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Improving The Efficiency of Investments in The National Economy of Accumulative Pension Funds

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Abstract: An investigation analyzes the investment efficiency of national funds directed through accumulative pension systems in Uzbekistan to improve financial stability and social security programs. The research analyzes how both high financial risks and inflation undermine the reliability of the accumulative pension system. A research assessment demonstrates how investment concentration affects an unstable fiscal environment while showing that sufficient financial tools should protect pension fund longevity and value. The paper assesses Uzbekistan's pension system through international benchmarking data that examines best practices from around the world to determine what would work in the Uzbekistan pension setting. Returns grow and risks decrease because investment portfolio diversification combines with strategies that include risk insurance together with asset allocation. Pension management requires digital modernization together with regulatory changes combined with strategic policy approaches to boost efficiency and transparency. The research endorses progressive investment tools along with incentives which would build trust between public members and the pension system. This study demonstrates that Uzbekistan can enhance both long-term economic stability and social security by filling current fund gaps alongside implementing new financial approaches for strength and sustainability of its accumulative pension system.

Keywords: Pension System, Pension Funds, Financial Risk, Investment, Reform, Pension Payments, Working Populations

1. Introduction

Currently, improving pension provision is one of the most global problems in the world. Discussions at the international level about improving pension systems began with a World Bank report published in 1994 on the pension crisis related to the aging of the population. The report noted that due to the increase in the life expectancy of pensioners in most countries as a result of the shortage of pension systems based on the principles of "generational solidarity" and strict allocation of funds, many countries pay special attention to a positive solution to this problem. The purpose of pension system reform is to introduce a minimum pension that can ensure a minimum standard of living for a pensioner, ensure a direct relationship between contributions paid during the course of work and the size of the pension, and differentiate sources of financing for pension payments.

In the countries of the world today, due to the increase in the average life expectancy of people, fertility, unemployment and other socio-economic factors, special and demographic attention is being paid to finding a scientifically sound solution to effectively organize the attraction of additional financial resources for retirement provision. The International Association of pension and social funds publishes the results of scientific

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research on the reform and improvement of the pension system, ensuring the financial stability of the pension system.

The research on improving the pension system highlights the issues of pension provision and increasing the financial stability of the Pension Fund, but the issues of ensuring the financial stability of pension provision are not sufficiently disclosed. This situation, in turn, dictates the need for systematic scientific research to ensure the financial stability of pension provision.

The introduction of market mechanisms to eliminate the misuse of financial resources in the pension system over the past period of socio-economic development in Uzbekistan, ensuring public participation in social protection and support for the population, and implementing institutional reforms with extensive use of the experience of developed countries to ensure the financial sustainability of pension provision indicates the need to reform the system. In this process, “we also have a lot of work to do to improve pension provision... revision of the procedure for the appointment and payment of pensions and benefits, fundamental reform of the pension system.” The priority is to ensure the financial stability of pension provision while guaranteeing the right of citizens to guaranteed social security, improving social justice and the effectiveness of the pension system, ensuring the relationship between the labor contribution of citizens and the amount of pension [1].

Literature Review

Today, the main category of modern pension provision is “pension”. Before we can do a retirement study, we need to understand what “retirement” is. Several scientists and researchers have given different concepts and explanations about this.

In particular, the financial stability of the pension system has been studied by foreign economic scientists J.Peng, V.Roik, N.Borisenko, S.Orlov, A.Shemetov, E.Chuprova, A.Pudovkin, V.Burdenko, A.Izhevsk.

Theoretical foundations and features of the development of the pension system in Uzbekistan, the importance of pension provision in the system of social protection of the population, issues of pension insurance for old age, disability and loss of breadwinner, funded pension provision, appointment and payment of pensions, scientific and theoretical foundations of ensuring the financial stability of the pension system, theology in the pension system, foreign experience in the development of the pension system, as well as the theoretical and practical aspects of non-state pension provision were studied by national economists Z.Abdullaev, A.Vakhabov, A.Islamkulov, G.Kasimova, N.Mazhidov, T.Malov, B.Mamatov, Sh.Radzhabov, D.Rustamov, B.Umurzakov, Z.Beknazarov are reflected in their scientific works, and this tradition continues.

