

Contemporary issues of financial sustainability in the pension system in Azerbaijan

by *Emin Alirzayev**

Abstract

The article examines the problems of financing and forecasting within Azerbaijan's system of social insurance and pension provision. Through a thorough theoretical and methodological analysis based on the current regulatory and management framework, the main aspects of financial sustainability challenges were identified. The research evaluates the complex interplay between demographic, economic, and institutional factors affecting the pension system's long-term viability. The study's main scientific innovation lies in the development of a comprehensive analytical approach to a specific country model, providing methodological frameworks to handle financial security and sustainability issues, thereby expanding and improving the methodological foundation for financial management and forecasting in social protection systems. Particular attention is drawn to relevant priorities for strengthening the financial foundation of social protection, identified as the most critical factor in improving overall social protection. The findings provide a valuable theoretical basis for policy development at the national management level within the current pension system, which operates solely on the solidarity principle.

Key words: social protection; forecasting in social protection; replacement rate; Pay-As-You-Go; social security.

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1. Introduction

Financial planning and forecasting play a priority role in the effective organization and management of social protection as a specific economic sphere. This sphere is influenced by social, economic, demographic processes occurring in society, and especially decisions made at the management level. The growing relevance of studies on the long-term financial viability of retirement provision schemes is due to the need to ensure adequate ensuring social security for the population in the short, medium, and long term.

As noted by Otchere et al. (2024), problems of financial stability of pension funds are becoming increasingly relevant, especially in the context of economic instability and demographic changes. Dumiter et al. (2024) conducted research demonstrating that financial sustainability of pension systems in Central and Eastern Europe countries depends heavily on integrated approaches that consider both economic and demographic factors. The comparative analysis of retirement benefits systems in Central Asian countries conducted by Aliev et al. (2024) demonstrates common problems and risks characteristic of the region. Special attention in the context of financial sustainability of retirement benefits systems deserves the approach to assessing various influencing factors. Figari et al. (2023) emphasize the critical role of financial literacy and public awareness of pension issues for ensuring effective reforms. This is complemented by research from Świecka et al. (2025), who demonstrate that sustainable pension outcomes require consideration of consumer behaviour patterns and systemic incentives.

As noted by Lenney et al. (2022), the approach to ensuring the sustainability of pension systems must rely on careful analysis of public finances and macroeconomic indicators. In the context of Azerbaijan, this means the necessity of taking into account the peculiarities of the country's economic structure, dependence on the oil sector, and demographic trends. Research by Helmdag and Väänänen (2024) reveals that recommendations for pension reforms in most countries are determined primarily by financial sustainability considerations. However, the authors emphasize the importance of a balanced approach that takes into account not only financial but also social aspects of pension provision. Bocchialini et al. (2025) demonstrate that sustainable pension systems increasingly integrate environmental and social dimensions into their financial frameworks, suggesting a pathway for Azerbaijan's future development.

The analysis of recent research and publications demonstrates the limited nature of fundamental economic-scientific research on the chosen topic in the direction of improving social protection in Azerbaijan. Most discussions were conducted predominantly based on provisions of local regulatory and legislative acts, which limits the possibilities for systematic scientific analysis of the problem.

The principal aim of this research was to determine the primary obstacles and challenges facing the challenge of maintaining the fiscal stability of Azerbaijan's pension scheme as a key aspect of its development. To achieve this objective, the following research tasks have been established:

1. To analyse the financial foundations of Azerbaijan's insurance-pension system.
2. To develop and apply a quantitative modelling framework for evaluating the sustainability of Azerbaijan's retirement benefits system.
3. To identify the key factors influencing the prolonged economic resilience viability of the retirement system.
4. To formulate evidence-based recommendations for strengthening the financial sustainability of Azerbaijan's pension system.

2. Materials and Methods

The methodological framework employed in this research is multifaceted, encompassing various approaches to ensure a comprehensive analysis of financial sustainability in Azerbaijan's pension system. The analysis is based primarily on the directions and requirements defined by the relevant national economic and regulatory framework, taking into consideration the specific content of the selected problem. The foundational methodological approach relies on a combination of empirical and theoretical research methods. Comparative analysis was used to examine the differences and similarities between Azerbaijan's pension system and those of other countries with similar economic profiles, focusing on structural elements such as revenue generation, pension distribution, and sustainability mechanisms.

