

UDC 519

FINANCIAL CALCULATION OF INCOME AND COST BALANCE IN CIVIL INSURANCE

D.I.Allahverdiyev, K.A.Agayeva, Y.J.Binnetov

(Presented by Corresponding Member of ANAS Sh.M.Muradov)

The purpose of the study was to analyze the importance of GDP growth rate and economic efficiency, citizens' income and civil insurance in the country's economy using mathematical methods. The criteria of insurance guarantee in citizen welfare and the effect of profit in insurance benefits were scientifically explained. The interests and incentives of innovative economic subjects in insurance activity were determined, and insurance calculation was investigated in the real political-economic landscape. The cause-and-effect relationships of the impact of insurance on economic progress, political-economic relations and macroeconomic stability were comparatively studied.

Keywords: state insurance policy, insured economic landscape, nature of effectiveness, financial progress

Introduction

Thus, in the periods when insurance was historically formed, the natural insurance factor had an advantage. So, it was in this format that they organized protective measures against climatic conditions and the attack of rival enemies. Such collective conservation efficiency involved people and the accumulation of common productive resources and formed associations.

Based on the research, the form of the insurance criterion was established in ancient Babylonia, Egypt and Rome. The formed professional associations included representatives of the collegium (masters and other professional craftsmen). The main task of the collegium was to help each of its representatives. Collegiums of actors, musicians and gladiators were formed as aristocratic professionals. Under such conditions, the insurance-funded budget of the Blacksmiths was formed [5]. The main purpose of the budget formed for this purpose was collected as support to people or assistance to families. Back in the Asian continent, during the reign of the famous Babylonian ruler Hammurapi in the 3rd millennium, merchant caravans used to sign agreements among themselves. According to the agreement, each merchant agreed that they would be jointly protected against the loss of goods during the march.

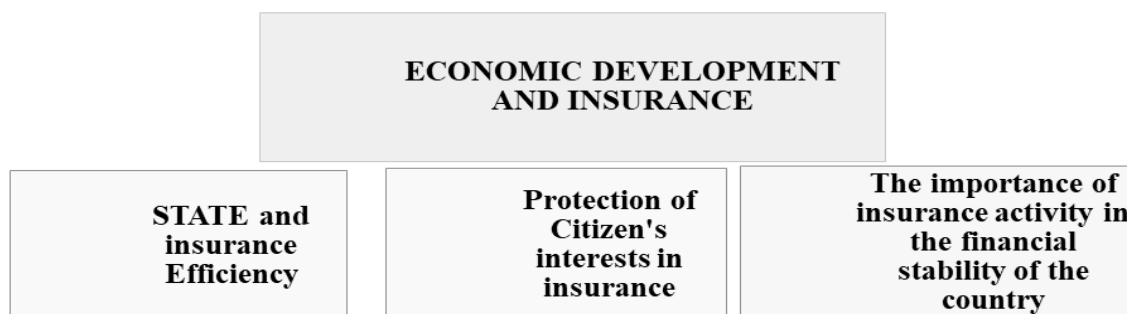
For this reason, the resistance and protection of the population against the enemy coincided

with the birth of Christianity. Thus, the creation of a fund by Christian communities by concluding mutual protection agreements was formed out of the existing socio-political necessity. For protection purposes, insurance in the Middle Ages was administered by an association called a "fraternity." Thus, the community is characterized as the evolutionary stage of property insurance, the goal of protecting private life and property, to protect against natural events [5].

In the current political and economic conditions, the main goal of the state is the effective organization of efficiency in the country's economy, the regulation of risks in economic activity, and the insurance policy has been formed through investment sources.

Thus, the organization of satisfaction in insurance services, regulation of reinsurance operations in the direction of political and economic interests of the country is considered typical. Thus, the main weight of insurance premiums in the GDP, as well as the integration of the republic's activity in this field into the world insurance market and the importance of the country's insurance operations, made it necessary to study.

The necessary criteria for the formation of an effective insurance policy are classified as follows.



Description 1. Source: prepared by the author

In this context, the economic criteria of insurance activity, mainly compulsory innovative insurance, the organization of the progress of healthy and long-lived human insurance have become relevant.