In the doctoral (DSc) dissertation of D. Rustamov's “Directions for ensuring the financial stability of the Pension Fund in Uzbekistan”, defended in recent years, investigated the scientific and methodological foundations for ensuring the financial stability of the off-budget Pension Fund, income and expenses. And in the doctoral (PhD) dissertation work, Sh. Radjabov studied the theoretical and organizational foundations of non-governmental pension funds. In the scientific research work of Z. Beknazarov highlights the theoretical and practical aspects of increasing the financial stability of the Pension Fund in Uzbekistan [2].

However, in the context of economic liberalization, the problems of ensuring the financial stability of pension provision, taking into account international best practices as a separate, independent scientific field, have not been studied in a comprehensive manner.

The source of the accumulative pension provision is the mandatory monthly contributions of citizens to personal accumulative pension accounts. In this case, pension funds are formed from the savings of individuals at the expense of one percent of the

employee's accrued salary (income), duly excluded from the amount of income tax calculated in accordance with the legislation [3].

2. Materials and Methods

The purpose of the article is to review and discuss the results of research on evaluating the effectiveness of accumulative elements of the pension system from the perspective of international experience.

The methods of generalization, classification and comparative analysis of theoretical and methodological approaches to assessing the effectiveness of pension systems and its individual elements are used, the method of abstraction, which allows, based on the material presented in the publications, to typologize existing pension models in the world, methods of formulation of scientific hypotheses, grouping studies depending on the conclusions.

3. Results

The social security system is based on the principle of a mixed economy, including state, voluntary, collective and private institutions, commercial and non-profit organizations. Such a structure makes it possible to ensure more complete satisfaction of the needs of various categories of the population in social security services from social risk, as guaranteed social protection of citizens from the possibility of disability and the causes of loss of income. Thus, pension provision is a system of financial and economic relations that arise in the process of organizing material security, providing for the protection of the population from various socio-economic risks.

The organization of state pension provision in the context of economic reforms is based on the following principles:

1. unity of compulsory and voluntary social security;
2. social cooperation between the state, the employer and employees;
3. personal income and disability compensation;
4. formation and effective use of special-purpose extra-budgetary funds;
5. unity of self-regulation with regulation of supply activities; state
6. relations between suppliers and suppliers who are considered the main subjects of social security;
7. proportionality of economic efficiency and social justice;
8. social solidarity and individual responsibility in providing citizens.

The most important economic function of pension provision is the creation of prerequisites for the reproduction of labor resources. Pension provision is an important and integral part of the State social security policy. From this point of view, the social security system is one of the main conditions for ensuring social justice in society and creating stability.

The aggravation of the demographic situation in the countries of the world, including a significant change in the age composition of the population, i.e. an increase in the proportion of elderly citizens in the age composition of the population, an increase in the average life expectancy of the population, lead to an increase in the costs of the pension system. The average age of humanity, on the other hand, has been rising since 1970 and now stands at 31 years old, according to a United Nations (UN) analysis, reaching 33 years by 2030 and 36.2 years by 2050. According to a World Bank report, the world's population aged 60 and over in 2017 was 962 million people, which is 383 million people, or 152% more than in 1980. By 2030, this figure will increase by 1.4 billion, and by 2050 - by 2 times compared to 2017, that is, by 2.1 billion, it is assumed that it will be a person.

Today, the global average life expectancy is 69 years. And in 1950, this figure was 48 years old. According to a World Bank report, life expectancy will average 73.8 years by the

2030s and 77 years by the 2050s. In all countries with an average life expectancy of more than 75 years, the retirement age is 65 on average [4].

The main aspect in the process of saving accumulative pension funds is their investment. In doing so, one of the ways to ensure the integrity of funds and further move it is to choose effective financial instruments for investment, to guarantee diversification, not to allow serious concentration of financial risks. It is worth noting that when activating the investment process, it is important to ensure the infrastructure, integrity and profitability of investments. In this case, two interconnected and opposite tasks arise: on the one hand, investment ensures the profitability of investments, and on the other – risk reduction. To successfully solve these tasks, the following methods are used in world practice: risk insurance; investment portfolio diversification; risk limitation [5].