Theoretical modeling was applied to develop a quantitative financial model, which assessed the sustainability of Azerbaijan's retirement income support system. This model incorporated various financial coefficients to evaluate the balance between pension contributions, benefits, and the demographic dynamics of the working population versus pensioners. Empirical analysis was based on historical data from national statistical bodies, such as the State Statistical Committee and the State Social Protection Fund, to assess the financial stability of the pension system using specific financial metrics and sustainability ratios. The inductive and deductive approaches allowed the study to draw general conclusions from specific data trends (inductive reasoning) and test existing theories about pension system sustainability in light of Azerbaijan's unique regulatory and economic environment (deductive reasoning). Synthesis and abstraction were applied to integrate various data sources and theoretical perspectives,

helping to construct a coherent understanding of the systemic challenges facing Azerbaijan's pension system and its long-term financial viability.

To establish a robust analytical foundation, the research extensively utilized Azerbaijan's pension legislation, including the Law of the Republic of Azerbaijan No. 250-IQ "On Social Insurance" (1997), Law of the Republic of Azerbaijan No. 221-IIQ "On Individual Accounting in the State Social Insurance System" (2001), and Law of the Republic of Azerbaijan No. 54-IIIQ "On Labour Pensions" (2006). These legislative acts provide the main regulatory framework within which the retirement benefits system operates and formed the basis for analysing institutional structures and operational mechanisms. Demographic analysis constituted another essential methodological component, examining trends affecting the pension system, including population aging, birth rates, and workforce dynamics. This demographic analysis was integrated with financial sustainability metrics to develop a comprehensive understanding of the system's long-term viability.

For quantitative analysis, specific mathematical-statistical methodologies were applied to assess financial sustainability, including the development of various coefficients. Several key coefficients were developed to measure different aspects of financial sustainability. The first coefficient evaluates the relationship between accumulated funds and expenses, taking into account various income sources and expenditure categories. A second coefficient measures integral financial stability by examining the relationship between collected mandatory contributions and social transfers to the population. For assessing the demographic foundation of the retirement benefits system, a coefficient was developed to measure the ratio of active insured contributors to pensioners. Building upon this, a more comprehensive metric was created to evaluate current financial security by incorporating not only the ratio of insured persons to pensioners but also the average monthly insurance premium and the average monthly pension payment. The data collection process incorporated multiple sources to ensure comprehensiveness and accuracy, including official statistics the State Statistical Committee of the Republic of Azerbaijan (2024a; 2024b; 2024c), financial reports from the State Social Protection Fund (SSPF), and economic indicators from the Ministry of Economy of the Republic of Azerbaijan.

3. Results

3.1. Financial foundations of the insurance-pension system in Azerbaijan

There are significant dependencies between the possibilities of

developing social protection and the labour market from an economic point of view. At the centre of these influencing stands the financial factor. Wages in social protection are key in Azerbaijan, serving as the main financial source and accounting base for the state social insurance system, which funds mandatory insurance, benefits, and pensions managed by the SSPF.

The importance of the insurance-pension system can also be expressed by the fact that, according to authors' calculations based on the latest official statistics for 2022, the state extra-budgetary fund – the SSPF, formed mainly through mandatory state social insurance contributions, averages 14% of the total household budget income.

According to the national legislation, SSPF, which is the source of financing the old-age security framework, is considered the third largest budget (more than 6.9 billion manat) after the state budget (with 39.7 billion manat expenses) and the budget of the State Oil Fund of the Republic of Azerbaijan (with 12.9 billion manat expenses) (Law of the..., 2023a; 2023b; 2023c). From the point of view of determining the financial activities of the pension system for the future, the importance of assessment of financial indicators and promoting of methodology on models is obvious (Table 1).

Table 1 – Financial architecture and fiscal balance analysis of Azerbaijan's social security system: 2024 budget structure

<i>A. Revenue directions</i>	<i>In percentage terms of the whole</i>	<i>Total amount (mln manat)</i>
Revenue from mandatory social insurance payments	76.42	5288.1
Treasury transfers to the Fund for covering statutory pension obligations and maintaining fiscal equilibrium	20.12	1392
Other revenues	0.18	12.7
The amount allocated to the expenses of the current year from the unused funds of the SSPF in previous years	3.28	227.02
In total		6919.82
<i>B. Expenditure directions</i>		
Pension payments	93.93	6500
Social payments provided to the population through funds accumulated from obligatory state social contributions	2.63	181.58
Other	3.44	238.28
In total		6919.86

Source: Created by the author based on State Statistical Committee of the Republic of Azerbaijan (2024a), Law of the Republic of Azerbaijan No. 1029-VIQ “On the 2024 Budget of the State Social Protection Fund” (2023b).

