

# New Economic Instruments of State Regulation of Private Savings, Social Security and Pension Support

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## Abstract

In the conditions of market infrastructure for the transformation of medical services, there is an objective need to build effective insurance protection of the population against risks associated with loss of health. Using a systematic approach, the problem of combining compulsory and voluntary health insurance is investigated, a theoretical conceptualization of the concept of “financial mechanism of public health insurance” is carried out. The solution of the above problems will contribute to the development of an adequate approach to the formation and use of funds of insurance funds for the effective functioning of the health insurance system. Also, the development of a more rational structure of public health will meet the needs of protecting property interests related to loss / deterioration of health.

**Keywords:** Economic instruments, Private savings, Social security, Medical insurance, Pensions.

## 1. Introduction

In the conditions of the market infrastructure transformation of medical services, the refusal of administrative management of health care institutions financing and the transition to a world-recognized model of financing - money follow the patient, there is an objective necessity to build an effective insurance protection of the population from the risks connected with health loss and systematic approach to consideration and study of the problems of compulsory and voluntary health insurance combination. The solution of the above mentioned problems will contribute to the development of a more rational structure of health care services of the population and will meet the needs in protection of property interests associated with the loss / deterioration of health.

The world's experience shows that the biggest success in solving problems of strengthening of population health have been achieved by those countries that have built health insurance mechanisms into health care systems. The choice of the variant of construction of insurance protection system for population from the risks of loss / deterioration of health depends on different political, economic and demographic conditions. The universal solution of problems for providing population with accessible and high-quality medical services does not exist, but the solution of this issue is possible due to a combination of mechanisms of compulsory and voluntary health insurance, self-insurance and mutual insurance, which requires consideration of complex concept - the

financial mechanism of insurance protection of health of the population and evaluation of the effectiveness of its functioning in modern Ukraine.

Economic growth is the main condition for the sustainable functioning of the financial system, and one of the key issues is the formation of a sufficient level of investment, and as a result of the rise of national well-being. Saturation of the economy with investment resources is a complex and multifaceted task, the solution of which will allow achieving stable growth of the economy. One of the largest sources of investment in the economy is household savings. Considering the current development of the Ukrainian economy and the low level of realization of the savings potential of the population, they are perhaps the most important investment resource of the economy.

In the modern world, each country chooses its own way of building a pension system, taking into account the specifics of the development of its demographic and socio-economic functioning. The main vector of reforming the pension systems is the creation of a stable and socially equitable system of pensions that would guarantee the citizens of the elderly and the disabled a stable income and a decent standard of living after losing their ability to work (Law of Ukraine, 2003).

The financial aspects of the insurance market development and the organization of cash flows in insurance were investigated by Ukrainian scientists. Theoretical and practical aspects of the organization and functioning of voluntary health insurance (VHI) have been reflected in the writings of foreign scholars and practitioners of insurance business (Babenko et al, 2019a).

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The questions of the theory and practice of pensions and pension reforms are being explored by many domestic scientists. Thus, the essence, the functional purpose of pensions and their provision, and the peculiarities of the mechanisms for managing the pension system are justified in the writings of the following authors: B. Zaichuk (2001), V. Ishkov (2002), and others. The processes of the state pension provision reforming have also been reflected in the writings of such researchers as M. Rippa (2009), V. Tkach (2005) and others. However, despite the existence of a sufficiently large scientific output, further scientific research on ways of reforming the pension system of Ukraine in the changing conditions of unfinished pension reform and the emergence of new challenges and threats to its implementation remain relevant.

## **2. Materials and Methods**

In general, the domestic literature examines common trends in the development of medical insurance in Ukraine and foreign countries. It describes the opportunities that will receive the health care system of the country after its reformation and introduction of compulsory health insurance (CHI) and after the use of it is voluntary form, without specifying methods of practical realization of these opportunities within the framework of the integral functioning of the financial mechanism of insurance protection of health of the population in Ukraine.

The necessity to evaluate the effectiveness of functioning of the existing financial mechanism of insurance protection of the population is the confirmation of relevance and practical significance of the subject of this study.