Another of the aspects of the problem is the selection of investment facilities in the process of depositing funds for accumulative pensions and the determination of the readiness of the corresponding sectors of the financial markets. World practice has shown that securities issued and guaranteed by the state are seen as less risky. In terms of profitability, bonds are considered favorable [6]. This is mainly important in the early stages as an additional guarantee of the integrity, integrity of the accumulative pension funds. It is also important that the accumulated pension funds are provided with real property. Therefore, the accumulated pension funds should be directed to the growth of GDP and invested in the real sector of the economy. This makes it possible to eliminate to some extent the deficit of private investiture resources in the country's economy. In this case, the basis of the investment portfolio should be corporate securities.

In the process of studying the implementation of the law of the Republic of Uzbekistan "On the accumulative pension provision of citizens", there are issues that are waiting for their solution. Article 13 of the law, it is necessary to open pension accounts that are subject to compulsory savings by the employer, follow the procedure for maintaining them, correctly and fully calculate contributions, to adequately establish mutual cooperation between these organizations, even if control over their timely payment is established by the financial, state tax service authorities and the people's bank. According to the requirement established by the state tax authorities in article 13 of this law, it is necessary that control over the implementation of the law be adequately organized. The obligation of the people's bank to notify citizens annually about the state of personal accumulative pension account sheets is established, in this regard, the reporting of participants in practice is slow [7].

At the same time, sufficient attention should be paid to systematically conduct scientific and practical seminars with heads and accountants of economic entities on the issue of the functioning of the pension system, to explain to the population the content of the legislation on the pension system to be saved. In order to further strengthen the confidence of the population in the bank, issues related to improving the provision of information through electronic systems of notifications of the annual movement of their personal accumulative pension accounts should be resolved. Another problem is related to the validity of the labor market. The magnitude of the share of the informal and hidden economy in the economy of Uzbekistan, which creates a certain abstraction in the labor market, negatively affects the effective formation of the accumulative pension system.

The study of international experience in this regard, to some extent, contributes to solving the issue, for example, the main problem in the Chilean pension system is related to the characteristics of the labor market [8]. Most working populations, including women and young people, are unemployed or employed in the informal sector. Frequent changes in jobs and changes in the number of busy residents also reduce the possibility of regular savings of funds, attracting self-employed residents to saving pension funds and generating motivation to participate in this system is a complex problem [9].

An analysis of the experience of financing infrastructure projects in developed countries confirms that their financing is almost entirely the prerogative of the state, which carries it out either through direct budget investments or through the creation of specialized financial institutions or specialized lending mechanisms. At the same time, pension savings can and should be used to finance infrastructure projects, since they are the most long-term resource of the national economy. Abroad, pension funds invest in infrastructure projects either by purchasing bonds directly from the organization implementing this project, or bonds issued by specialized financial institutions (for example, development banks). To implement such a mechanism in modern conditions, in order to absorb the risks associated with the use of pension savings to finance projects in the real sector of the economy, it is necessary to create a unified system of government guarantees for the issuance of securities intended for infrastructure and other investment projects supported by the state.

In our country, according to the term of funds of the pension provision of citizens, "Long money"[10] is considered as financial resources. World practice has shown that these funds can be attracted to investments until a citizen has issued a pension. Currently, the share of voluntary individual contributions in the formation of the fund does not have a serious deduction, in this regard, it will be advisable to further improve this system and establish financial organizations engaged in non-state pension funds. Reforms in the financing of the accumulative pension system should be carried out in conjunction with reforms in the field of employment, labor market, income of the population, salaries of employees of budgetary organizations, taxes, Finance and credit.

Analysis shows that the following factors contribute to a decrease in the effectiveness of the pension system of Uzbekistan:

1. Lower the profitability of the accumulative pension system than the inflation rate;
2. The absence of alternative sources in the placement of funds;
3. The impossibility of early receipt of funds from the accounts of individual pension funds;
4. The high cost of the people's bank in relation to its services to the accumulative pension system.

The effectiveness of investing pension savings, especially in the context of a possible expansion of the range of assets allowed for investing pension savings of citizens who have not exercised their right to choose a management company, depends not only on the available financial instruments, but also largely on the investment portfolio management strategy chosen by the management company: active or passive. The active management policy provides for a continuous process of buying and selling securities and changing the proportions between different asset classes depending on financial market conditions in order to generate additional income, i.e. the formation of a certain ratio between the portfolio structure and the market condition. Unlike an active strategy, a passive strategy involves investing pension reserves in a specific set of assets while maintaining a constant proportion between them. Profitability in this case is ensured by increasing the exchange value of securities and receiving dividends and other types of income.

