

THE ROLE OF INVESTED CAPITAL OF LIFE INSURANCE COMPANIES IN ECONOMIC AND SOCIAL CHANGE IN THE REPUBLIC OF MACEDONIA

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Abstract

The capital of life insurance companies invested in various development areas is a main factor in economic growth and improvement of the social status of citizens in the Republic of Macedonia. Life insurance in Western countries is important and specific in the role of institutional investors in financial markets due to the fact that through these types of insurance the absorption of long-term assets available for long-term plans. According to investments invested in the state, an interesting fact is that in the US right after commercial banks, life insurance companies are in the second place.

In this paper will be considered the positive role of investment capital of life insurance companies in capital investments in the Republic of Macedonia, which will consider some very important and relevant economic factors such as gross domestic product (GDP), inflation, gross average wage bill, gross crude life insurance premiums (PDP), and the reduction of unemployment in the Republic of Macedonia during the years 2009 - 2016.

To verify the treatment of the positive role of invested life insurance capital, we have conducted a correlation analysis and regression between invested capital and other parameters, which will reflect and confirm the economic development trend and improve the social situation in developing countries and enhancing the well-being of citizens in the Republic of Macedonia.

Keywords: life insurance, invested capital, gross domestic product, generating average wages, social welfare.

INTRODUCTION

All types of insurance as a whole have the character of long-term savings and are based on the assessment of the probable achievement of the insured event, the use of mortality statistics, or diseases. The research of this paper is an important activity of the invested assets of life insurance companies. The actuality of the life insurance is expressed at a high level, because life insurance is nowadays understood and accepted as a need, i.e. the necessity for concluding a life insurance contract. Life insurance in the Republic of Macedonia gradually occupies the rightful place over time attracting more customers who are interested in

concluding a life insurance contract, especially people who need to do so, such as elderly people and people with spent physical ability.

From a financial point of view, the insurance represents forming of cash reserves and a mechanism for gathering finances, i.e. transformation small amounts of cash into large amounts of cash. The investment capital of life insurance companies has an important and outstanding role in socio-economic development and a positive impact on social well-being.

The long-term placement in real estate and bonds due to the high level of security proved to be the best means that insurance companies use to protect their insured. The placement of assets from life insurance companies is conditioned by economic and political factors. The placement of assets of life insurance companies is covered in several structures: bonds, shares, real estate and others. Investing in government bonds with life insurance companies is attractive because there is little risk in investing, because the state, with its authority and tax system, ensures the safety of their investments, Therefore, these bonds by solvency and quality are considered for the best and first degree. The absence of credit risk enables the state to offer the lowest interest rate on the market. The premium is determined between the difference in yields that the private sector entails and the yield of government bonds. The offered premium of the investor will be higher if the credit risk is higher.

1 RESEARCH METHODOLOGY

1.1 The relevance and importance of the research

The paper has a special importance in terms of clarifying and understanding life insurance, in the absence of accurate and detailed information of our citizens regarding the importance and the actuality of life insurance. We should point out that the insurance market, in particular the life insurance market, has not been promoted at the desired level for the citizens to understand the essence, the benefits and advantages of life insurance, such as the conditions and possibilities for concluding a life insurance contract. With the development of the market, life insurance will directly have the placement of invested assets of life insurance companies in capital investments, which gives the result of economic stability and development, as well as a better life for our citizens. The actuality of the labor refers to the development of life insurance because our country strives to join NATO's alliance and the EU where special emphasis is on insurance, but life insurance differs and is valued at a higher level in social life.

1.2. Research subject

The subject of research in this paper concerns insurance, in particular life insurance, analyzing the invested assets of life insurance companies in various financial institutions, helping the process of improving economic and social life in the Republic of Macedonia, but similar to regional developing countries. The placement of the insurance companies is directed towards the following directions:

- Buying of real estate or direct approval of mortgage and other loans;
- Purchase of securities;
- Deposition of cash with banks and other financial organizations;
- The placement of assets of life insurance companies can be short-term (up to twelve months) and long-term (over one year). The maturity structure is conditioned by the function and purpose of the separate means of insurance, as well as depending on the maturity structure of the placement and the need for maintaining the liquidity in the following period.