Thus, the criteria of coincidence or necessity in the calculation and determination of the interests of innovation subjects in the insurance activity determined the real political-economic picture. Thus, the negative manifestations of the methods that affect the existing economic criteria, such as insured tax benefits and interest benefits of deposits, require a mathematical calculation. Insurance is presented as a necessity in the regulation and provision of material and moral issues for citizens. In such conditions, insurance should focus on the balancing of citizens' income and expenses, and it stipulates the neutralization of the anti-customary and material and moral effects of the canary intervention. The main criterion of insurance is characterized by mathematical calculation with the application of tax and social insurance, regulation of goals and interests of innovative subjects. Thus, a logical judgment is rightly formed in the research that the insured innovation should be manifested by determining the effect of the known actions of the subjects on economic progress and human well-being, family size.

In such circumstances, the insurance amount is calculated based on the current reality. In financial calculations, the discount format is used, which is characterized by how much funds are included to create a fund of a certain amount in the future [3]. Another expression of the discount format determines whether the future amount of money is stable or unstable.

Thus, the simple phase rate determines the equilibrium based on the David model.

Thus, the mathematical methods of innovative insurance adequacy, which affect the economic criteria in the calculation of insurance in real political and economic conditions, are reflected. So, if the current rate of return is 10%, the discount form for 10 years is calculated by the mathematical method mentioned below.

For example, in 5 years, we should form a fund in the amount of 50,019 manats, where the rate of return is 10%. Thus, investment sum insurance based on fuzzy logic reflects the adequacy of the sum form of David's model.

$$D = N + G + A$$

D investment wealth, N wealth criterion, G state insurance, A insured state interest. Thus, the insurance criterion of financial security in long-term insurance transactions is based on income and benefits, and the public interest accepts insured wealth. Also, the annual rate of return of the interest rate, which reflects the political-economic reality, is described as the amount of the amount directed to investment or other operations.

The innovative insurance turnover reflects the insurance in the form of AA=278, AD=319 acceptance insurance as the annual income rate of D=100 manats, in which the insurance determines the result in a total of 595 units. The economic progress calculated on the basis of these criteria is directional, and the mathematical methods of such insurance should be determined in full accordance with political and economic interests.

Such a mathematical method determines the mentioned sequence.

EA= 278+319,
EA=EAD relativity,
EAD= reflected 595 results

Here, the insured economic criterion of the mathematical description conditions the citizen's progress in the direction of the necessary political-economic activity. So, from this description, it can be concluded that the price of the final product created through the production criterion of the innovative insurance financial income is maximized because it is equal to the price of that production criterion.

In the economic landscape of the world, created on account of special funds insurance is as important as commodity producers and citizen's socio-economic security. Thus, the political-economic interests of the state continuously regulate the equality with the insurance method, defense guarantee, as well as the progress of the reproduction and consumption criteria.

For this reason, even in the 19th century, investment insurance in the oil industry in Azerbaijan is characterized as a period of progress. In Azerbaijan, the Law "On Insurance" in 1999 and the Decision "On Insurance Activities" by our President Ilham Aliyev in 2008 formed the basis of economic progress in the insurance sector of our country and conditioned the adoption of social insurance growth [4].

The formation and development of the insurance market in Azerbaijan is regulated by the demand for long-term insurance and the offer that fulfills this demand. Thus, in the insurance market, the price of the property, the intensity of its involvement in the insurance and the amount of the insurance fee play an important role [2]. This is made possible by competitive service, provision and effective organization of insurance activities in the insurance market. Thus, an innovative insurance system is formed. Here, objects, natural and legal persons and their relationship system are formed and improved in the insurance market.

If we determine the value of the insurance potential at current prices and know its subsequent dynamics and the degree of involvement in insurance, then the insurance amount can be described as a one-parameter model.

$$A(IIIq) = D + N + G$$

A (IIIq) insured wealth, D income and population price criterion, N state insurance perspective, G insured state wealth.

The evaluation of the insurance conditions stipulates the implementation by the relevant executive bodies and the state as a part of the general world policy. Thus, the rate of growth of the insured's economy in certain years is represented by figures in table [1].

According to the data of the State Security Service, in 2023, the average monthly nominal salary of salaried workers in the country's economy increased by 11.2% compared to the corresponding period of the previous year and amounted to 919.8 manats.