4. Discussion

In our country, in the long term (1015 year), an increase in weight on the pension fund is observed as a result of the influence of the following factors in the pension system:

1. Mass retirement of a generation of current 40-year-old workers who are employed in informal sectors, considered migrant workers. These categories claim to receive a pension after reaching the specified retirement age, if they do not pay the pension contribution.
2. By 2050, the gradual increase of the part of the population above working age to 12-15 percent, the global trend of population aging begins to apply in our country. The

need to ensure a decent quality of life for pensioners, whose number is growing in conditions of a decrease in financial capacity associated with the current pension supply model, remains one of the key long-term tasks in the field of pension provision.

To ensure the financial stability of the pension fund, it provides for such traditional measures as an increase in the amount of pension contributions, reduction of pension provision benefits or raising the retirement age, which is even higher without it. All listed cases can lead to negative results:

1. A sharpening of the activities of enterprises in a superstitious way.

2. An increase in the distrust of the population towards the pension provision system.

Taxilies show that improving the pension system is a problem inextricably linked with the remuneration of Labor, the tax system, the state of the labor market and the financial market. This problem cannot be solved separately, separated from the issues related to the demographic situation in the country, unemployment, natural growth of the country's population and an increase in the average age of life expectancy. Also, a decrease in the number of employed people, an increase in the costs of the social sphere in the cost part of the state budget, an increase in the weight that falls on the able-bodied part of the population, payment by employers of most of the formation of pension funds in countries of the transition economy, an increase in the level of, the current pension provision is subject to reform of financing.

Given that the entry of an investor with such a volume of financial resources into the financial market can lead to its monopolization, the new mechanism provides for the distribution of all newly received pension savings funds into one conservative and one or more less conservative portfolios based on the "risk-return" ratio, taking into account the projected market volumes by competition among several private management companies. financial instruments. At the same time, the general orientation of investing pension savings of persons who have not exercised the right to choose a management company should remain fairly conservative, since the risks of investing in this case are actually assumed by the state and, accordingly, the reliability of investments should prevail over their profitability.

A different set of financial instruments should be provided for different investment portfolios. In addition to government securities, any bonds guaranteed by the state, as well as foreign securities, can be included in a conservative portfolio. Less conservative portfolios may include sub-federal bonds, corporate bonds, any mortgage-backed securities, units and shares of foreign and national investment funds, as well as possibly limited-volume stocks[11]. According to the results of the work for the year, all the investment results of management companies should be summarized for posting on the accounts of insured persons. Taking into account the need to ensure compliance with the capacity of the financial market and the volume of pension savings placed on it, one of the most promising areas for expanding investment instruments is the use of the practice of issuing government-guaranteed securities.

This company manages the funds on a professional basis, helping to protect against its increase and inflation levels. In many countries, state control of private pension funds is being strengthened, and the types of securities in which investments can be made are being established[12], [13]. In view of this, we believe that it is advisable to establish private pension funds in order to increase the activity of the population in the pension system and strengthen their trust in the system of accumulative pensions [14]. To do this, it will be necessary to initially create the organizational and legal framework for the organization of the activities of non - state, private pension funds, develop the securities, investment market. Strengthening explanatory work on the mechanism and advantages of the accumulative pension system among the population in order to improve the accumulative pension system, it is necessary to regularly carry out a set of measures to improve the financial literacy of the population [15], [16].

It is advisable to include among the basic principles that an investment index should meet for the purpose of investing pension savings:

1. the independence of the index developer from market participants;
2. transparency of the calculation methodology;
3. diversification of the included asset classes;
4. weighting by different asset classes;
5. the ability to use it for investment purposes, i.e. freely make purchase and sale transactions with all instruments included in the index;
6. the possibility of regular information monitoring.

At the same time, it seems more promising to create multi-tool indexes rather than single-tool indexes that would model optimal investment portfolios for investing retirement savings. Such indexes could include and quantify not only stocks or bonds, but also various asset classes at the same time.

