

## **In Allocating Financial Resources Of Insurers Increasing The Role Of Accumulative Life Insurance Ways**

IlhomG'iyozovichKenjaev<sup>1</sup>

This article examines and analyzes the need and importance of life insurance in the placement of financial resources of insurance companies. The article discusses the financial resources of insurance companies and approaches to the economic content of life insurance. In addition, the article provides suggestions and recommendations on the problems in the allocation of financial resources of the insurer and ways to increase the impact of life insurance on the placement of financial resources of the insurer.

**Key words and phrases:** insurer, the insured, financial resources of the insurer, accumulative life insurance.

### **INTRODUCTION**

In the global economy, insurance plays a special role in preventing economic and social risks and compensating for losses. In particular, there is a high demand for measures to address risks to human health and life, and to plan in advance for both adverse and positive events. Therefore, "the share of general insurance in the global insurance market is 45-46%, while the share of life insurance is 54-55%. Accumulated insurance premiums account for 8-10% of the GDP of developed countries, of which about 60% is accounted for by life insurance" [1]. This indicates the role of life insurance in the development of the world economy and the high demand for it.

For the country's economy, long-term life insurance companies invest large sums of money in the long term. With this in mind, the Government of Uzbekistan pays special attention to the development of this insurance network. This is evidenced by the "Roadmap" of the President's Decree "On measures to reform the insurance market and ensure its rapid development " [2] where development and introduction of new innovative types of life insurance services and the issue of education was highlighted.

### **MATERIALS AND METHODS**

During our research, it became known that at different stages of the development of the theoretical views of world scientists in the field of insurance, different approaches to insurance and life insurance have continued. With the development of economic thinking and the complexity of socio-economic relations, scholars have tried to adapt the categories under study to the conditions of the time. For example, according to the research of the Russian economist K.G.Vobly, the history of insurance business is an integral part of the insurance economy. In order

---

<sup>1</sup>Associate Professor of "Insurance and Pension", Ph.D.Tashkent Institute of Finance, Tashkent, Uzbekistan. E-mail: i\_kenjayev@mail.ru ORCID: 0000-0002-7462-5623

## IN ALLOCATING FINANCIAL RESOURCES OF INSURERS INCREASING THE ROLE OF ACCUMULATIVE LIFE INSURANCE WAYS

to accurately assess the current state of the insurance business, we need to study the history of the insurance business [3].

The original concepts of insurance and life insurance did not have theoretical approaches to their essence, but were the first manifestations of future theories of indemnity, eventual, insurance contract. In our opinion, these concepts are taken from the standpoint of an institutional approach, taking into account that insurance cannot operate without a separate organization (insurance company). At the same time, they separate the main elements of insurance: subject, object, purpose, risk definition, contract form, contract term, terms of payment for services, closed distribution of losses, redistribution of insurance operations.

A different approach was put forward by the German scientist Gupka. He put forward the theory of general supply of possible demand. The scientist's views, on the one hand, continue the idea of satisfying the eventual demand for insurance, and on the other hand, in V.I.Serebrovsky's opinion, are quite different: "while "eventual demand" theory pays more attention to the forecasting possible demands that can be burst up and to the last conclusion of the insurance, "the purpose of the "supply" theory is to meet these requirements, focusing the center of gravity on the initial period of insurance"[4].

Some of the ways to increase the impact of life insurance on the placement of financial resources of the insurer are described in detail by our local economists X.Shennaev, K.Quldashev, I.Abdurakhmonov, G.Khalikulova, N.Mavrulova, S.Sherov, G.Adilova and D.Baratovaresearched.

Analytical methods such as comparison, grouping were widely used in the research process. As a result of the study, practical proposals and recommendations were developed to increase the impact of life insurance on the placement of financial resources of the insurer in the insurance market of the republic .

### RESULTS

According to the Law of the Republic of Uzbekistan "On Insurance Activity" adopted on April 5, 2002, insurance is divided into two branches - life insurance and general insurance. According to the Classification of Insurance Activities adopted by the Cabinet of Ministers on November 27, 2002 No. 413 "Measures for further development of the insurance services market" [5], the life insurance network is divided into four classes: Class 1 "Life and annuities"; Class 2 is called "Marriage and Birth"; Class 3 is called "Long-Term Life Insurance" and Class 4 is called "Health Insurance".

