatively high, i.e. unfavorable values of the combined ratio as the summary indicator of profitability of insurance operations, especially in certain types of insurance with dominant shares on the markets of Serbia and Croatia.

Impact of the crisis on the investments activities of insurers in Serbia, Slovenia and Croatia

Relatively undeveloped financial markets, a poor supply of financial instruments and a low level of investment activity due to insufficient free funds dictate a fundamentally different structure of investment portfolio and a less important role of insurance companies as institutional investors in the observed compared with economically developed countries.[24] At the same time, these factors limit the spillover of crisis effects from advanced financial markets on assets of insurers operating on the insurance markets under consideration.

Although limited, the effects of the global financial crisis on the investment activities of insurers in Serbia, Croatia and Slovenia can be identified in the field of return on investment of technical reserve funds, i.e. their coverage with prescribed types of assets, as well as in the domain of their investment portfolio structures. Due to capital losses[25], the coverage of technical reserves with prescribed types of assets has been worsened in each of the countries surveyed at the time of the crisis occurrence. However, unlike the markets of Serbia and Slovenia, which achieved the considerable improvement in the coverage of technical reserves in the period following, the problem of providing high-quality

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[22] Operating expences of insurance companies dealing exclusively with non-life insurance in Serbia in 2009 were 72.5% higher than the expense loading.

[23] Croatian Financial Services Supervisory Agency. (2011). *Godišnje izvješće 2010*. CFSSA, Zagreb, p. 86.

[24] Kočović, J., Rakonjac Antić, T., Jovović, M. (2011). „The impact of the global financial crisis on the structure of investment portfolios of insurance companies“. *Economic Annals*, Vol. LVI, No. 191, p. 153.

[25] Investment return from technical reserves of insurers in Croatia, for example, declined from 6.43% in 2007 to only 1.95% in 2008.

types of assets in accordance with the relevant regulations regarding Croatia is deepening. Lack of assets covering technical reserves of a given insurance market amounted to 0.7% in 2007 and even much as 17.5% in 2010.

Table 4: The coverage of technical reserves by prescribed types of assets

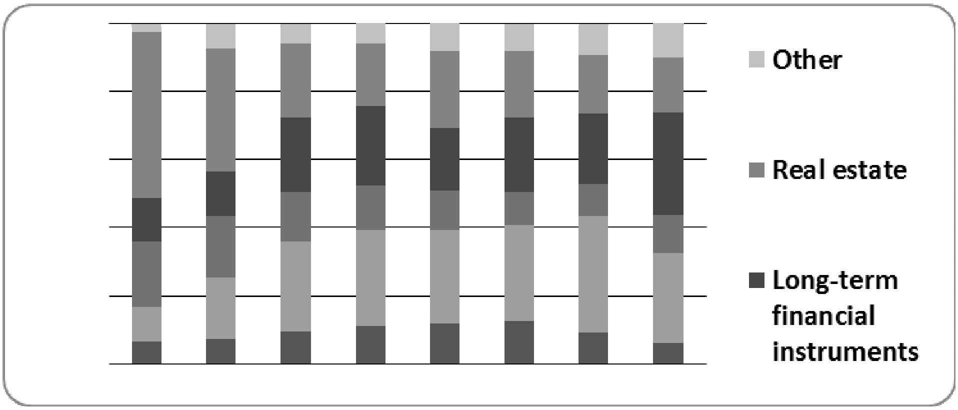
Country	**Year**			
	2007	**2008**	**2009**	**2010**
Serbia	96.4	90.4	94.2	100.3
Croatia	99.3	86.5	83.9	82.5
Slovenia	113.0	105.0	113.6	115.2

Source: www.nbs.rs, www.hanfa.hr and http://www.a-zn.si

In an effort to avoid capital losses and increase the security and liquidity of their investments, and insurance companies in the observed countries have restructured their investment portfolios, according to crisis conditions. On the example of the investment structure of insurance companies in Serbia there is apparent decline in the share long-term financial instruments in 2008 compared with 2007 (from 23.4% to only 18.3%), with a simultaneous increase in the share of investment in real estate (from 18.4% to 22.5%).[26] Analysis of the investment portfolio structure indicates a gradual improvement in the following period, which is reflected in the increase in the share of long-term and the reduction of the shares of short-term investments, cash and cash equivalents. For the first time within the given time interval, the long-term investments achieved a dominant share in the insurers' assets of as much as 30.3% in 2011.[27] However, in the context of analysing the impact of the financial crisis on investment returns of insurance companies in Serbia, the predominance of stocks among the long-term allocations of insurers is unfavourable, because of the poorly developed market's susceptibility to major drops in indices triggered by a slightest adverse impulse.[28]

[26] www.nbs.rs
[27] National Bank of Serbia. (2012). *Insurance sector in Serbia – Report for 2011*, Belgrade, p.10.
[28] Kočović, J., Rakonjac Antić, T., Jovović, M. (2011). „The impact of the global financial crisis on the structure of investment portfolios of insurance companies“. *Economic Annals,* Vol. LVI, No. 191.