Every investment of life insurance companies must satisfy two basic principles:

- Providing a high level of protection against risk to its insured persons;

- Achieving the higher yield from the placed funds.

1.3 The purpose of the paper

The purpose of this paper is to reflect the reason of knowing the life insurance, in all aspects by the potential clients as a possibility of saving up their money, to have at least one kind of life insurance that will serve them on later occasions. In the development of the life insurance there are of course few important factors that must be implemented, as

- Correct information and adequate promotion of life insurance;
- Reconstruction of life insurance companies as well as management structures and introduction of innovative forms of life insurance acceptable and tailored by potential life insurance clients.
- The state's influence with its progressive policy in favor of increasing the premium of life insurance by applying the laws in the field of insurance, creating a trusted environment in the process of life insurance.
- The increase in the premium of life insurance implies a solid investment of invested assets of life insurance companies in capital investments either in the segment of infrastructure, technological investments, scientific research as well as in other socio-economic areas that directly have a positive impact, giving solid results to economic growth, with particular emphasis in the developing countries, because in these countries the possibility for economic growth is greater and provides an opportunity for investments by domestic and foreign investments.

1.4. Research hypotheses

The hypotheses are thoughtful answers to the question of the problem, on which questions can be given more answers, therefore, the hypothesis is one possible answer to the asked questions. The hypothesis is what is predicted, as well as an assertion that relates to limited facts, phenomena and processes that need to be confirmed or rejected. According to the formulated problem, we can set the following hypotheses:

- The Investment funds of life insurance companies in the Republic of Macedonia help in the functioning of our country's business as well as in developing countries, positively affecting the socio-economic development.
- The investment funds of life insurance companies in the Republic of Macedonia reduce the level of unemployment and increase social welfare in our country as well as in developing countries.
- The increase in invested assets of life insurance companies in financial institutions is a positive correlation with the increase in gross domestic product.
- The average gross salary is in a tandem of increase versus the invested assets of life insurance companies.

2. SCIENTIFIC RESEARCH METHODS

2.1 Research methods (case study)

During investigating the problem, as well as during formulating and presenting this paper, combinations of several scientific methods and techniques will be used. In the theoretical part of the paper the following methods will be used:

Observation method

This method is used to describe the problem. Its application is characteristic because it involves perceiving the contents and elements that directly reveal the required data.

Modeling Method

By applying this method through drawings, graphs, images, the state of the invested assets of life insurance companies will be more clearly shown as opposed to other economic parameters in the Republic of Macedonia.

Method of risk analysis

It is a method that identifies the types of life insurance, invested assets of life insurance companies, unemployment in the Republic of Macedonia, gross domestic product, cost index, as well as the method of correlation that will clarify and confirm the assumed hypotheses in this paper.

Comparative method

This method is especially important in the process of acknowledgement as a whole and especially in the process of knowledge and the discovery of the features and phenomena of social life, as well as its importance in the practical value by implementing the various institutional phenomena of social life, revealing the properties and the same sides of the other phenomena that have the same characteristics by making similarities and differences between them.¹

Chart number 1. Investments of life insurance companies in the Republic of Macedonia in 000, denars²