Accumulated life insurance differs from other types of insurance not only in its longevity, the fact that the insurer pays a certain amount of insurance and additional investment income to the insured (beneficiary), but also in the content of risks that complement its content.

In the early years of independence, there was only one life insurance company in the country (UzbekinvestHayot), but today there are eight (see Table 1).

**Table 1 Development dynamics of life insurance in Uzbekistan<sup>2</sup>**  
( share of life insurance companies in total insurance premiums, in%)

n/o	Insurance companies	Years
-----	---------------------	-------

<sup>2</sup>This was made by the data of The Ministry of Finance

		2014	2015	2016	2017	2018	2019
1.	Uzbekinvest life	3,8	4,1	5,2	6,8	6,2	4,1
2.	AlphaLife	0,5	0,7	1,0	1,9	1,5	2,9
3.	NewLifeInsurance	0,5	1,4	2,3	4,8	9,8	9,3
4.	AgrosHayot	-	-	-	1,4	7,9	4,2
5.	Euroasia Life	-	-	-	-	0,1	3,3
6.	Warranty life	-	-	-	-	0,01	1,0
7.	Apex Life	-	-	-	-	-	0,5
8.	Alskom Vita	-	-	-	-	-	0,1
	Life insurance in the total insurance market share	4,9	6,2	8,5	14,9	25,5	25,4

The table above shows the dynamics of life insurance development in Uzbekistan, in which the share of life insurance in the market in 2014 was 4.9%, in 2019 this figure was 25.4%, but this year compared to the previous year, there was a decrease of 1 percent. However, it can be considered as a high growth rate. However, this ratio differs significantly from that in developed countries. The share of life insurance in the total insurance premiums collected in such countries is 50% or more, ie the main part of the insurance premiums collected in these countries falls on the contribution of the life insurance industry.

Also, in order to carry out an econometric analysis of the development of life insurance in Uzbekistan, the insurance company "Uzbekinvest Life" was selected as a sample from the general package. In modelling the development of the function of "Uzbekinvest Life" life insurance company, rather than the pair econometric model, it is more important to create the multi-factor econometric model. Because multi-factor econometric model covers all the factors that affect the main indicator of insurance field and assess impacts of each factor on the response variable.

In general, the multi-factor econometric model is as follows:

$$y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_n x_n + \varepsilon \quad (1)$$

In determining the unknown  $\beta_0, \beta_1, \beta_2, \dots, \beta_n$  parameters of this multifactor econometric model, a system of normal equations of the following form was constructed:

$$\begin{cases} n\beta_0 + \beta_1 \sum_{i=1}^n x_i + \beta_2 \sum_{i=1}^n x_i^2 + \dots + \beta_n \sum_{i=1}^n x_i^n = \sum_{i=1}^n y \\ \beta_0 \sum_{i=1}^n x_i + \beta_1 \sum_{i=1}^n x_i^2 + \beta_2 \sum_{i=1}^n x_i x_2 + \dots + \beta_n \sum_{i=1}^n x_i x_n = \sum_{i=1}^n y \cdot x_1 \\ \dots \\ \beta_0 \sum_{i=1}^n x_n + \beta_1 \sum_{i=1}^n x_n x_1 + \beta_2 \sum_{i=1}^n x_n x_2 + \dots + \beta_n \sum_{i=1}^n x_n^2 = \sum_{i=1}^n y \cdot x_n \end{cases} \quad (2)$$

**IN ALLOCATING FINANCIAL RESOURCES OF INSURERS INCREASING THE ROLE OF ACCUMULATIVE LIFE INSURANCE WAYS**

This system of equations, to calculate the value of unknown  $\beta_1, \beta_2, \dots, \beta_n$  Kramer method is used.

A mathematical representation of a multifactor econometric model can be obtained from the calculated values of unknown parameters.

If the units of measurement of the variables in a multifactor econometric model are different, then the values of all the factors involved in the model are turned to logarithmic values and have the following view:

$$\ln(y) = \ln(\beta_0) + \beta_1 \ln(x_1) + \beta_2 \ln(x_2) + \dots + \beta_n \ln(x_n) + \ln \varepsilon, \quad (3)$$

All unknown parameters in this multi-factor econometric model can also be calculated by the Kramer method.