In the economy, the average monthly nominal salary in the industrial, financial and insurance activities, professional, scientific and technical activities, as well as in the information and communication fields was even more incremental. He predicted that the average monthly salary will be 930 manats this year, which will enable an average 11% increase in pensions in 2024. Also, it is predicted that next year the average salary will reach 980 manats. In 2024, it is predicted that the funds of the State Social Protection Fund (DSMF) will be increased by 651.9 million manats or 10.9% to 6 billion 919.9 million manats, which is about 20% of the state budget expenditures. On this basis, the average monthly amount of labor pensions is predicted to be 483 manats in 2024. Also, next year, the average monthly amount of pension according to age is predicted to increase by 50 manats to 516 manats from 466 manats in the current year, and by 47 manats to 454 manats expected at the end of the current year [5].

Table 1

Social-economic criteria of some areas of the country

Directions	2010	2019	2020	2021	2022
Average monthly nominal salary, manat	331,5	635,1	707,7	732,1	847,9
Employed population, thousand people	4359,1	4785,9	4751,9	4831,9	4551,9
State	1142,7	1146,1	1117,8	1089,2	1955,7
Salaried workers. thousand people	1382,9	1646,6	1698,7	1709,1	1738,7
Workforce, thousand people	4587,4	5037,7	5089,7	5191,6	5195,5

Source: Prepared by the author based on data from the DSK

Thus, it is characterized as relations based on the transfer or balancing of risk in the direction of protection of property interests of the insured, related to property, human health, civil liability, as well as economic activity, foreign economic activity.

Reinsurance is considered to be an expression of relations based on balancing the risks insured by the insurer with the insurance contract as a whole or with the reinsurer.

Thus, it is considered typical to organize the main directions of the state investment policy as follows.

Progress of regional investment policy,

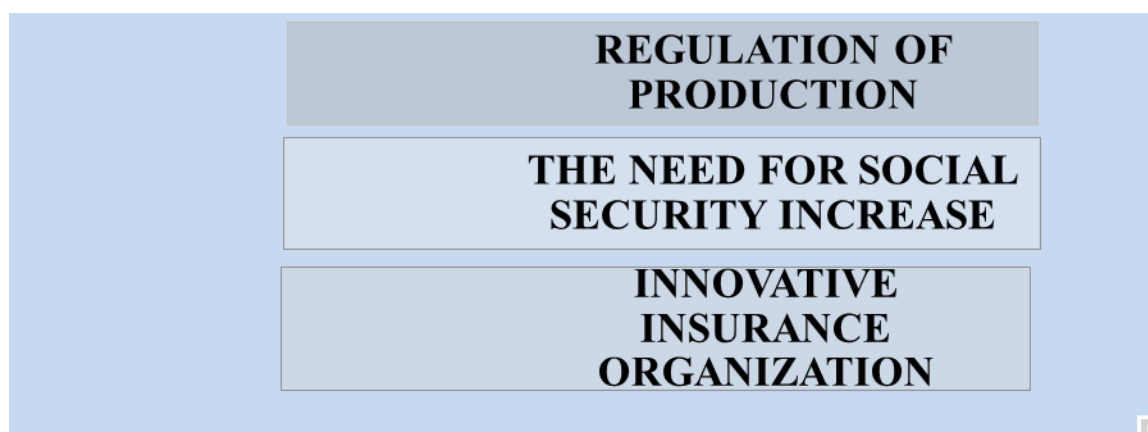
Strengthening the social direction of investment activities in the country,

Ensuring the country's economic security;

directing state investments to science and education;

Increasing the socio-economic protection of the state.

In this context, our country's President Ilham Aliyev has conditioned more than 159 services to the population in the field of labor, employment and socio-economic direction, with the formation of serious support for citizens such as unified labor relations. Thus, as a result of complex political and economic measures in our country, employment opportunities have increased, unemployment has decreased, and social payments have been repeatedly increased. The necessary elements in the production of insurance are classified and conditioned as follows.



Description 2. Source: Compiled by the author

Table 2

GDP ratio of certain revenues of the state budget

Meyarlar	2008	2012	2019	2020	2021	2022
Revenues of the state budget %	26,8	31,6	28,7	34,9	27,8	22,5
Corporate income tax %	7,5	4,5	3,1	3,5	3,4	5,19
Economic activity %	1,9	1,5	1,6	1,6	1,5	1,9

