

Region Requirements for Life Insurance in Uzbekistan and Regression Analysis of Factors Affecting It

Bekberganova Mohira Ravshonbekovna

National University of Uzbekistan University of Economics

2-year master's degree

E-mail: mohira96@inbox.ru

Ikromov Ahmadjon

National University of Uzbekistan University of Economics

2-year master's degree

Email: ikromvakhmadjon@gmail.com

Abstract: The article notes that insurance is an integral part of the financial infrastructure a market economy and an important factor in ensuring the sustainable development of the economy as a whole and the role of the insurance in ensuring the continuity of production and protection of the population from accidents in a market economy. In particular, the current state of life insurance in Uzbekistan was analyzed and suggestions and conclusions were made on the direction of development.

Key words: life insurance demand, factors effecting insurance demand, life insurance, insurance premium; unemployment; inflation; GDP; income.

Introduction

In the current period of rapid development, the share of life insurance in the global insurance market is growing. Life insurance is a social and financial protection that covers several events: for example, disability due to illness, death or survival up to a certain age. At present, serious attention is being paid in our country to the development of the insurance market, in particular, to increasing the share of life insurance.

The degree to which the study has been studied

Quantitative assessment of the factors influencing the development of the insurance market and the development of the insurance market is reflected in the scientific work of a number of researchers. Among the factors influencing the demand for financial services, of course, are the factors that have a positive impact on economic growth and financial development. For example, in a recent empirical study of the insurance market by Browne (2000), Ward and Zurbruegg (2002), Beck and Webb (2003), and Esho (2004), several factors affect the level of demand for insurance in the economy, including economic, political, legal, and social. factors have been found to be affected.

Research methodology

The study used scientific abstraction, grouping, comparison, retrospective and prospective, empirical analysis, and other methods. The article substantiates the importance and necessity of the factors influencing life insurance insurance revenues in the development of life insurance companies using the method of scientific abstraction, and predicts the scientific and practical importance of ensuring the financial sustainability of insurance operations. Also, the method of comparative comparison of the activities of insurance companies in the world insurance practice and life insurance premiums in developed countries with the existing insurance companies in our country has been formed.

Conclusions and discussions

In the world economy, insurance activity is a system that integrates the steps of creating a cash fund, increasing the competitiveness of production, protecting the export and import of products, activities related to the integration of production, as well as expanding the scope of activities of each entity, investment serves to increase placement and credit opportunities.

Life insurance compensates for the life and health problems of the insured during the insurance period by protecting them from various risks. In this way, insurance companies compensate for the losses in the economy and contribute to its development.

In European countries (France, Spain, Germany, Italy, etc.), the share of insurance companies in GDP is 8.4%. In Russia, the figure is 1.5 percent, in Kazakhstan 0.9 percent, in Armenia 0.6 percent, and in Uzbekistan 0.4 percent. [Nasretdinov S.S. "Activities of insurance companies during the coronavirus pandemic"] The share of life insurance in GDP in 2020 was 0.12%. [Figure 1]

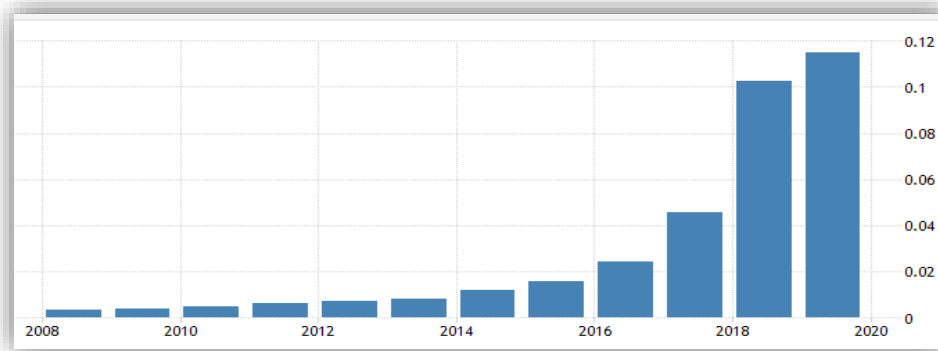


Figure 1. Life insurance in 2008-2020
 Share of Uzbekistan in GDP (%)

[Source: <https://tradingeconomics.com/uzbekistan/life-insurance-premium-volume-to-gdp>]

Today, there are 40 insurers in the insurance market of the Republic of Uzbekistan, including 32 in the general insurance network and 8 in life insurance, as well as 5 insurance brokers, 5 actuarial organizations and 22 assistants, associates, surveys, 8870 insurance agents.