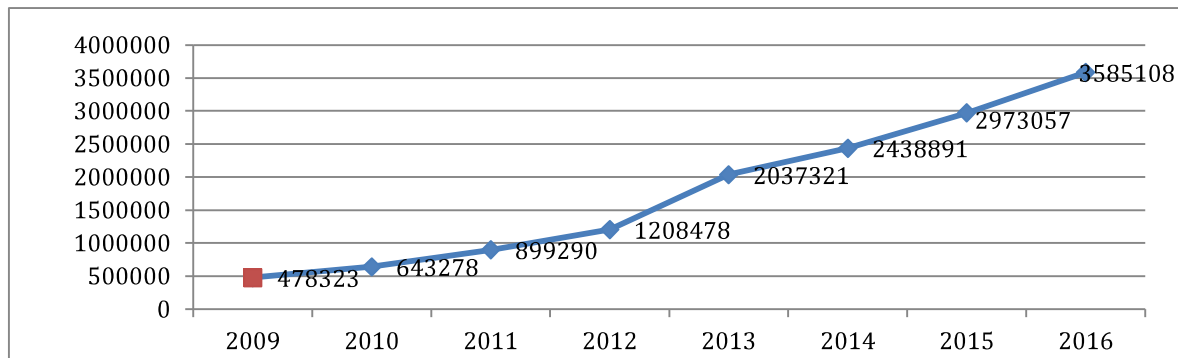


Table number 1 Equity capital of insurance companies and life insurance in 000, in denars³

Year	2009	2010	2011	2012	2013	2014	2015	2016
A	423436	423437	822747	787200	848747	941273	940771	940771
B	3461640	3461641	4014936	5135297	5146300	5361830	3988273	4019120
A- Equity capital of life insurance companies								
B- Share capital of insurance companies								

Chart number 2. Equity capital of insurance companies and life insurance⁴

¹ Prof. Dr. Liljana Batkoska, Methodology of scientific research, page,107

² Insurance Supervision Agency in RM, financial report 2009-2016

³ Insurance Supervision Agency in RM, financial report 2009-2016

⁴ Insurance Supervision Agency in RM, financial report 2009-2016

2015	8358	1100991	8279711	13,30%	2973057421	544,35	0,20%	1,24
2016	13733	1291670	8721620	14,80%	3585108931	638,63	0,22%	1,17

From Table 2, we note that the number of persons having a life insurance contract has registered a decline in 2011, but this does not affect the gross written premium of life insurance companies, since each year we have an increase in the life insurance premium index. The percentage of life insurance on the general insurance market ranges from 4.87% in 2009 to 14,80% in 2016, which points us to the fact that we have prominent progress of life insurance on the general insurance market in the Republic of Macedonia. Another element of the table above is the invested capital of life insurance companies, which also represents the purpose of this paper, we notice that we have permanent growth of the invested capital, and in 2009, compared to 2016, we have 13.34 times more invested funds, which shows us that life insurance companies have a positive impact on the economic development of the country.

As indicators for measuring the concentration of the premium of life insurance the degree of life assurance density and the level of penetration of life insurance are usually used. The degree of life assurance density is calculated as the ratio between the gross written premium and the number of residents, while the level of penetration of life insurance is calculated as the ratio between gross written premium and gross domestic product. The level of life insurance density in 2009 is 148.73% per capita in the Republic of Macedonia, while in 2016 it is 638.63 denars per capita which also has a solid increase in the gross written premium by 430% or more than 53% per annum. This shows us that the demand for life insurance in our country is still high and we can expect further development.

The level of penetration of life insurance in 2009 is 0.07%, while in the year of 2016 it represents 0.22% which points out that in 2016 we have an increase of 3.14% of the gross written premium compared to the gross domestic product.

Table number 3. Life insurance companies, invested assets, gross domestic product (GDP), inflation, gross average salary and unemployment in the RM

Year	Invested assets of life insurance	GDP in million denars	Inflation	Gross aver- age salary	Unemployment in RM
2009	478323844	409100	-0.8	30611	-----
2010	643278000	424762	1.6	31435	295371
2011	899290000	461730	3.9	31338	297986
2012	1208478000	458621	3.3	31466	290276
2013	2037321971	499559	2.8	31498	275225
2014	2438891335	525620	-0.3	32742	265370
2015	2973057421	558240	-0.3	33299	233767
2016	3585108931	598881	-0.2	34374	219148