The primary financial challenge for Azerbaijan's pension system stems from sustainability concerns. According to current social insurance

legislation (including the Law of the Republic of Azerbaijan No. 250-IQ “On Social Insurance” (1997) and Law of the Republic of Azerbaijan No. 54-IIIQ “On Labour Pensions” (2006)), financial viability depends on the system's capacity to meet diverse social insurance commitments using exclusively internal revenue sources rather than external funding. However, treasury transfers play a critical role in addressing historical liabilities, such as pensions related to periods before the establishment of the current pension system in 1992, and in providing temporary assistance to bridge gaps in funding. These transfers, which make up 20.12% of the total revenue, are essential for covering past pension commitments that the current system, based solely on mandatory contributions, cannot fully support. Therefore, while the system aims for long-term self-sufficiency, government transfers remain necessary to manage these legacy costs and ensure stability in the short to medium term (Ongan et al., 2025). This self-sufficiency requirement represents the fundamental solvency test for the national insurance framework. In accordance with the provisions of current legislation, the financial stability coefficient of the insurance and old-age security framework, used to assess the system's ability to meet its obligations to the population (including pensions and benefits financed through mandatory state social insurance contributions), may be theoretically determined by formula (1):

$$K_s = (F_c + F_o)/(C_p + C_b + C_m), \quad (1)$$

where K_s – sustainability coefficient; F_c – accumulated fund of contributions of mandatory state social insurance; F_o – other income; C_p – old-age security expenses, C_b – payments financed through mandatory state social insurance contributions; C_m – other expenses.

It is evident from Table 1, given that other income in the budget of the Fund is about 0.18%, but is not considered as a source of financing, also membership fees to international organizations represent insignificant figures, it would be more appropriate to assign a financial stability coefficient (2):

$$C_s = F_c/(C_p + C_b). \quad (2)$$

Using the same approach, expressing pension expenses and benefits paid on collected fees as social transfers to the population in the amount through “T”, the coefficient of integral financial stability can be determined in the current old-age security framework in Azerbaijan according to the following formula (3):

$$C_s = F_c/T. \quad (3)$$

While rapid expansion of contribution revenue appears improbable in the short term, addressing Azerbaijan's pension system sustainability requires comprehensive, multifaceted analysis rather than quick solutions. Any meaningful conclusions about system viability must emerge from extended temporal perspectives that consider demographic, economic and administrative factors over decades rather than years (Kerimkhulle et al., 2023a; 2023b). Thus, it is noteworthy that the assessment of this coefficient in terms of the elasticity problem, in turn, is not applicable using the elasticity coefficient described in formula (4), since within the existing structure of the pension system in Azerbaijan it is impossible to expect that an increase will necessarily increase pension expenditures (4):

$$\varepsilon = (\frac{\partial C_p}{C_p})/(\frac{\partial F_c}{F_c}). \quad (4)$$

Currently, according to the amendments made to the pension legislation in 2018, the part of pension expenses formed based on work experience before 1992 (until the collapse of the Soviet system of government), which is not an insurance basis, or determined on preferential terms, should be accepted as a liability of the state budget and paid to the SSPF in the form of a transfer, but the experience of recent years shows that in practice the actual transfers allocated are not in the amounts covering those liabilities, which, on the other hand, is one of the relevant factors that can negatively affect the sustainability of pension financing mechanisms.