Table 1. Life insurance companies in Uzbekistan
 [Source: Based on information from www.mf.uz.]

Суғурта компаниялари номи	Суғурта мукофотлари		Хаёт суғуртаси бўйича бозордаги улуши, %да
	01.10.2020	01.10.2021	
Жами	244 022,0	483 263,4	
АЖ "New Life Insurance"	66 502,4	183 693,6	38,01
АЖ СК "Agros Hayot"	42 111,9	102 545,4	21,2
АЖ "O'zbekinvest Hayot"	58 944,8	56 647,0	11,7
АЖ "Apex Life"	11 016,7	39 728,5	8,22
АЖ "Kafolat Hayot"	17 624,3	38 499,8	7,97
АЖ "Alfa Life"	14 658,0	26 316,0	5,45
АЖ "Euroasia Life"	27 133,1	25 613,8	5,5
АЖ "Alskom Vita"	6 030,8	10 219,3	2,11

According to Table 1, New Life Insurance LLC is currently the leader in the field of life insurance in Uzbekistan, which accounts for 38% of total insurance premiums. The volume of insurance premiums has declined relatively quickly until 2019. By 2020, the growth in the total insurance network slowed down to 9%, while in the life insurance network there was a decrease in the volume of insurance premiums, which is 57% compared to last year.

Table 2. Volume of insurance premiums by life insurance classes
 [Source: Based on information from www.mf.uz.]

Суғурта турлари	Суғурта мукофотлари	
	01.10.2020	01.10.2021
Ихиёрий суғурта бўйича хаёт суғуртаси класслари жами	218 884,7	473 416,1
I класс. Хаёт ва аннуитетлар	119 727,5	199 585,2
II класс. Никоҳ ва туғилиш	8,4	16,0
III класс. Хаётни узоқ муддатли суғурталаш	97 587,2	252 287,4
IV класс. Соғлиқни суғурталаш	-	639,5
икки ва ундай ортик класслар бўйича суғурта	1 561,7	20 888,1

The decline in the life insurance network observed in 2020 is primarily due to the fact that on December 31, 2019, the Republic of Uzbekistan
 In the tax code, we can say that the reason is the limited use of existing benefits from the income tax of individuals and legal entities, introduced for the purpose of life insurance



Figure 2. The amount of insurance premiums and growth rate dynamics

In 2021, insurers collected insurance premiums in the amount of 3,732.8 billion soums, which is 68.6% more than in 2020. Between 2010 and 2021, the national insurance market changed for the better, growing almost 21.3 times, from 175.5 to 3,732.8 billion soums (Figure 2)

¹ Суғуртани кўллаб қувватлаш агентлиги маълумотлари асосида муаллиф томонидан тузилган

Table 3. Correlation matrix between economic indicators of Uzbekistan and insurance premiums

№	Кўрсаткичлар номи	Кўрсаткичлар						
		Ҳаёт суғуртаси мукофотлари	Асосий капиталга киритилган инвестициялар	ЯИМ	Аҳоли сони	Инфляция	Аҳоли жон бошига даромад	Ишсизлик
1.	Ҳаёт суғуртаси мукофотлари	1						
2.	Асосий капиталга киритилган инвестициялар	0,92	1					
3.	ЯИМ	0,90	0,99	1				
4.	Аҳоли сони	0,87	0,94	0,98	1			
5.	Инфляция	0,86	0,71	0,69	0,67	1		
6.	Аҳоли жон бошига даромад	0,88	0,94	0,96	0,98	0,71	1	
7.	Ишсизлик	0,85	0,88	0,89	0,87	0,81	0,90	1

It is advisable to use a correlation coefficient to determine and assess the relationship between life insurance revenues and the country's key socio-economic indicators. Because the correlation coefficient evaluates how linearly correlated the two indicators are.

In general, the Republic of Uzbekistan has a moderately strong correlation between key socio-economic indicators and life insurance premiums, ranging from 0.67 to 0.99 (Table 3). This indicates that their level of sensitivity to each other is strong, but in this case it will be necessary to determine which indicator is primary and secondary.