It will be found out the content of the components that form the concept of financial mechanism of insurance protection of health, namely financial mechanism, insurance protection and health.

## **3. Results and Discussion**

### *3.1. Social and health insurance*

Human life is a complex of many elements, each of which has its relative value and, depending on the situation, can be replaced by one another. Thus, a person can stay single - without creating a family, use public transport - not having the ability to buy a car or evaluating the economic inexpediency of this acquisition, live without a permanent job - applying freelance or living at the expense of others, the only value that can not be replaced by something else is health. In modern realities, health is a value, as it serves as the basis for ensuring the quality of person's life. More than two hundred definitions of the concept of "health" are presented in the scientific articles. It is the subject of scientific research by philosophers, physicians, economists, sociologists, and the focus of attention of politicians and medical functionaries.

Thus, according to the WHO, health is a state of complete physical, mental and social well-being, and it is not just an absence of disease or physical disability (WHO, 2020). Loss of health in the narrow sense (a disease or a physical

disability) can cause a variety of socio-economic consequences both for the individual and for society as a whole. Considering this, it is important to examine the issue of a financial mechanism formation for the insurance protection of health of the population from the risks of losing health and its consequences (Prikazyuk and Yukhimenko, 2014).

In scientific circles, there are two points of view on the nature of the financial mechanism, the first one is based on the functioning of finance, which is expressed in the organization, planning, management of cash flows and control over the processes of formation and use of financial resources, and the second one is based on the fact that, it is a set of forms, methods, techniques, and tools (Kwasnycy, 2014).

For the purposes of our study, fairly accurate is the interpretation of the financial mechanism of authorship of the O.D. Vasilik (2001). He defined it as a complex of specially developed and legally established forms and methods for the creation and use of financial resources to ensure economic development and social needs of citizens (Vasilik, 2001). It confirms the objective financial mechanism existence of insurance protection of health of the population.

At present, in the economic literature, there is not a single approach to defining the concept of "insurance protection", various authors interpret this concept in different ways. The situation is strange when the definition is widely used in insurance research and insurance practice and at the same time, there is no clear interpretation of it.

In Soviet times in the domestic insurance science the insurance protection was understood as the system of economic relations, aimed at preventing, overcoming, localizing the devastating effects of natural and other disasters, as well as compensation for losses in the planned economy (Kushchenko, & Shkiria, 2019). Insurance protection has included not only insurance funds formed by the insurance method - by regular contributions of legal entities and individuals, but also national (centralized) reserve funds, decentralized insurance reserves created by enterprises and organizations, and household savings (self-insurance).

The conducted analysis of work on insurance topics allows us to conclude that the category "insurance protection" is often identified with insurance as a synonym for the implementation of direct insurance and reinsurance. The features of the category "insurance protection" are: the accidental nature of the occurrence of an adverse event, the expression of loss in cash or in natural form, the objective need for compensation, the implementation of measures to prevent and overcome the consequences of a particular adverse event (Malyarets et al., 2019). All these features are inherent in insurance protection of health, and its main characteristics are insurance risk and insurance interest.

The above mentioned makes it possible to give the following definition of the "financial mechanism of health insurance of the population" as a way of influence on the subsystem, which includes regulatory, administrative,

organizational and informational support for the formation of funds for the financial support of citizens in case of risk of deterioration / loss of health by means of the application of financial methods, financial techniques and instruments, to finance measures for the conservation and development of biological, physiological, psychological functions, optimal working capacity for work and social activity with the maximum duration of active life (Sholom, 2019).

Analyzing the indicators of the development of Ukrainian market for voluntary health insurance, presented in Table 1 and Figure 1, we can state that this segment is in the

initial stage of its development. The volume of collected insurance premiums is miserable and does not provide a solution of the problem of financial provision of domestic health care institutions, and the amount of insurance payments made, per one insured person, is insufficient to compensate the costs incurred for treatment and rehabilitation (Babenko et al, 2019b). The existence of voluntary health insurance, in the presented today format, does not solve the existing problems of patients (insured persons) or medical institutions (providers of medical services) and does not have commercial interest for insurers providing such insurance services.