This means that the “least squares method” is used in the econometric modeling of Uzbekinvest life insurance company development indicators.

Multi-factor econometric model that has been constructed to assess the development of Uzbekinvest life insurance company is checked by several measures. Looking at the model that satisfy all the requirements, insurance indicators can be forecasted for future periods.

In the multivariate econometric model, the coefficient of determination is used to determine the percentage ( $y$ ) of the factors included in the model, and is calculated as follows:

$$R^2 = 1 - \frac{\hat{\sigma}^2}{\hat{\sigma}_y^2} = 1 - \frac{RSS / n}{TSS / n} = 1 - \frac{RSS}{TSS} \quad (4)$$

here

$$RSS = \sum_{i=1}^n \varepsilon_i^2 = \sum_{i=1}^n (y_i - \hat{y}_i)^2 \text{ - sum of squares of regression residues;}$$

$$TSS = \sum_{i=1}^n (y_i - \bar{y}_i)^2 = n \cdot \hat{\sigma}_y^2 \text{ - total variance;}$$

$y_i, \hat{y}_i, \bar{y}_i$ , respectively - resulting factor is real, and average values.

In order for models to be compared by different factors in other scales and in order such factors not to affect the  $R^2$  statistics, determination coefficient is usually used, such as:

$$R_{adj}^2 = 1 - \frac{s^2}{s_y^2} \quad (5)$$

Fisher's F-criterion was used to examine the statistical significance of the multi-factor econometric model developed for Uzbekinvest Life Insurance Company on the indicators of insurance activity development, and it was calculated using the following formula:

$$F_{\text{числ}} = \frac{R^2}{1 - R^2} \cdot \frac{n - m - 1}{m}, \quad (6)$$

here:  $R^2$ - determination factor;  $n$ - number of observations;  $m$ - number of factors.

F-criterion value is greater than the value of the tables, the multi-factor econometric model is called statistically significant.

To find the value of F-criteria in the table, values of the degrees of freedom  $k_1 = m$  and  $k_2 = n - m - 1$  and  $\alpha$  level of importance are calculated. If the  $F_{\text{calculation}} > F_{\text{table}}$  condition is satisfied, this indicates that the calculated value of the F-criterion is greater than the value in the table and that the constructed multifactor econometric model is statistically significant.

To check the reliability of parameters of Multi-factor econometric model and reliability of the correlation coefficients, Student's T-criterion yardstick has been used.

Comparing the Student's  $t$ -criterion ( $t_{calculation}$ ) value and the table ( $t_{table}$ ) values,  $H_0$  hypothesis is accepted or rejected. To do this, the table value of the  $t$ -criterion is found based on the selected probability of reliability ( $\alpha$ ) and degree of freedom (d.f. =  $n - m - 1$ ) conditions. Here  $n$ - the number of observations,  $m$ - the number of factors.

For the calculated parameters in a multifactor econometric model, the condition of this table criterion ( $t_{calculation} > t_{table}$ ) must also be satisfied. This shows that all the coefficients in the multifactor econometric model are reliable.

In the econometric analysis of the development of insurance activities of the insurance company "Uzbekinvest life" it is expedient to identify the main factors influencing its development and to make them appear in time series.

As a result, the accumulative life insurance in the development of multi-factor econometric model for "Uzbekinvest life" life insurance company, annual information on the following factors for the years 2008-2019 were selected:

Y - Sequential indicator - "Uzbekinvest life" life insurance company's insurance premiums (mln. soums)

Influencing factors, main regressors:

$X_1$  - Insurance coverage of Uzbekinvest Life Insurance Company (million soums)

$X_2$  - Number of insurance contracts of Uzbekinvest Life Insurance Company (unity)

$X_3$  - GDP of the Republic of Uzbekistan, (billion soums)

$X_4$  - GDP per capital of the Republic of Uzbekistan (thousand soums)

$X_5$  - Inflation rate of the Republic of Uzbekistan ( % )

$X_6$  - Official exchange rate of the US dollar in the Republic of Uzbekistan (thousand soums)

$X_7$  - devaluation of currency of the Republic of Uzbekistan ( % )

$X_8$  - real capital income of the Republic of Uzbekistan (thousand soums)

Since the units of measurement of the 8 selected variables are different, we can logarithm all the factors.