The results of Table 3 show that it is possible to construct a regression model between life insurance premiums and key macroeconomic indicators. However, in this case it is possible to create only a one-factor model. Because there is a strong correlation between all the indicators in the construction of a multivariate model, multicollinearity is observed in the model. In the modeling process, regression equations are constructed that represent the relationship between the insurance premium and key macroeconomic indicators. The reason we do not model the effect of insurance premiums on macroeconomic indicators is that insurance premiums have a very small effect on key macroeconomic indicators

Table 4. Model of correlation of insurance premiums collected in the Republic of Uzbekistan with the main economic indicators

№	Модел	t-статистика	F _{stat}	Детерминация коэффициенти
1.	$LifePrem = Invest * 0,0024 - 43,2$	(7,69) (-1,15)	59,1	R ² = 0,85
2.	$LifePrem = GDP * 0,0009 - 111,2$	(6,63) (-2,16)	43,97	R ² = 0,81
3.	$LifePrem = Pop * 0,0998 - 2964,1$	(5,57) (-5,25)	31,02	R ² = 0,75
4.	$LifePrem = Infl * 48,8 - 281,3$	(5,44) (3,13)	29,62	R ² = 0,74
5.	$LifePrem = IncperC * 0,065 - 218,7$	(5,86) (-2,96)	34,3	R ² = 0,77
6.	$LifePrem = Unempl * 80,7 - 385,48$	(5,10) (-3,35)	26,01	R ² = 0,72

Here: LifePrem (life insurance premiums), GDP (GDP), Invest (Fixed capital investment), Pop (Total population), Unempl (Unemployment rate), Infl (Inflation), IncperC (per capita income)

The independent variable parameter (regression coefficient) represents how many units the independent variable changes to the independent variable. The impact of key macroeconomic indicators on insurance premiums can be divided into 3 groups based on Table 4.

The first group of indicators includes fixed capital investment and GDP, their impact on insurance premiums is 0.0024 and 0.0009, respectively.

The second group of indicators is the total population and per capita income, a change in these indicators per unit leads to a change in insurance premiums of 0.0998 and 0.065 units, respectively.

The third group is inflation and unemployment, which increase or decrease by one unit, leading to an increase or decrease in insurance premiums by 48.8 and 80.7 units, respectively.

According to insurance companies, in the III quarter of 2021, 483.3 billion soums were spent on life insurance. soums of insurance premiums were collected. Despite the fact that insurance premiums are declining from year to year, today the volume of insurance premiums is 0.4% of the republic's GDP. Worldwide, the figure averages 6.1 percent. The share of life insurers in the insurance market of our country is relatively low. The share of the life insurer in the total amount of insurance premiums was 25% in 2019, and in 2020 this figure will fall to 15%. In this case, the share of the life insurance network in the total volume of insurance premiums in developed countries is relatively large.

In order to increase the demand for life insurance in Uzbekistan and increase the amount of insurance premiums, it is necessary to study the factors influencing the demand for insurance. The demand for life insurance is affected by a number of factors. We can divide these factors into demographic and economic factors. These are: education rate, inflation, income, unemployment, interest rates, etc. [A Time-Series Analysis of Demand for Life Insurance Companies in Australia: An Unobserved Components Approach.// Liam J. A. Lenten, David N. Rulli] These factors are at risk affects differently in different countries. It is through the analysis of this that life insurance companies can identify the factors that have the greatest impact on the size of the premium, which in turn allows them to increase their income in the future.

Conclusion

As Uzbekistan aims to develop the insurance industry, it should study and apply the experience of developed countries. This has been demonstrated by the pandemic that has been going on around the world since the beginning of 2020. In 2020, the Uzbek insurance market grew by only 5% instead of the projected 10%, while insurance premiums in the life insurance sector fell to 57%. Given that insurance premiums are one of the sources of capital for insurance companies, this has a negative impact on the solvency of companies.

The Uzbek life insurance company has a very small share in the country's gross domestic product. At the same time, life insurance co-haci have a very large untapped potential. To take advantage of this potential, it is necessary to analyze the market, study the influencing factors and, most importantly, gain customer confidence.

References

1. Shennaev X.M. Uzbek insurance market. Study guide. - T.: "Finance", 2013. - 264 b.
2. C.C.Nacretdinov, "Activities of insurance companies during the Koronoviruc pandemic" - T.: Innovative Development-Publishing House, 2020. - 329p.
3. Actual problems of development of investment activity of insurance companies, collection of materials of the republican scientific-practical online conference.- - T.: Innovative development-publishing-printing house, 2020. - 329p.
4. A Time-Series Analysis of Demand for Life Insurance Companies in Australia: An Unobserved Components Approach.// Liam J. A. Lenten, David N. Rulli //
5. Australian Journal of Management, Vol. 31, no. 1 June 2006, © The Australian Graduate School of Management
6. The Life Insurance Association of Japan [Electronic source]. URL: <http://www.seiho.or.jp/english>
7. <http://www.mf.uz> (Ministry of Finance of the Republic of Uzbekistan)
8. <http://www.stat.uz> (Uzbek State Statistics Committee).
9. <http://www.tradingeconomics.com>