Table 1  
The main indicators of the development of voluntary health insurance in Ukraine in 2016-2018 years \*

Year	2016				2017				2018			
	CHI	MEI	HIS	Together for VMI	CHI	MEI	HIS	Together for VMI	CHI	MEI	HIS	Together for VMI
Insurance premiums (IPr), mln. UAH.	1929,2	490,7	269,5	2689,4	2355,5	727	292,6	3375,1	2881,3	891,0	405,1	4177,4
Share in IPr. %	71,7	20,8	10,0	100,0	69,8	25,2	8,7	100,0	69,0	21,3	9,7	100,0
Share in IPr on the market, %	–	–	–	11,9	–	–	–	12,6	–	–	–	12,0
Insurance payments (IP), mln. UAH	1198,5	169,2	47,4	1414,3	1341,4	216,8	23,7	1581,9	1672,1	263,5	32,6	1968,2
Share in IP, %	84,7	12,0	3,5	100,0	84,8	13,0	1,5	100,0	85,0	13,4	1,7	100,0
Share in IP on the market, %	–	–	–	22,8	–	–	–	24,2	–	–	–	25,9
Level of payments, %	62,1	34,5	17,6	52,6	56,9	29,8	8,1	46,9	58,0	29,6	8,0	47,1

Note. \* Calculated by the authors according to the reports of the State Statistics Service of Ukraine <http://ukrstat.gov.ua>.

Average annual indicator for the period from 2016 to 2018, the total volume of gross insurance premiums for health insurance, including continuous health insurance (CHI), health insurance for sickness (HIS) and medical expenses insurance (MEI), amounted to 3375.1 million UAH (Consolidated reporting data, 2016-2018). The share of gross insurance premiums for the analyzed types of insurance from the total volume of the insurance market is 12.6%, which indicates the existence of insurance interest of consumers in insurance medical services.

There was the growth of insurance payments, but at a lower rate - 11.8%, which positively affected the financial performance of companies in this segment of insurance. It was reflected in the level of payments, which in 2017 amounted to 46.9%, which was 5.7 pp lower than in the previous year. In 2018, growing tendencies persisted, but the growth rate of insurance premiums amounted to 23.8%, and the share of VMI in the total amount of insurance premiums collected by companies was 12.01%. The volume of insurance payments made in 2018 increased by 24.4%, due to rising prices for medicines and medical supplies, as well as an increase in the cost of medical interventions. The level of payments in the analyzed year was 47.1%.

Analyzing the structure of bonuses received from insurers under the VMI contracts, we can draw conclusions about consumer preferences of policyholders. Thus, during 2016-2018, the structure of collected insurance premiums is dominated by income from continuing health insurance

contracts - 71.7%, 69.8% and 69.0%, respectively, in 2016, 2017 and 2018. This implies that this type of VMI has found its consumer and, in terms of quality indicators, it satisfies the needs of policyholders against the risks associated with health loss.

We note the reduction of the share of insurance premiums under medical insurance contracts - from 25.2% in 2017 to 21.3% in 2018, it does not exceed 10 percent and the amount of premiums collected under sickness insurance contracts is 8.7 and 9, 7% in 2017 and 2018, respectively. This indicates a change in the priorities of the insured, namely: the insurance payment becomes effective at the moment of obtaining the medical service, and not after the submission of documents confirming the fact of the loss of health and receipt of medical services, as in the insurance of medical expenses. One of the disadvantages of sickness insurance is that the amount of payment may be significantly lower than the actual costs incurred for the treatment of a specific illness (the payment for a specific illness is limited to a fixed amount specified by the rules / insurance contract).

To talk about insurance indemnity, we can conclude that the share of insurance payments under health insurance contracts in their total amount under insurance contracts was 22.8% in 2016, in 2018 - 24.1%, and at the end of 2018 increased to 25.9%. At the same time, in the stated period, the level of payments on the market was in the range of 21,9-27,4% and showed a steady tendency to decrease. However, in the VMI segment, we can see the

opposite situation - the level of payments is increasing and is twice as high as the average on the market.

