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FORMATION OF THE OPTIMAL PENSION LEVEL: PROBLEMS AND PROPOSALS

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Abstract: This article analyzes the role of average monthly earnings in determining pension amounts in the pension system, the ratio of pension amounts to average earnings, and the factors influencing them. As a result of the analysis, the problems were studied and proposals and recommendations for their elimination in the pension system of Uzbekistan were developed.

Keywords and phrases: pension provision, pension system, pension contribution, private pension system, average monthly salary, average pension amount, social justice, assessment of the population's living standards, work experience, replacement ratio, pension funds' revenues and expenditures, financial risks, pension plan, state social protection scheme

Introduction: An adequate amount of pension plays a crucial role in ensuring the economic stability of elderly individuals. A sufficient level of pension provision enables older people to maintain financial independence and a decent quality of life. At the same time, the adequacy of pension amounts strengthens socio-economic stability and contributes to enhancing the level of social protection for the population. If pension funds are insufficient, the living standards of the elderly may decline, increasing the risk of social isolation. Therefore, the reasonable and fair determination of pension amounts is not only essential for the well-being of individuals but also serves as a vital social policy objective for the development of society as a whole.

Article 46 of the Constitution of the Republic of Uzbekistan states: "Everyone shall have the right to social security in old age, in the event of loss of working capacity, unemployment, as well as loss of a breadwinner, and in other cases provided by law. The amounts of pensions, benefits, and other types of social assistance established by law may not be lower than the officially established minimum consumer expenditures."

In assessing the adequacy of pension provision levels, the replacement rate is commonly used; a higher replacement rate serves as one of the key indicators of the effectiveness of a pension system. In the pension system, the replacement rate is a crucial indicator that represents the ratio between an

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¹ In Article 46 of the Constitution of the Republic of Uzbekistan

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individual's pension amount and their previous salary. Theoretically, it allows for the evaluation of the extent to which a person's income earned during their working life is maintained in old age.

In international practice, an optimal replacement rate is considered to be around 40–60 percent, which is seen as an indicator of fairness and stability within the pension system. Analyzing this indicator helps assess the current state of the pension system and identify directions for its improvement.

Analysis of Relevant Literature:

International normative documents, including the ILO's Convention No. 102 on "Minimum Standards of Social Security," serve as the basis for this. Practice shows that it is necessary to develop the pension system with a target replacement rate of 40%. The replacement rate is a key indicator that demonstrates the effectiveness of the pension system, and its quantitative value depends on the initial normative replacement level established by legislation (Shugayeva, 2020).

The replacement rate (or the lost wage coefficient) is an indicator used in the pension system, which determines the pension amount based on wages and work experience. The replacement rate indicates what portion of the average wage is paid as a pension when a worker retires. For example, if the replacement rate is 40%, the pensioner will receive 40% of their average wage as a pension. The higher the coefficient, the more "stable" the pension system is considered. Although the replacement rate is one of the indicators used to evaluate the efficiency of the pension system, it is not sufficient as the sole criterion—it needs to be complemented by other indicators and assessed comprehensively to cover all aspects of the system (Krupskiy, Vasenkova, 2023).

The targeted directions set for the development of the pension system should be pursued alongside quantitative indicators, which will allow for the monitoring of the following processes:

Reduction in poverty levels based on the ratio of insurance pensions and the pensioner living minimum.

Improvement in the efficiency of the state pension system through the ratio between insurance pensions and the employee's lost wage.

In order to objectively evaluate the long-term dynamics towards achieving the set goals, these indicators must have a sound methodological approach. This approach should reflect both the economic and social essence of the insurance pension and the pension system.

Different measurement methods are used for the main calculation parameters in order to calculate the replacement rate as an indicator of state pension system efficiency:

- Pension amount;

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- Wage amount;

The degree of coverage of the population by pension provision (availability for different categories of employees);

Conditions for the formation and implementation of pension rights (payment period, receipt period, retirement age, etc.);

Categories of pensioners: elderly, disabled, orphaned, etc. (Solovyov, 2021).