This time is based the giving expressional statistics on econometric model before the creation of the model. Stata 14 is advisable to use a special econometric modeling program (Table 2).

**Table 2 Results of the normal distribution test of factors<sup>3</sup>**

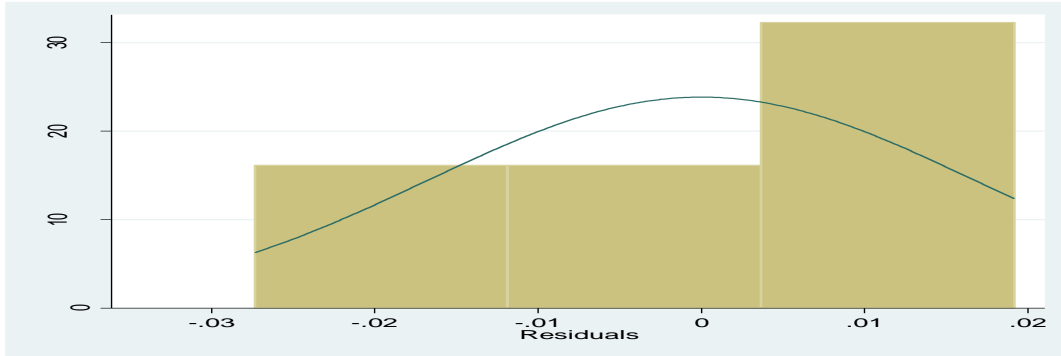
Skewness/Kurtosis tests for Normality					
Variable	Obs	Pr (Skewness)	Pr (Kurtosis)	adj chi2 (2)	joint Prob>chi2
ehat	12	0.5488	0.2165	2.21	0.3315

Visually, Figure 1 also shows the test results.

It can be seen from the pictures that not all the factors studied do not obey the law of normal distribution. However, we continue to test hypotheses using a scientific abstraction approach.

<sup>3</sup>Accountings in the program Stata 14 by author

**IN ALLOCATING FINANCIAL RESOURCES OF INSURERS INCREASING THE ROLE OF ACCUMULATIVE LIFE INSURANCE WAYS**



**Figure 1. Graph of normal distribution functions of factors<sup>4</sup>**

If all indicators are within the norm after the descriptive statistics on time series, then the density of the relationship between the factors (variables) is determined. To do this, a correlation analysis is performed and the correlation coefficients are calculated among the factors. The correlation coefficient between the two factors is calculated using the following formula:

$$r_{y,x_i} = \frac{\overline{Y \cdot X} - \bar{Y} \cdot \bar{X}}{\sigma_X \cdot \sigma_Y}, \quad (7)$$

here  $\sigma_X \cdot \sigma_Y$  - these factors mean squared away.

There are special and double correlation coefficients between the factors. The specific correlation coefficient is the density of the relationship between the resulting factor (y) and the factors influencing it (xi) (Table 3).

The double correlation coefficients reflect the interrelationships between the influencing factors (xi).

Factors to calculate the correlation coefficients face multicolleniarity problem. Multicolleniarity is the expression which shows dense connections between the two factors.

**Table 3 A matrix of specific and even correlation coefficients between factors<sup>5</sup>**

```
. cor lnY lnX1 lnX2 lnX3 lnX4 lnX5 lnX6 lnX7 lnX8
(obs=12)
```

	lnY	lnX1	lnX2	lnX3	lnX4	lnX5	lnX6	lnX7	lnX8
lnY	1.0000								
lnX1	0.6800	1.0000							
lnX2	0.7449	0.3965	1.0000						
lnX3	0.6777	0.4876	0.3985	1.0000					
lnX4	0.9998	0.6836	0.7422	0.6774	1.0000				
lnX5	0.5986	0.5753	0.7589	0.4051	0.5973	1.0000			
lnX6	0.9435	0.7186	0.8082	0.6328	0.9447	0.8051	1.0000		
lnX7	0.2491	0.0580	0.1022	0.1267	0.2494	0.1275	0.2771	1.0000	
lnX8	0.9396	0.6336	0.8058	0.6351	0.9419	0.6722	0.9605	0.2186	1.0000

<sup>4</sup>Accountings in the program Stata 14 by author

<sup>5</sup>Accountings in the program Stata 14 by author

As can be seen from Table 3, the specific correlation coefficients are the density of the relationship between the resulting factor and the factors that affect it. Thus, the private correlation coefficients resulting factor ("Uzbekinvestlife" insurance premiums, the insurance company lnY) and the connections among the factors that affect the intensity (in addition to lnX7) indicate that the value of the private correlation coefficient of 0,7 or more.