Source: Compiled by the author based on the data of the DSK

Thus, the revenue forecast of the Production Regulation Insurance Fund is 238 million manats, with equal expenses and revenues of the fund, which is 20.3 million manats or 9.3% more than the current year. Based on this forecast, in 2024, 35.7% of the expenses are for state and self-employment measures, 27.83% for the state employment service, 18.9% for the social sector services and the financing of additional education costs. Thus, by continuing the state and self-employment project in 2024, it is considered necessary to provide 10,009 people at the expense of the Insurance Fund, as well as 6,519 people on the basis of self-employment measures based on the World Bank project. Thus, it is planned that 80,519 people will be employed in software. Thus, in accordance with the decision "On the minimum living wage for 2024 in the Republic of Azerbaijan", the minimum living wage for 2024 has been determined in the amount of 278 manats for the country, 287 manats for the working-age population, 222 manats for pensioners, and 239 manats for young people [3]. At the same time, in the draft decision "On the limit of the need criterion for 2024 in the Republic of Azerbaijan", the amount of 279 manats will be 279 manats as the need criterion for the purpose of determining targeted state social assistance.

From the analysis, it is known that the measures implemented by the government in order to regulate the socio-economic criteria are predicted to be of a continuous nature. Thus, the budget possibilities for employment, population's wages, pensions and other payments are rich in our country, and the intensity of economic measures is necessary to ensure the balance. In such a political-economic scenario, the reve-

nues of the state budget are described as table.

Thus, economic stability is a reality that must be fiscally adjusted to fit the conditions and regularly regulated with insured economic support focused on sustainable growth over the general accounting period with "floating" exchange rates. It determines the inflation equilibrium based on the stability of the average interest rate in the financial market.

Thus, according to the method of stabilization of the value of money over a certain period of time, it is balanced with the condition of continuous growth. Insured growth rate or rate of growth is the incremental process of a sum of money, which generates future benefits. Thus, in financial calculations, the criterion of growth is accepted, which is adequate to the main amount of this coefficient and determines how many times the capital has increased. The mathematical nature of the profitable growth of such insured investment operations is determined as follows.

$$EAD = DA + NDA + GDA$$

Realize the basic mathematical method of insured economic growth as follows,

$$A_{IIIq} = AA + D + DA$$

Comparative analysis, human capital, natural capital, clear logical judgment considers the growth rate of economic progress to be characteristic of the "nature, society and man" model based on insured welfare in the world economy.

The higher the rate of continuous income, the more adequate it is for the insurance fund. A higher rate of return (annual rate of return) and insurance period bring more wealth, which increases the efficiency of innovative insurance.

Table 3

2024 INSURANCE BENEFIT CLASSIFICATION	AMOUNT
Net Insurance reserves	537 807,87
Investment returns	731 480, 78
Financial gain	198 895,19
Authorized capital of profit	16318,39
Net profit	102 673,55

Source: Compiled by the author based on the Insurance report of the Ministry of Finance

Thus, according to the forecast of international organizations and Table III data, global economic growth in 2025 is expected to be 2.5, 3.7%. In Azerbaijan, according to the official forecasts of the government, at first there was an expectation that the GDP would increase by 3.5 percent this year. That forecast was revised and 1.8 percent growth was predicted by the end of the year. During the 10 months of the current year, the oil and gas GDP in the country decreased by 1.5%, while the non-oil and gas GDP increased by 3%. However, due to the impact of the decrease in the volume of oil and gas GDP, GDP increased by only 0.5% during the 10 months of this year and conditioned the global economic growth. The average annual growth rate in Azerbaijan was 4-5 times the global growth rate, and in some years 7 and 9 times.

The condition of continuous economic price increase in the world market is characteristic of a stabilizing economic countermeasure against monopoly. Thus, in the coming years, innovative insured economic growth for Azerbaijan was targeted on a sustainable basis, in this direction, it was considered necessary to implement a complex of programmatic measures. In this direction, the growth and efficient use of budget funds is conditioned by the guarantee of the execution of the planned insurance duties [7].

Thus, the trajectory of rapid economic growth in Azerbaijan consists of the systematic strengthening of the innovative development model with the intensity of the fight against monopoly. Thus, achieving the effectiveness of the fiscal, monetary, guiding and encouraging

criteria of financial and monetary policy in the environment of insured economic competition, increasing the efficiency of the volume and quality of investment in non-oil production areas, and increasing new jobs with progressive prospects are conditioned [6]. In the current conditions, the major part of the insurance market is the necessary direction of this type of insurance. Civil insurance is modified by different methods in some countries.

Conclusion

As a result of the research, it was determined that insurance income in Azerbaijan is important in the growth of GDP, foreign economic activity and the effectiveness of investment efficiency is based on political and economic stability. Thus, the political-economic forecast of 2025 based on the EA(IIIq) acceptance formula, the development model of the mathematical criteria determines the direction of progress.