Research Methodology: In the research process, the theoretical and practical foundations for shaping the optimal level of pension amount were studied and analyzed based on the research of foreign and local scholars. Furthermore, the article employed methods such as theoretical reasoning, a systematic approach, observation, and generalization. Additionally, conclusions and recommendations regarding existing problems and their solutions in shaping the optimal level of pension amount, as well as the tasks to be implemented in this regard, have been formulated.

Analysis and Results: Between 2014 and 2024, under the influence of various factors, the average monthly pension amount increased by 3.5 times, while the average monthly wage increased by 5.3 times. In other words, the growth rate of average wages exceeded that of pensions, which reflects a negative trend from the perspective of financial support and social protection for pensioners (Figure 1).

This tendency also highlights that the replacement rate in Uzbekistan's pension system remains significantly below the internationally recommended standard. According to the International Labour Organization's Convention No.102 on "Minimum Standards of Social Security", "the replacement rate should not be less than 40 percent, provided that an individual has at least 30 years of insurance coverage".

"The replacement rate in a state pension system is defined as the ratio of the average pension amount to the average wage, which reflects the extent to which lost wages are compensated through pensions in old age."

² Конвенция №102 Международной организации труда «О минимальных нормах социального обеспечения». Статья 67. (Заключено в г. Женева 28.06.1952). Приложение к разделу XI периодические выплаты типовому бенефициарию. — С. 21.; Роик В.Д. Пенсионные системы в странах СНГ: итоги преобразований и пути совершенствования // ЭКО. — 2019. — № 3. — С. 99.

³ Хить Л.В. Комплексная оценка эффективности пенсионной системы как приоритетное направление социальноэкономической политики России. // Ж. Теория и практика общественного развития. 2010. №2. – С. 272-273.

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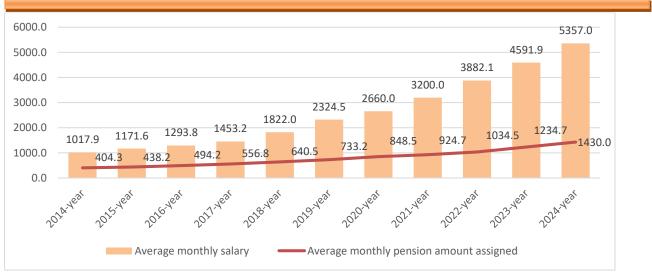


Figure 1: Average Monthly Salary and Assigned Average Pension Amount (in thousand UZS)⁴

Due to the fact that the growth rate of the average monthly wage during the period from 2014 to 2024 exceeded the growth rate of the average monthly pension, the replacement rate has significantly declined. Throughout this entire period, the replacement rate did not meet the international standard and never reached the 40 percent threshold (Figure 2).

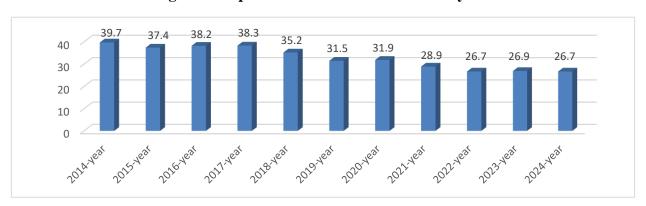


Figure 2. Replacement Rate in the Pension System⁵

Specifically, the replacement rate decreased from 39.72 percent in 2014 to 26.69 percent in 2024, marking a decline of 13.03 percentage points over the analyzed period. This indicates the need to further strengthen the social and financial protection of pensioners in Uzbekistan and represents a negative trend in terms of ensuring the efficiency of the pension system.

⁴ Compiled by the researcher based on statistical data from the Agency of Statistics under the President of the Republic of Uzbekistan and the Extra-Budgetary Pension Fund.

⁵ Compiled by the researcher based on statistical data from the Agency of Statistics under the President of the Republic of Uzbekistan and the Extra-Budgetary Pension Fund.

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"In European Union countries, the replacement rate fluctuates around 60 percent, while in the member countries of the Organisation for Economic Co-operation and Development (OECD), this indicator averages between 60 and 65 percent."