**Table 4 Results of descriptive statistics on factors<sup>6</sup>**

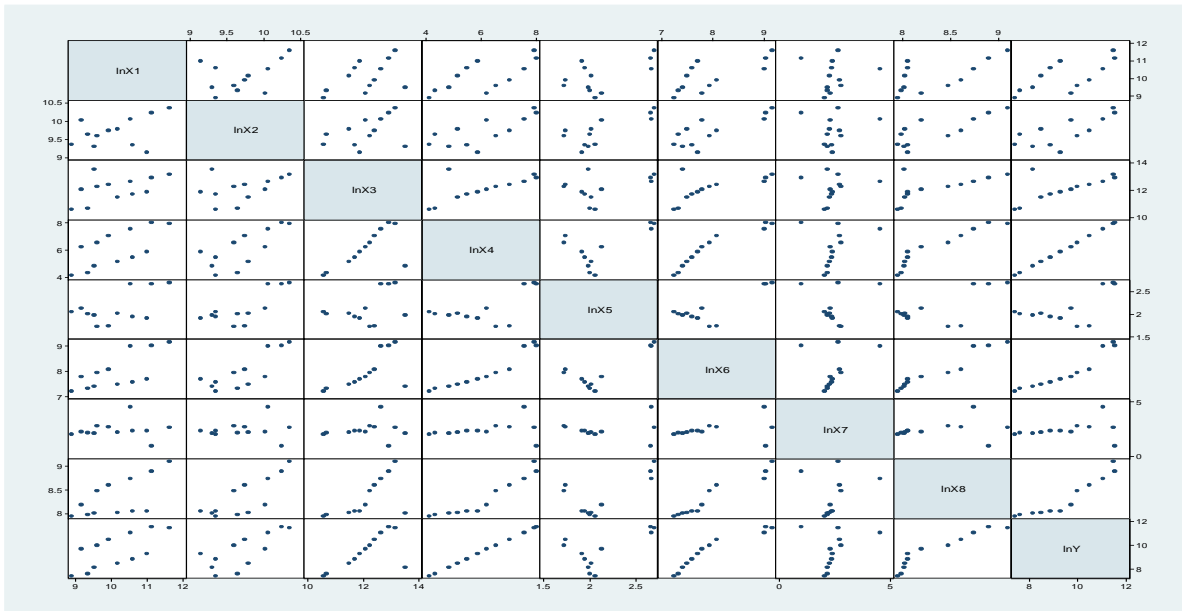
```
. pwcorr lnX1 lnX2 lnX3 lnX4 lnX5 lnX6 lnX7 lnX8 lnY, sig
```

	lnX1	lnX2	lnX3	lnX4	lnX5	lnX6	lnX7	lnX8	lnY, sig
lnX1	1.0000								
lnX2	0.3965 0.2019	1.0000							
lnX3	0.4876 0.1078	0.3985 0.1995	1.0000						
lnX4	0.6836 0.0142	0.7422 0.0057	0.6774 0.0155	1.0000					
lnX5	0.5753 0.0503	0.7589 0.0042	0.4051 0.1914	0.5973 0.0403	1.0000				
lnX6	0.7186 0.0085	0.8082 0.0015	0.6328 0.0272	0.9447 0.0000	0.8051 0.0016	1.0000			
lnX7	0.0580 0.8579	0.1022 0.7518	0.1267 0.6949	0.2494 0.4343	0.1275 0.6930	0.2771 0.3833	1.0000		
lnX8	0.6336 0.0270	0.8058 0.0016	0.6351 0.0265	0.9419 0.0000	0.6722 0.0166	0.9605 0.0000	0.2186 0.4949		
lnY	0.6800 0.0150	0.7449 0.0054	0.6777 0.0154	0.9998 0.0000	0.5986 0.0397	0.9435 0.0000	0.2491 0.4349		
		lnX8	lnY						
lnX8		1.0000							
lnY		0.9396 0.0000	1.0000						