The consideration of the fundamentals of the organization and functioning of the financial mechanism of the VMI in the financial mechanism of insurance health protection has made it possible to draw the following conclusions. It is not clearly defined the place of the CMI in the system of insurance of citizens and the list of medical services provided within the guaranteed amount of medical care; the subject complex of the VMI is not regulated and its rights and obligations are not defined. The activities of assistant companies remain apart from the attention of legislators; it is not foreseen to create their nationwide network.

The analysis of the segment of voluntary health insurance in the domestic insurance market indicates a scarcity of funds accumulated in this way to finance the health sector. Assessment of the state of insurance operations with VMI suggests that, despite the nominal growth of the main indicators of the development level of the VMI market, its share is very insignificant in terms of the amount of insurance premiums collected and insurance payments made. Insurers do not accumulate significant amounts of financial resources that could substantially improve the state of health care financing and make health care available and affordable to patients / insured persons.

The largest share in the amount of insurance premiums collected by the VMI in 2016-2018 is continuous health insurance and medical expenses insurance; as a result insurance for the disease loses its former popularity. An open question remains about the existence of long-term medical insurance in Ukraine (critical sickness insurance, long-term care insurance, etc.), for the development of which it is necessary to develop appropriate regulatory and methodological support.

### 3.2. Household savings

In terms of the formation of the financial mechanism for the transformation of households' savings, an insufficient theoretical and organizational basis for attracting public savings begins to play an important role. The imperfection of the legislation during the transition to market economy has contributed to the development of unscrupulous financial companies, which resulted in proliferation of Ponzi schemes. That resulted in drop in the welfare of the population, as well as distrust to financial intermediates. In such circumstances, it becomes impossible to activate savings investing without the combination of market and government regulation. In our opinion, the state should play an active coordinating role in the process of forming of a new mechanism for administrating the savings process.

The households process is also considerably affected by the stability of the political situation in the country. In an unstable situation, citizens invest in foreign currencies or other valuables, export money illegally to other countries, fearing not only their savings would devalue but also could be confiscated. On the contrary, under conditions of political stability, the population is always actively investing their savings in local-currency denominated debt.

There is a direct correlation between the favorable economic situation in the country and the savings process. Increasing the savings that are needed to finance investments can stimulate economic growth and further increase savings. This correlation is, more or less, is evident in most developed economies, but the mechanism for converting savings into investment may vary significantly.

In order to identify the relationship between the dynamics of nominal GDP, income and savings of the population, the yield on deposits, the official exchange rate and changes in the volume of household deposits, according to the data for 2010-2018, a correlation matrix is presented in Table 2.

Table 2

Correlation matrix for nominal GDP, nominal households' income and savings (according to the data for 2010-2018) \*

	GDP	Household income	Household savings	Deposit yield	FX rate	Deposit growth
GDP	1					
Household income	0.99	1				
Household savings	0.71	0.76	1			
Deposit yield	0.92	0.95	0.80	1		
FX rate	0.79	0.83	0.82	0.91	1	
Deposit growth	0.35	0.33	0.29	0.13	-0.11	1

Note. \* Calculated by the authors according to the reports of the State Statistics Service of Ukraine <http://ukrstat.gov.ua>

Analyzing the data presented in the correlation matrix given in Table. 1 the level of correlation between GDP and nominal income is estimated at 99% (because GDP consists for 70% of household income). The nominal savings of the households correlate with the dynamics of GDP by about 71% and with nominal incomes of the households by about 76%.

Another important factor in increasing or decreasing households savings is the unemployment rate. With the decline in employment and rising unemployment, the opportunity to save money is lost, as all previously earned income is spent on daily consumption. The level of savings of the population based on their income distribution is inversely proportional to the unemployment

rate. Moreover, in times of economic downturn, a significant proportion of the population entirely consumes their savings on earned during economic growth stage (Kulesha, 2008; Petrenko, 2006).

Activation of the savings process is facilitated also by a neutral and stable budgetary policy, in particular, a deficit-free budgetary policy. In particular, the size of household savings is affected by the mechanism for collecting taxes related to household income. These are tax incentives and tax exemptions for personal retirement accounts, preferential taxation for investments etc.