In developed countries, the replacement rate in pension systems ranges from 55 percent to 75 percent. For instance, in 2023, the replacement rate was 74.7% in the Netherlands, 73.1% in Denmark, 62.3% in Sweden, 58.4% in Finland, and 54.9% in New Zealand⁷. Such high levels of the replacement rate are characteristic of the pension models implemented in these countries. Most developed nations have adopted a multi-tier pension system, which typically includes mandatory public pensions, voluntary individual pensions, and mandatory occupational pensions.

Table 1
Analytical Information on the Population and Number of Pensioners, Their Average Wages, and Average Pension Amounts in Foreign Countries

	Country name	Popula tion (millio n people)	Pensioners		Payable insurance premiums (%)		Average salary			Average pension amount		Coverage coefficient (%)
Nº			Numbe r (millio n people)	the popula tion of %	Worke r	Emplo yer	Natio curre (thousan	ency	US dollars (thous and units)	National currency (thousan d units)	US dollars (thousand units)	(Ratio of average pension to average salary)
1	Great Britain	69,4	12,9	18,6	10,0	10,2	2,3	pound	2,9	1,4	1,72	58%
2	Spain	46,4	8,8	18,8	6,4	23,6	2,3	euro	2,3	1,3	1,36	58%
3	France	66,7	20,9	31,4	7,3	10,4	2,4	euro	2,6	1,3	1,40	55%
4	Turkey	85,4	14,6	17,1	9,0	11,0	17,8	lyre	5,6	9,5	0,29	53%
5	Canada	41,5	6,6	15,9	6,0	6,0	4,9	dollar	3,6	2,6	1,93	53%
6	Thailand	70,6	11,1	15,7	3,0	1,0	15,4	bat	0,4	8,0	0,22	52%
7	Azerbaijan	10,2	1,1	10,8	3,0	22,0	1,0	manat	0,6	0,5	0,29	50%
8	Vietnam	102,5	7,9	7,7	8,0	0,0	8 176,0	dong	0,3	3 400,2	0,13	42%
9	Kazakhstan	19,8	2,4	11,9	10,0	5,0	390,3	tenge	0,8	131,4	0,26	34%
10	Uzbekistan	37,4	4,1	10,9	0,0	12 - 25	5 357,5	sum	0,4	1 431,3	0,11	27%

⁶ PENSIONS AT A GLANCE 2023 © OECD 2023. OECD and G20 indicators. Publishing, Paris. – P. 151-152.

⁷ OECD Pensions at a Glance 2023. URL: https://www.oecd.org/en/ publications/2023/12/pensions-at-a-glance-2023_4757bf20.html.

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The replacement rate in the pension system is a key indicator that reflects the ratio of the pension

amount to the average wage. It serves as an important criterion for assessing economic development,

social justice, and the standard of living of the population. This article analyzes the role of the

replacement rate in the pension systems of foreign countries and Uzbekistan, and examines the

differences between them.

The pension system aims to implement economic and social measures designed to improve the

standard of living during the periods of incapacity for work and old age. Currently, 11.1% of the

population of Uzbekistan, or 4.2 million people, are covered by pension provision. This includes

pensions for age (3,439.9 thousand people), disability pensions (471.3 thousand people), and pensions

for loss of breadwinner (247.4 thousand people). To pay these pensions, more than 6.0 trillion UZS

are spent monthly.

In recent years, several significant changes have been implemented in the pension system aimed

at improving the social and economic conditions of pensioners. Specifically, the minimum pension

amount was increased beyond the officially established minimum consumption level, the work history

for women on maternity leave was recognized, the threshold for calculating the average monthly

wage for pension calculation was raised, and disability pensions are now recalculated every two years.

Between 2010 and 2024, both wages and pension amounts in Uzbekistan have increased

nominally. However, the decline in the replacement rate has clearly demonstrated that pensions are

decreasing relative to wages. This trend is inconsistent with ensuring the stability of the pension

system and social justice.

The pension reforms being implemented by the state should be just and targeted, with ensuring

the decent standard of living for the elderly population remaining a critical issue. Addressing the

theoretical and practical aspects of the pension system will remain a pressing task.

Conclusions and suggestions.

Strengthening the social protection of the elderly population in the pension system of

Uzbekistan is one of the most pressing issues today. During the research, the main factors influencing

the determination of pension amounts, such as average monthly wage, work experience, pension

contributions, and the replacement rate, were thoroughly analyzed.