In addition, Table 4 contains double correlation coefficients, which show the density of the relationship between the influencing factors (lnX<sub>i</sub>, lnX<sub>j</sub>). The most important thing here is that the influencing factors should not be closely linked. In other words, multicollinearity cannot exist. If two pairs of correlation between the factors is less than 0,7, here multicollinearity doesn't exist. I can see the data in Table 4, the coefficients of the the factors that affect the link between the X4, X5, X6, X8 are greater than 0,7, which means there is multicolleniariry.

<sup>6</sup>Accountings in the program Stata 14 by author

**IN ALLOCATING FINANCIAL RESOURCES OF INSURERS INCREASING THE ROLE OF ACCUMULATIVE LIFE INSURANCE WAYS**



**Figure 2. Graph of the correlation matrix between factors<sup>7</sup>**

In addition, Table 4 calculates the coefficients for determining the reliability and probability of correlation coefficients. At the bottom of each correlation coefficient, there is its value in t-student and probability. There is a condition that the probability among factors should not be more than 0.05. For example, correlation coefficient between lnY-volume of insurance premiums of the insurance company “Uzbekinvest life” (lnY) and the GDP per capital of the Republic of Uzbekistan (lnX4),  $r_{\ln Y, \ln X4} = 0,99$  and probability is equal to prob. = 0,0000. This indicates that there is a strong correlation between the two factors, that the specific correlation coefficient is reliable, and that there is a positive correlation between the two factors with 99% accuracy.

Correlation coefficients between "Uzbekinvest life" insurance company insurance premiums (lnY) and devaluation of the currency of the Republic of Uzbekistan (lnX7) is equal to  $r_{\ln X4, \ln X7} = 0,2491$  and prob. = 0,43. This suggests that there is a weak correlation between these two factors and that the double correlation coefficient is unreliable.

Thus, multi-factor econometric model of the correlation coefficients between the factors of t-student criteria meets following requirements. Based on these factors, it is possible to create a multifactor econometric model that determines the amount of insurance premiums of the insurance company "Uzbekinvest life".

Another method to check the multicollinearity among the factors is to calculate the rates of VIF (Variance Inflation Factors). The calculated VIF coefficients for each factor are given in Table 5 below.

**Table 5 Measurement among the factors affecting the effectiveness of multicolleniarity<sup>8</sup>**

<sup>7</sup>Accountings in the program Stata 14 by author

<sup>8</sup>Accountings in the program Stata 14 by author



Variance Inflation Factors

Date: 01/15/20 Time: 08:23

Sample: 2008S1 2019S2

Included observations: 12

Variable	VIF	1 / VIF
lnX6	500.25	0.001999
lnX4	102.01	0.009803
lnX8	84.42	0.011846
lnX5	62.20	0.016077
lnX2	8.99	0.111216
lnX1	3.56	0.280671
lnX7	2.68	0.373317
lnX3	2.34	0.427459
Mean VIF	95.81	

If there is multicollinearity among the affecting factors, then  $VIF > 10$ . As can be seen from Table 2.3.4, the VIF coefficients of influencing factors such as X1, X2, X3, X7 are less than 10. So, this shows that multicollinearity doesn't exist among the factors affecting the correlation analysis. On the other hand, VIF coefficients for X4, X5, X6, X8 are greater than 10, which means there is multicollinearity among those variables.