The process of household savings growth is also influenced by factors such as population age, gender, family composition, education, profession, as well as labor movement and seasonality of work. Single people save less than families, and financially affluent families are more interested in savings. There are almost no savings for families with three or more children and low income families. In most cases, such families need state support. To a large extent, the potential for savings depends on the education, skills and employment of the working age population. Higher education provides more skilled work and higher incomes. In addition, more educated individuals understand the value of savings. With age, a person's income and attitudes to savings also change (Olynyk and Romanyuk, 2010). Middle-aged people not only cover their current expenses, but also have the potential to save money, with good income. Older people, when retired, often spend more than they receive using previously earned savings. Often this is due to the fact that they try to maintain and not reduce the consumption level.

Regarding the seasonal nature of labor, as a factor that influences the size of the household savings, it can be noted that in rural areas where seasonal agriculture prevails, the incomes of the population are seasonal. Therefore, employees can only save money periodically. And in regions where industrial production is predominant, population generally receives regular income. Continuous employment makes it possible to replenish savings regularly (Petrenko, 2010).

The fact that the unorganized savings of the population are neutral for economic growth, we can conclude following:

- the financial potential of the population is not utilized (realized) by means of indirect investment via consumption or through a system of organized savings;
- the population of Ukraine is uncertain about its expectations and, despite the sharp rise in organized savings, seeks to keep a large portion of its financial assets in cash;
- the existing financial potential of the population has to be realized fast, the longer it remains in an inactive form, the greater the damage it entails for society and economy;
- hypertrophied propensity to consumption (as can be seen from the dynamics of lending), most likely will lead to the use of financial potential of population for consumer spending, which can have both positive and negative consequences for the innovative development of the economy;

- formation of the financial potential of the population, obviously, occurs due to the significant influence of shadow incomes of citizens, that, in turn, presents a field for separate study (Vodolazska, 2008).

Improvement of the system of management of household savings accumulation suggests the use of a comprehensive approach aimed at the gradual realization of a number of specific tasks:

- identifying the region's need for additional financial infusions (incl. on the part of the population), carrying out calculations and substantiation of the role of local household savings in realizing the economic development of the region and identifying the necessary conditions for their involvement;

- analysis and assessment of the savings potential of the population. The priority here is to use not so much official statistics, but rather direct information from the population obtained through sociological surveys. Determining the level of readiness of the population to save money (but also to a greater extent their willingness investment) involves identifying the key points of citizens' saving activity, which include:

- the amount of savings potentially applicable for investing;
- priorities in allocation of savings of the population;
- influencing factors and motives for saving money;
- the key characteristics of different population groups and the characteristics of their savings behavior;

- appealing instruments for attracting savings, based on population preferences and national priorities. The specificity of management at this stage is to effectively use the savings on a mutually beneficial basis, with a focus on the priority interests of the owners of the assets;

- improvement of identified priority instruments in order to more effectively accumulate population savings. Legislative underdevelopment, insufficient economic development and territorial distribution of financial intermediaries, which resulted in the weak use of private savings, necessitate the immediate implementation of this stage (Basilevich et. al, 2008; Petrenko, 2010; Vodolazska, 2008).

In order to stimulate the regeneration of the investment potential of the population, the following measures should be taken:

- 1) to increase the level of remuneration of the population by introducing reduced tax pressure on personal income and keeping a tax base low;

- 2) implement a mechanism for activating direct investment use of household savings through targeted investment accounts for investing in non-financial corporations and investing through the banking and parbank institutions;

- 3) carry out a number of incentive measures in the sphere of financial services in order to increase depositor confidence and activate the savings process (creation of a Deposit Guarantee Fund for non-banking institutions, repayment of the Savings Bank's debts to the public through housing construction and repayment of loans, etc.);

4) create conditions for consolidation and strengthening of the system of banking and parabanking institutions, intensification of competition between these structures in the issue of attracting clients and expansion of liabilities;  
5) to develop a system of state mortgages that would serve as an incentive tool for the use of savings in housing construction and at the same time serve as an additional source of national income.