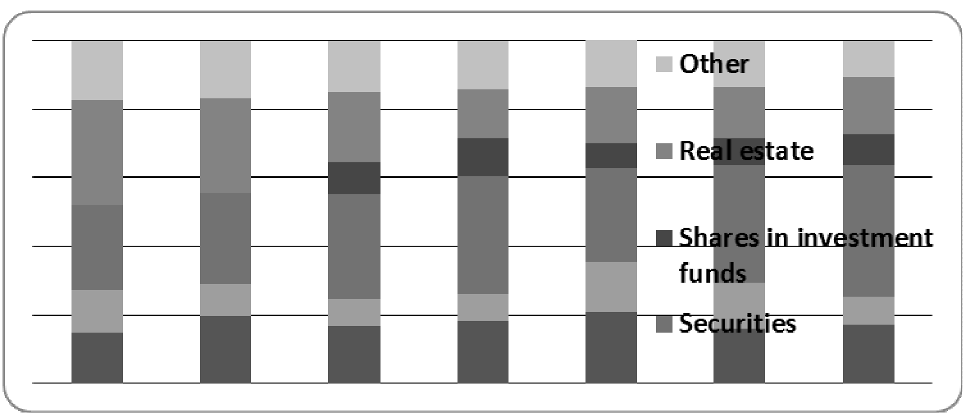
Figure 6: Investment structure of insurance companies in Serbia (2004-2011)



Source: Prepared based on www.nbs.rs.

The onset of the crisis in 2008 provoked analogous changes in the structure of assets covering technical reserves of insurance companies. In the case of the Croatian insurance market, companies recorded a decrease in the share of securities in comparison with 2007 (from 34.5% to 27.9%) and an increase in the share of cash and cash equivalents (from 18% to 21%) and real estate (from 14.4% to 16.4%).

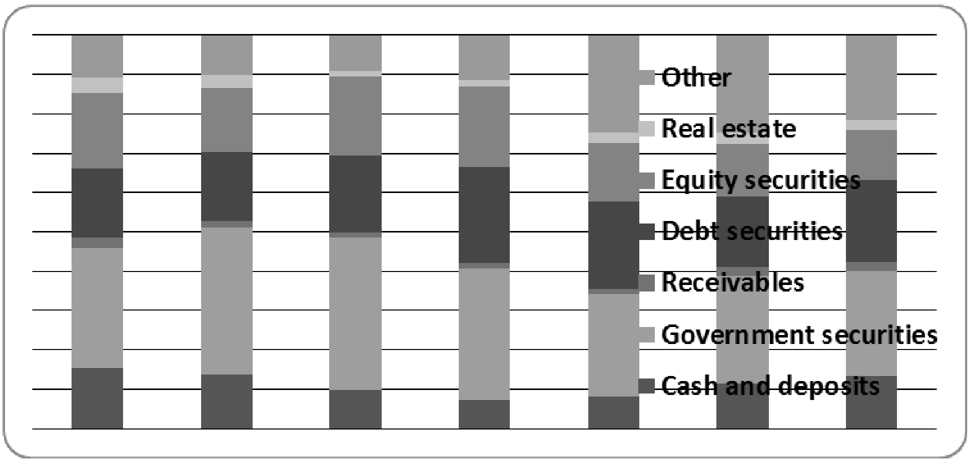
Figure 7: The structure of assets covering technical reserves of insurance companies in Croatia (2004-2010)



Source: Croatian Financial Services Supervisory Agency. (2011). Godišnje izvješće 2010. CFSSA, Zagreb, p. 82.

The structure of assets covering technical reserves of insurance companies in Slovenia also exhibits a distinct fall in the share of all types of securities in 2008 compared with 2007, particularly placements in shares (from 20.7% to 15%). At the same time, there has been an increase of bank deposits and real estate, with the above tendencies generally maintained until the end of the period.

Figure 8: The structure of assets covering technical reserves of insurance companies in Slovenia (2004-2010)



Source: Prepared based on http://www.a-zn.si

The analysed structure of the total investments covering technical reserves of insurance companies in the period shows that the crisis occurrence significantly reduced the readiness of insurers to fund immobilization in periods longer than one year. This conclusion is supported by the decline long-term financial instruments share and the increase in the share of bank deposits. Also, there is evident growing role of real estate in insurers' investments in terms of monetary instability, in order to maintain the real value of assets.

CONCLUSION

The repercussions of the financial crisis, which in 2008 escalated into an economic crisis, have been manifold for insurance companies with respect to both liabilities and assets of their balance sheets. However, insufficient depth and width of financial markets, combined with a relatively low insurers' share on them, and strict regulation and supervision of their investments have narrowed the area of the global crisis influence on the assets of insurance companies in the Western Balkan countries. Investment losses are not dramatic and investments structure is not significantly changed, but there are insufficiently exploited yield opportunities of available funds.

At the same time, insufficient development of the insurance market compared to economically developed countries limited the crisis effects on the liabilities side of the companies. The crisis affected the results of insurance operations through the fall in demand and the consequent decline in premium revenues, as well as through a temporary escalation of claims in certain types of insurance. The crisis conditions have led to the emergence of new, but also have intensified the existing problems on both the operating revenues, as well as expenses of insurance companies. The result of their influence is a deterioration of key indicators of insurers' financial health, with the expected trend in the same direction in the coming period.

Comparative analysis of business and investment results of insurance companies before and after the occurrence of the current financial crisis provides useful guidance for further development and the conduct insurance operations. Lessons to be drawn from the crisis are the following: insurance companies should firmly focus on their core i.e. risk – assuming activities. Adequate, reasonable and competitive premium rates, which are actuarially founded, are becoming imperative to maintain the solvency of insurers in critical conditions. It is particularly important to ensure the efficiency by controlling and limiting the operating expenses of insurers. Preserving market position requires insurers' flexibility concerning insurance and premium payment terms and continuous introduction of new products. Finally, in order to regain the policyholders' trust, it is crucial that insurance companies operate transparently, openly and promptly perform its obligations arising from insurance contracts.

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