Table number 4. Correlation matrix between investment vehicles of life insurance companies, gross domestic product (GDP) and inflation

CORRELATION MATRIX			
	Invested assets of life insurance	GDP	Inflation
Invested assets	1	0.990687	-0.41656
GDP	0.990687	1	0.34528
Inflation	-0.41656	-0.34528	1

From the given table of the correlation analysis we conclude that the two variables are in high positive correlation. This suggests that the invested assets of life insurance companies depend on the gross domestic product which is 0.99 indicating that the domestic product is very important and, among other factors, is a basic factor for investing assets of life insurance companies in and on the region.

For the needs of the survey, a regression analysis of the amount of invested assets by companies was made on the basis of the amount of gross domestic product - GDP and the amount of annual inflation. The results of the analysis are given in Table 5.

Table number 5. Regression between life insurance capital, GDP and inflation rate

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.99386
R Square	0.98776
Adjusted R Square	0.98286
Standard Error	1.51E+08
Observations	8

ANOVA					
	df	SS	MS	F	Significance F
Regression	2	9.16E+18	4.58E+18	201.78	1.66E-05
Residual	5	1.13E+17	2.27E+16		
Total	7	9.27E+18			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-6.4E+09 16784.3	4.71E+08	-13.60	3.85E-05	-7.6E+09	5.2E+09	-7.6E+09	-5.2E+09
GDP	4	920.2279	18.239	9.11E-06	14418.82	6	14418.82	19149.86
COICOP	-5.2E+07	32191570	-1.604	0.1695	-1.3E+08	24	-1.3E+08	31098424

By the analysis can be concluded the following:

The regression model gives an excellent track of the series of invested funds from insurance companies. The constant and the series of GDP are important parameters in the regression

analysis and according to the value of the t-statistics and the p-value for accepting the null hypothesis for the parameters of the model. Accordingly, the model as independent variables should have a constant and a series of GDP, and inflation will be ejected from the model.

CONCLUSION

From the analysis made in this paper, we can positively favor the title of the paper that the invested assets of life insurance companies have a positive impact on the economic and social changes in the Republic of Macedonia. The tables and graphs show that life insurance every year has the tendency to achieve a double-digit rate that is at the level of regional countries. What is positively to say is that the insurance market has been revised where life insurance companies have established a strategic plan as the achieved results show, and are achieved with the introduction of various types of insurance, accepted for potential customers for life insurance.

For the development of life insurance at the desired level, an important element, of course, is the positive influence of the state in this sphere, due to the fact that the state contributes to develop a positive mood for accepting life insurance by the citizens of the Republic of Macedonia. The state can intervene positively on life insurance, and on several occasions as the economies of the developing countries do so in Switzerland, we have a tax system easing in the case when buying a house, apartment or office space.

The realized analyzes are confirmed by the hypotheses. The development of the rise in life insurance provides an opportunity for life insurance companies to invest their assets in long-term capital investments that result in improving the functioning of businesses at the desired level, economic growth in the country as well as a better standard of living. The second hypothesis is confirmed by the correlation analysis of the two variables that have a high degree of correlation but negative, which means that the invested assets of life insurance companies reduce the level of unemployment. Also, the last two hypotheses have a high degree of positive correlation indicating that invested funds have an important role and impact on the increase in gross domestic product and an increase in the gross average wage.

RECOMMENDATIONS

- ❖ The life insurance in the Republic of Macedonia should take the right place in our society, because through them the insured person organizes life in a special way creating economic stabilization and trust in the financial institutions of the state.
- ❖ The state should assist life insurance companies, facilitating the functioning of the life insurance business, as a guarantor of the adoption of laws and as a regular controller of their work, so that citizens are properly informed about the types, the elements and characteristics of life insurance.
- ❖ Organization of various forms of life insurance promotion such as conferences, seminars, media, round tables for the clients to have access to the importance of the positive effect of having a life insurance contract.

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