### *3.3. Pension System*

In the economic literature, the concepts of "pension" and "pension reform" are used quite often. In its socio-economic sense, the concept of "pension" (from the Latin pension is payment) is a special form of cash payment to citizens, which must adequately compensate for the amount of earnings or other regular income from labor or other socially useful activities that have been lost for such reasons as, for example, the onset of the statutory age (old age), invalidity, survivors' pensions or other grounds stipulated by the legislation established by the legislation. It should be noted that the concept of "pension" has a combined financial-insurance and social and labor nature. This significantly distinguishes it, on the one hand, from banking, corporate and other ways of obtaining cash income in the form of dividends, which depend only on the size of capital, and on the other hand - on various types of state social benefits that are conditioned exclusively by social standards or special merits before the state (Luhovenko, 2010; Yakymiv, 2001).

The concept of "pension reform" is interpreted by individual researchers as: "a complex, systematic measure of enormous complexity, which requires quite a high managerial potential, set before the need to simultaneously solve the set of urgent current tasks, as well as strategic problems" (Sandler, 2005); "a complex, multifaceted and complex process that must significantly change the balance of political, economic and social interests of the population, the system of public finances, the functioning of labor markets and capital (Shamanska, 2010), etc. In our opinion, under the pension reform we suggest to understand a set of measures aimed at improving the structure and mechanism of functioning of the pension system aimed at improving the level of retirement pensions for pensioners.

The analysis of pension reforms in countries with a developed market economy suggests that ways of modernizing the national pension systems are diverse. Currently, three main approaches to the reform of the state pension systems are: firstly, the preservation of the distribution system - the use of a "parametric approach" with adjustments to certain parameters of the pension system: secondly, maintaining the bases of the distribution system with the introduction of the accumulation level, while simultaneously the distribution system is improving and the accumulation system is gradually being added in the form of revenues of the established share of the pension contributions to the accumulation accounts of public or private pension funds; thirdly, the transition to a fully cumulative pension system with the transfer of rights

to retirement funds to the private pension funds (Busel, 2005; Melnychuk, 2006).

The common approach to these three to pension reform is that they are based on a new approach to social policy, when the increase in social protection of the population does not mean that the state spends more and more money in support of its retired citizens, but in order to create the conditions when citizens can provide a decent standard of living after retirement themselves.

The choice of the structure of the pension system is determined by a complex set of economic, social, historical and cultural conditions of society's life. The formation of acceptable models of the national pension systems for the country, the development of their qualitative and quantitative characteristics, is possible only as a result of public agreement on the distributive relations between the state, able-bodied and disabled members of society in relation to the ratio of wages and pensions, the degree of their differentiation, as well as ways and forms of social policy. Such consent is formed under the influence of economic and social realities, cultural and national traditions of a country, and its implementation is ensured by the creation of the state of the relevant legal, organizational and economic foundations of the functioning of the pension systems (Rad, 2009; Zaichuk, 2001).

The formation and the development of pensions in each country has its own peculiarities and periods that are different from other countries. In order to identify the stages of the pension system development in Ukraine, we will take into account socio-economic, normative-legal and regulatory criteria. Thus, the first stage of the pension system formation began in 1991, when Ukraine became an independent state, and therefore had to have its own legislation on pensions. On November 5, 1991, the Verkhovna Rada of Ukraine adopted the Law of Ukraine "On Pension Provision". According to this Law, all non-able-bodied citizens were guaranteed the right to material security at the expense of public consumption funds through the provision of labor and social pensions. This stage of the formation of the pension system lasted until 1998 and was characterized by the fact that the pension system was based largely on the provisions similar to provisions of the Soviet pension legislation.

The second phase of development of the pension system of Ukraine - is 1998-2003 years. During this period, work was conducted to determine the areas of pension reform model developed by the new pension system in Ukraine, which would correspond to market conditions, regulatory support measures were worked out for its implementation. The Decree of the President of Ukraine "On main directions of pension reform in Ukraine" in 1998 (Presidential decree, 1998) provided the creation in Ukraine a three-tier pension system that combines elements of public and private pensions.