5. Conclusion

From the above, one can conclude that in the experience of foreign countries, the funds of pension funds are an important source of financing investments. These funds are "long money" in their nature, and attracting them to finance investment projects in the economy reduces the risk of transformation. Therefore, effective transfer of pension funds to investments remains an important issue in the structural restructuring and modernization of economic sectors. In the further development of the savings pension system in the Republic of Uzbekistan, it is recommended to use the following:

1. on the basis of the state guarantee, it is necessary to issue mortgage bonds and attract funds from the pension system, which will be accrued to them. Then the risk level of these securities is low, and its role in financing the provision of Housing to the population increases;
2. The accumulated pension funds, which will be taken into account in the "People's bank", should be transferred to a specialized managing company, which is determined on a competitive basis.

Thus, the effectiveness of pension savings management will largely depend on the timely development and adoption of a package of regulatory legal acts ensuring the expansion of financial investment tools, in particular, the possibility of implementing various asset securitization mechanisms, as well as the application of an index-based investment strategy

REFERENCES

- [1] Shavkat Mirziyoyev, "Address of the President of the Republic of Uzbekistan to the Oliy Majlis," *Narodnoe Slovo*, Dec. 29, 2018, no. 271-272 (7229-7230), p. 1.
- [2] M. Erkhonova, B. Tursunov, S. Egorov, and F. Saidmurodov, "Improving the pension system in Uzbekistan based on the recommendations of the International Monetary Fund," *Modern Science and Research*, vol. 3, no. 5, 2024, p. 7.
- [3] B. S. Mamatov and F. R. Ametova, "Ensuring the proportionality of income and expenses of the accumulative pension system," *Economy and Finance (Uzbekistan)*, no. 2, 2018, pp. 41-49.
- [4] M. Erkhonova, B. Tursunov, S. Egorov, and F. Saidmurodov, "Improving the pension system in Uzbekistan based on the recommendations of the International Monetary Fund," *Modern Science and Research*, vol. 3, no. 5, p. 6.
- [5] E. Nosirov et al., *Investitsiya risklarini boshqarish: O'quv qo'llanma*, Tashkent: Fan va texnologiya, 2012, p. 116.
- [6] M. Nurali and U. M. Pensiya jamg'armalari mablag'larini investitsiyalashning ustuvor yo'nalishtari, *Journal of New Century Innovations*, vol. 43, no. 1, 2023, pp. 3-7.
- [7] "On state pension provision for citizens," *Lex.uz*, Sept. 3, 1993, [Online]. Available: <https://lex.uz/docs/6808892>.

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- [8] S. A. Muxamedova, "Jamg'arib boriladigan pensiya ta'minotidagi ayrim muammolar va ularni hal etish yo'llari," *Ekonomika i Finansi (Uzbekistan)*, no. 9, 2019, p. 46.
- [9] M. A. Mamanazarov and A. Y. G'aniev, "Jamg'ariladigan pensiya tizimining afzalliklari va kamchiliklari," in *Pensiya tizimining moliyaviy barqarorligini ta'minlash va samaradorligini oshirish* (materiallar Respublika ilmiy-amaliy konferensiyasi), Tashkent, Uzbekistan, Nov. 15, 2017, p. 246.
- [10] S. A. Muxamedova, "Jamg'arib boriladigan pensiya ta'minotidagi ayrim muammolar va ularni hal etish yo'llari," *Ekonomika i Finansi (Uzbekistan)*, no. 9, 2019, p. 79.
- [11] N. M. Majidov, "Pensions in the human capital reproduction system," *Theoretical & Applied Science*, no. 10, 2016, pp. 90-94.
- [12] N. Y. Borisenko, "Ways to increase the efficiency of investing mandatory pension savings," *Finance and Credit*, no. 15 (255), 2007, p. 93.
- [13] N. M. Majidov, "Jamg'arib boriladigan pensiya tizimi va uning investitsion faoliyati imkoniyatlari," *Science and Education*, vol. 2, no. 12, 2021, pp. 900-905.
- [14] L. Drobyshevskaya et al., "Improving the efficiency of the pension system in the digital economy," in *2018 International Conference on Digital Science*, Cham, Switzerland: Springer International Publishing, 2021, pp. 490-502.
- [15] B. S. Anatolyevich and P. Z. Viktorovna, "Pension reforms in countries with developed and transitional economies," *Economy Region*, no. 4, 2015, pp. 158-169.
- [16] R. Hinz et al., Eds., *Evaluating the financial performance of pension funds*, Washington, D.C.: World Bank Publications, 2010, p. 69.