In the current pension system, the ratio of pension amounts to average wages (i.e., the

replacement rate) is low, which results in a decline in the social status of citizens after they retire.

The formation of the optimal level of pensions is an important factor in socio-economic

development, aimed at ensuring stability for both pensioners and the state budget. The conducted

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studies show that there are a number of problems in the pension system, and by addressing these issues, it is possible to achieve a just and economically efficient level of pension payments.

The transition to a multi-tier pension system involves ensuring citizens receive a decent pension upon retirement through a combination of state pensions, mandatory, and voluntary pension funds.

Improving the methodology for calculating pensions, taking into account work experience and social security contributions, is aimed at reforming the pension system based on international practices, ensuring a more fair pension provision.

List of references:

- 1. Constitution of the Republic of Uzbekistan, National Database of Legal Documents, 01.05.2023, No. 03/23/837/0241.
- 2. Law of the Republic of Uzbekistan on "State Pension Provision for Citizens". Tashkent, 03.09.1993, No. 938-XII.
- 3.Regulation on "The Procedure for Appointing and Paying State Pensions," approved by the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 592 dated 13.10.2022.4.
- 4. Tursunov J. P. "Oʻzbekistonda iqtisodiyotni rivojlantirish va liberallashtirish davrida pensiya ta'minoti tizimini takomillashtirish". Toshkent: "Iqtisod-moliya", 2020, 55-57 b.
- 5. Davronov Sh. Z. "O'zbekiston Respublikasida ijtimoiy himoya tizimini takomillashtirish iqtisodiy-ijtimoiy barqarorlik omili sifatida". Moliyachi ma'lumotnomasi. 06 (102) 2020, 20-25 b.
- 6. Шугаева И. В. "Коэффициент замещения как экономический показатель эффективности пенсионной системы" Власть и управление на Востоке России. 2020. № 1 (90) С. 27-28.
- 7. Соловьёв А. К. "Задачи повышения эффективности пенсионной системы в РФ для преодоления бедности пенсионеров" Проблемы прогнозирования, 2021, № 2. С. 99.
- 8. Соловьёв А. К "Проблемы применения коэффициента замещения как критерия эффективности пенсионной системы России" Проблемы прогнозирования, 2022, № 2. С. 80-81.
- 9. Крупский М. А., Васенкова Е. И. "Базовый прожиточный минимум и коэффициент замещения как показатель эффективности пенсионной системы" Белорусский государственный университет, г. Минск. 2023, ilmiy-amaliy anjuman materiallari to 'plami C.129-130. https://elib.bsu.by/handle/ 123456789/301145

International Journal of Economic Perspectives, 19(03) 39-46

ISSN: 1307-1637 UGC CARE GROUP II

Retrieved from https://ijeponline.com/index.php/journal

10. "How Measuring Replacement Income Can Aid Assessment of Public Policy" Electronic resource//Access: https://www.pewtrusts.org/

/media/assets/2021/01/how_measuring_replacement_income.pdf

- 11. "Pensions at a Glance 2023" Electronic resource//Access: https://www.oecd.org/content/dam/oecd/en/publications/reports/2023/12/pensions-at-a-glance-2023 4757bf20/678055dd-en.pdf.
- 12. The 2024 pension adequacy report. Electronic resource//Access URL: https://op.europa.eu/en/publication-detail/-/publication/c854e35f-2eb1-11ef-a61b-01aa75ed71a1/
- 13. Pardayev F. M. "Pensiya ta'minoti tizimining nazariy va amaliy asoslari" Jurnal of universal science research. 2024, 283 b.
- 14. Raxmonov N. M. "Davlat pensiya ta'minoti tizimi va uni isloh etish zaruriyatlari" Journal of marketing, business and management(jmbm)/sjif factor.2024, 12 b.
- 15. https://www.stat.uz official website of the National Statistics Committee of the Republic of Uzbekistan.
- 16. https://www.pfru.uz Official website of the Extrabudgetary Pension Fund under the Ministry of Economy and Finance of the Republic of Uzbekistan.