The above mentioned date can be considered as the start date of the next, the third stage of the pension system development of Ukraine - the stage of practical implementation of the pension reform, which lasted until mid-2011. Thus, a new, fourth stage of the pension system

in Ukraine, we believe, began in 2011, when a significant change in terms of premium payments to the Pension Fund and pension arrangements disabled citizens.

What is the essence of the current stage of pension reform in Ukraine? To answer this question, let us consider the model of the current pension system in Ukraine more. According to the Law of Ukraine "On Compulsory State Pension Insurance" (On Compulsory State Pension Insurance, 2020), the model of the pension system of Ukraine has three levels. But in fact, Ukraine's pension system has two levels: the first that is the solidarity system of compulsory state pension insurance and the third that is the voluntary private pensions. The second level is the accumulative system of compulsory state pension insurance that has not been introduced yet.

The system of non-state pension provision is created for the formation of additional pension savings at the expense of voluntary contributions of individuals and employers. In accordance with the Law of Ukraine "On non-state pension provision" (Law of Ukraine, 2003), this type of pension is provided by non-state pension funds (hereinafter - NPF), insurance companies, banking institutions.

The three-tier pension system is more financially balanced and resistant to the negative effects of both economic risks (the impact of which is more felt in the accumulation system), as well as political and demographic risks (which are more sensitive to the solidarity system). Such a system is better suited to solving retirement benefit tasks, it has more flexibility and is more clearly oriented to the main target groups, is able to provide citizens with more pension income on the basis of diversification more efficiently and rationally.

Creating an adequate market economy for the pension system will increase the level of responsibility of citizens for their fate, will encourage them to postpone the part of their earned money to old age, help overcome paternalism and expectations, adapt more quickly to new living conditions. The development and implementation of pension reforms should be aimed at promoting the economic growth and development, minimizing possible distortions in the functioning of capital markets and labor force. To do this, it is necessary to ensure the implementation of the related economic objectives aimed at reducing the possible adverse consequences of the introduction of pension systems for labor markets and macroeconomic stability, with the most effective use of positive results by increasing the volume of national savings and the development of financial markets (Bybyk and Siuta, 2006; Tkach, 2005).

Taking into account the inevitable nature of the aging process, the Ukrainian society considered a ball of options for the development of the Ukrainian pension system.

First: leave the pension contribution and the amount of budget subsidies unchanged. In this case, the replacement rate of earnings by pensions (their insurance part) will decrease from the current 40% to 35% in 2025 and 28% in 2050. As a result, we get the reduction in the living standard of pensioners, turning them into the poor.

Second: ensure that the replacement rate (the ratio of average pensions and wages) and the amount of subsidies to the PFU from the budget at the current level are maintained. In this case, there will be a need to ensure the Pension Fund's deficit-free ratio at the expense of the increase of pension contributions, which in modern Ukraine is one of the highest in Europe, up to 40% in 2025 and up to 50% in 2050. Increase in deductions for the needs of pension provision from the fund wages will lead to a decrease in the real wages of employees.

Third: keep the pension contribution and replacement rate intact, then the Pension Fund deficit will have to be covered by the increase of state budget subsidies. This could lead to a progressive increase in public pension liabilities. If, in the future, the state budget compensates for the shortage of the insurance pension system, it is also due to the increase in the demographic load, then in 2025 it should replace 12% of its funds, and in 2050 - 30% of the amount of the pension contribution deficit. But will the budget of Ukraine be able to assume the fulfillment of such a large part of the obligations within the framework of pension insurance, and if so, then what will it turn out to finance other social articles (education, health care, culture, social assistance for the poor and families with children, etc.)?

Fourth: increase the retirement age, which in the conditions of aging population is the most appropriate solution. Increasing the retirement age has a positive effect on the financial capacity of the pension system, since it allows simultaneous reduction of expenditures (reducing the number of recipients of pensions or at least slowing down their growth rates) and increasing revenues (prolonging the length of the labor period, increasing the number of employed people and pensioners). An increase in pension contributions for fewer retirees allows pensioners to increase their pensions, while extending the length of their insurance record will increase the pension rights of future generations of pensioners.