The socio-economic insurance trend in the Azerbaijani market with world experience is adequate in comparison with foreign countries. Thus, the insurance economy is relevant in our republic, but insurance as an investment tool requires compatibility with the service of human well-being. For this reason, the President of the country Ilham Aliyev's decisions "On Labor Pensions" considered the regulation of the insurance balance a priority. The state social insurance system in Azerbaijan requires the intensity of "State social insurance" measures for every insured citizen to ensure labor pension and other rights in the field of social protection.

The mathematical description of these insured economic requirements,

It determines the formula

$$A_{IIIq} = AA + D + DA.$$

Sustainable human progress has been considered to be of critical importance for countries rich in natural resources and innovative insurance adequacy of existing knowledge and skills. In such conditions, the main goal is "future development" and "progress assurance". So, how to protect the quality of the environment and direct natural resources to the state's interests is considered as a requirement of the current political and economic conditions. Here, sustainable progress and growth of the population's well-being are decisive in the formation of human development and human rights.

Thus, the economic strength of each country is determined by the main industrial potential and the position of insured innovation subjects in production. In our opinion, the most important conditions for the organization of the ef-

ficiency of production resources in the insurance economy of Azerbaijan and the regulation of a number of socio-economic problems that have arisen in the country are the improvement of the economic structure of industrial production.

REFERENCES

1. *Ilham Eliyev*. Development is our goal, book 13.
2. *Mammadov N.I.* Introduction to Geopolitics, Baku, 2022.
3. *Elirzayev A.* Basic principles of socio-economic welfare and management. Baku, 2020
4. *Eleyev I.H.* The form and principles of the model of economic progress. Baku 2022.
5. *Allahverdiyev D. I.* World economy: Economic interests, current realities and perspectives, Baku, 2022.
6. *Aliyev F.A.* Development perspective of Azerbaijani science. Baku, 2022.
7. *Allahverdiyev H.* Fundamentals of state regulation of the economy, Baku, 2008.

*Institute of Economics of the National Academy
of Sciences of Azerbaijan
dagbeycahani@gmail.com*

MÜLKİ SİĞORTADA MALİYYƏ HESABLAMASININ GƏLİR VƏ MƏSRƏF TARAZLIĞI

D.İ.Allahverdiyev, K.A.Ağayeva, Y.C.Binnətov

Tədqiqatın məqsədi ölkə iqtisadiyyatında ÜDM-in artım tempi və iqtisadi səmərəliliyinin əhəmiyyəti, vətəndaşların gəliri və mülki sığorta riyazi metodlarla təhlil edilmişdir. Sığortanın vətəndaş rifahında təminat meyarı və sığorta güzəştlərində mənfəətin effektivliyi elmi əsaslarla şərh edilmişdir. Sığorta fəaliyyətində innovasiyalı iqtisadi subyektlərin maraq və mənafeləri müəyyənləşdirilmiş, real siyasi-iqtisadi mənzərədə sığorta hesablanması araşdırılmışdır. Sığortanın iqtisadi tərəqqidə, siyasi-iqtisadi münasibətlərdə, makroiqtisadi sabitliyə təsirinin səbəb və nəticə əlaqələri müqayisəli tədqiq edilmişdir.

Açar sözlər: dövlətin sığorta siyasəti, sığortalı iqtisadi mənzərə, effektivliyin mahiyyəti, maliyyə tərəqqisi

ДОХОД ФИНАНСОВОГО РАСЧЕТА В ГРАЖДАНСКОМ СТРАХОВАНИИ И БАЛАНС ПОТРЕБЛЕНИЯ

Д.И.Аллахвердиев, К.А.Агаева, Ю.Дж.Биннетов

Целью исследования было проанализировать значение темпов роста ВВП и экономической эффективности, доходов граждан и гражданского страхования в экономике страны с использованием математических методов. На научной основе интерпретированы критерий гарантированности страхования благосостояния граждан и эффект прибыли при страховых выплатах. Определены интересы и стимулы инновационных экономических субъектов в страховой деятельности, исследован страховой расчет в реальном политико-экономическом ландшафте. Сравнительно изучены причинно-следственные связи влияния страхования на экономический прогресс, политико-экономические отношения и макроэкономическую стабильность.

Ключевые слова: страховой полис государства, застрахованный экономический ландшафт, природа эффективности, финансовый прогресс