**Table 6 Regression model of development of Uzbekinvest life insurance company<sup>9</sup>**

Source	SS	df	MS	Number of obs	=	12
Model	22.6374603	8	2.82968254	F(8, 3)	=	2755.00
Residual	.003081329	3	.00102711	Prob > F	=	0.0000
Total	22.6405416	11	2.05823106	R-squared	=	0.9999
				Adj R-squared	=	0.9995
				Root MSE	=	.03205

lnY	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
lnX1	-.002785	.0211573	-0.13	0.904	-.0701171 .0645471
lnX2	-.0140152	.0741722	-0.19	0.862	-.2500642 .2220338
lnX3	-.0020487	.0162406	-0.13	0.908	-.0537335 .049636
lnX4	1.155934	.0718844	16.08	0.001	.9271662 1.384703
lnX5	.2519386	.2176365	1.16	0.331	-.4406778 .9445549
lnX6	-.3387988	.3092492	-1.10	0.353	-1.322968 .64537
lnX7	.014795	.0195732	0.76	0.505	-.0474956 .0770855
lnX8	.1041137	.2177096	0.48	0.665	-.5887355 .7969629
_cons	3.911369	.7740807	5.05	0.015	1.447898 6.374839

Using the data in Table 6, we present a mathematical representation of a multifactor econometric model:

$$\ln y = 3,9113 - 0,0278 \ln x_1 - 0,1401 \ln x_2 - 0,0020 \ln x_3 + 1,1559 \ln x_4 + 0,2519 \ln x_5 - 0,3387 \ln x_6 + 0,1479 \ln x_7 + 0,1041 \ln x_8 \quad (8)$$

In this model determination coefficient is  $R^2 = 0,99$ , and can explain 99.9% of the changes. However, the model low level of significance in the following factors *sp-prob* (*p-value*) –

<sup>9</sup>Accountings in the program Stata 14 by author

## IN ALLOCATING FINANCIAL RESOURCES OF INSURERS INCREASING THE ROLE OF ACCUMULATIVE LIFE INSURANCE WAYS

X1 - 0.904, X2 - 0.862, X3 - 0.908, X5 - 0.331, X6 - 0.353, X7 - 0.505, and X8 - 0.665. In fact, the value of *p-prob* must be less than 0,05. In addition, the fact that density correlations among X4, X5, X6, X8- factors are greater than 0.7 and VIF is higher than 10 points for those factors show the presence of multicollinearity.

### CONCLUSION

In conclusion, it should be noted that the accumulated life insurance is very important in the allocation of financial resources of the insurer. Based on the results of the above analysis, we consider it expedient to implement the following proposals and recommendations as a solution to the existing problems in the allocation of financial resources of insurance companies:

1. It is necessary to increase the level of profitability of investment instruments, taking into account that the main source of income of insurance companies engaged in life insurance in Uzbekistan is the income from the accumulation of insurance premiums. This allows for the development of this type of insurance and the long-term investment of large amounts of money at the disposal of insurance companies.

2. Given that the high growth rate in the life insurance sector in Uzbekistan over the past five years is mainly due to tax benefits provided for life insurance, in order to create a competitive environment between insurance companies, taking into account inflation in their insurance products, it is necessary to increase the interest in insurance.

3. It is necessary to improve the quality of assets of professional participants of the insurance market by increasing the level of capitalization, solvency and financial stability, as well as to increase the activity of insurers in the investment process.

### REFERENCES

1. <https://raexpert.ru> – site address.
2. Resolution of the President of the Republic of Uzbekistan dated August 2, 2019 No 4412 "On measures to reform the insurance market of the Republic of Uzbekistan and ensure its rapid development."
3. Vobly K.G. "Основы экономики страхования". Textbook.– М.:, Ankil 1993.-504 p.
4. Serebrovsky V.I. "Страхование". Textbook. .– М.:, Finizdat, 1927.- 144 p.
5. Resolution of the Cabinet of Ministers of the Republic of Uzbekistan dated November 27, 2002 No 413 "On measures to further develop the market of insurance services".
6. Prepared on the basis of data of the Ministry of Finance of the Republic of Uzbekistan.
7. Insurance Information Institute; Life Insurers fact Book American Council of Life Insurers.
8. Edronova V.N., Mizikovskiy E.A. Accounting, assessment of profitability and analysis of financial investments. – *Moscow. Magistr: INFRA-M* 2011.- p. 316.
9. <https://www.louisepryor.com> - Enhanced capital requirements and Individual Capital Assesments Insurers; Comite Europeen des Assurances.pdf
10. <https://www.apsei.org.pt> - Comite European des Assuratures, CEA Statistics.
11. <https://www.allianz.com>
12. <http://www.raexpert.ru/researches/regions/investclimate>.