Fifth: limit the pensions of working pensioners. After all, while working pensioners will be able to receive pensions and salaries in full without restrictions, it will be difficult to really raise the retirement age. Negative consequences of such a choice can be the refusal of a significant number of pensioners from continuing their work or concealing existing labor relations; the loss of highly skilled educators and healthcare providers, because in these sectors there is a very high proportion of working pensioners.

Sixth: limit the right to early retirement from the solidarity system for work in harmful conditions. The consequences of such a choice may be the massive dismissal of workers employed in work with harmful and especially harmful working conditions, the resistance of employers and trade unions, lack of inflow of new staff in the relevant branches, because the right to early retirement is one of the factors of choice of the profession of a miner, a chemist, metallurgist, etc.

Seventh: limit the maximum amount of a pension from the joint-stock system.



#### 4. Conclusion

Macroeconomic problems which restrain the development of the VMI market are the low solvent demand of the majority of individuals and legal entities, significant payroll taxes, the absence of tax benefits for citizens who have purchased insurance health insurance from insurers, etc.

The insurance problems are the increase in the level of payments under the VMI contracts, which require increased attention to the methodology of actuarial calculations, which, in turn, are constrained by the absence of necessary statistics on the state of morbidity of the population; in most cases existing medical statistics for insurance companies is unsuitable for these goals. The organization of the underwriting process, which in addition to the medical one should include both financial, as well as the formalization of the stages of their implementation, is insufficiently worked out. There is no transparent pricing methodology for medical services, which makes it impossible to calculate an adequate size of an insurance fund.

Thus, based on the systematic approach, the theoretical conceptualization of the concept "financial mechanism of insurance of health protection of the population" will promote the development of an adequate approach to the formation and use of money of insurance funds for the effective functioning of the health insurance system.

Study of foreign experience of stimulating savings and peculiarities of functioning of the mechanism of attracting population savings to solve major macroeconomic problems, allows us to propose such a set of measures for implementation in Ukraine.

Firstly, it is necessary to improve the existing deposit guarantee system through:

- optimization of the size and conditions guaranteed deposit sum payout for credit unions (taking into account the specific risk factors of this segment);
- development of a model of a deposit guarantee fund for participants of investment funds (for example, guarantee funds were created in the Baltic countries - state institutions that generate guaranty contributions to investment funds and compensate for potential losses of the population), thus guaranteeing deposits not only in banks and pension funds, but also into investment companies.

Secondly, it is advised to use government securities as a financial tool for mobilizing public savings and attracting temporarily free funds. Such practices should be introduced on the principles of simplification, convenience and accessibility of government securities for the public - branching of the network of distribution channels with involvement of banks, credit unions, post offices, financial intermediaries, insurance companies, pension funds, investment companies.

Third, the National Retirement Savings Plan has to be introduced (such programs are in place in the US (Payroll Savings Program), Canada (New Canada Savings Bond Program, Canada Retirement Income Fund, Canada Retirement Savings Plan), the United Kingdom and other

countries, and ensure effective transformation of current savings of the population into reserves of future pension insurance on the principles of:

- simplicity and accessibility for citizens;
- flexible individual pension payment schedule;
- use of state investment instruments;
- no transaction fees for transactions with state bonds;
- employers' assistance such program enrollment (Busel, 2005).

That said, solving the problem of population savings management requires increasing public attention to all major spheres of life of society and is vital for improvement of the financial system and stimulating of economic growth.

For the majority of Ukraine's population, the need for radical changes in the pension system is obvious. However, the existing economic and demographic problems in the country substantially complicate the reform of the current system. The high social significance of pension reform for the population requires careful comprehensive analysis and the development of an appropriate national strategy. The choice of the best option for reforming the pension system should take into account the priorities of the overall strategy for socio-economic reforms, that is, not only the problem of pension reform, but also reforms in other areas, in particular restructuring of production and employment, modernization of the health care system, etc.

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#### Conflict of Interest

The author declares that there is no conflict of interests regarding the publication of this manuscript. In addition, the ethical issues, including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, and redundancy have been completely observed by the authors.

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