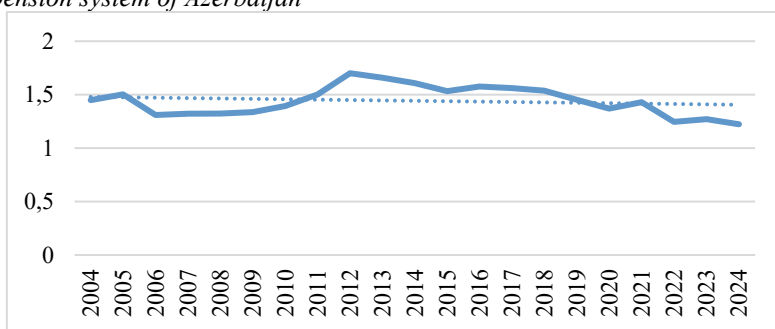
3.2. Evaluating Azerbaijan's pension system sustainability: A quantitative modelling framework

Applying the methodological framework outlined above, and considering historical data showing pension pay-outs constitute roughly 95% of the SSPF's total expenditures, we can derive a holistic financial sustainability indicator for Azerbaijan's old-age security framework. As shown in Figure 1, while the long-term trend of these coefficients improves (approaching "1"), fluctuations remain, requiring a multi-factor assessment for a clearer long-term picture.

Taking into account that the existing old-age security framework in the country is still managed in a single-tier structure based on the principle of solidarity ("Pay-As-You-Go" or PAYG), and at the same time the problem

of population aging has been accelerating in recent years in Azerbaijan, in order to increase the pension income of the population, in order to strengthen the savings potential of the pension system, first of all, the management of expenses should be carried out on an optimal basis, at the same time increasing the possibilities of increasing the number of active insured persons who are payers of mandatory state social insurance contributions, increasing overall economic activity and labour productivity, tax collection administration, especially the correct assessment of financial potential, becomes a matter of necessity.

Figure 1 – Ratio of payments to the population to revenues from mandatory state social insurance contributions (integral financial sustainability ratio) calculated for the pension system of Azerbaijan



Source: Created by the author.

Many Organisation for Economic Co-operation and Development (2023) countries are planning to raise retirement age thresholds, viewing this as an effective policy to strengthen pension system viability without cutting benefits. As the economically active population decreases and the elderly and disabled population grows, contributions to mandatory social insurance decline, while pension expenses rise (Ismayilov et al., 2024; Angjeli et al., 2025). A sign of the effect of these processes is a constant decrease in the number of active insured persons (payers of social insurance contributions) per 1 pensioner, which is considered one of the main indicators of ensuring long-term financial sustainability in the context of ensuring the continuity of pension provision (5):

$$R_n = N_c / N_p, \quad (5)$$

where R_n – coefficient of the number of active insured persons (social insurance payers) per 1 pensioner; N_c – number of contributors; N_p – number of pensioners.

A possible deviation of this coefficient from “1,0” should be considered favourable from the point of view of the financial potential of the pension system. The real nature of the coefficient is considered one of the important elements of assessing the PAYG system, since it shows how many insured persons work and pay social insurance contributions per 1 pensioner in the current situation. At this point, it is necessary to evaluate the coefficient determined by formula (6), showing the ratio of the share of the result of multiplying the number of active insured persons per 1 pensioner by the average amount of social insurance \bar{c} – paid by 1 payer in the amount of the pension (P_{ave}), paid on average per 1 pensioner (6, 7):

$$R_f = R_n * \bar{c}/P_{ave}, \quad (6)$$

$$\bar{c} = \overline{W}K_h, \quad (7)$$

where R_f – coefficient of current financial security of the retirement benefits system; \overline{W} – indicator of the average monthly nominal salary; K_h – standard insurance contribution for hired work; \bar{c} – average monthly insurance premium paid by an average wage earner.

In Azerbaijan, the majority of mandatory state social insurance contributions come from insured persons employed under contracts, with a 25% contribution rate (0.25). Official statistics on hired workers are based on those with employment contracts. The number of workers not contributing to mandatory state social insurance is considered an ineffective factor, as it has a minimal impact on the overall indicator. In 2023, the collected mandatory state social insurance contributions amounted to 5,197,700,000 manat (Sadiqov, 2024a), with an average monthly nominal wage of 933.8 manat (Sadiqov, 2024b; State Statistical Committee of Azerbaijan, 2024b). The number of pensioners at the beginning of 2023 was 1,114.2 thousand, decreasing to 1,099 thousand by early 2024, with an average of 1.1 million pensioners in 2023 (State Statistical Committee of Azerbaijan, 2024c). Based on these figures and using formulas (5) and (6), the replacement rate for 2023 was approximately 1.68:

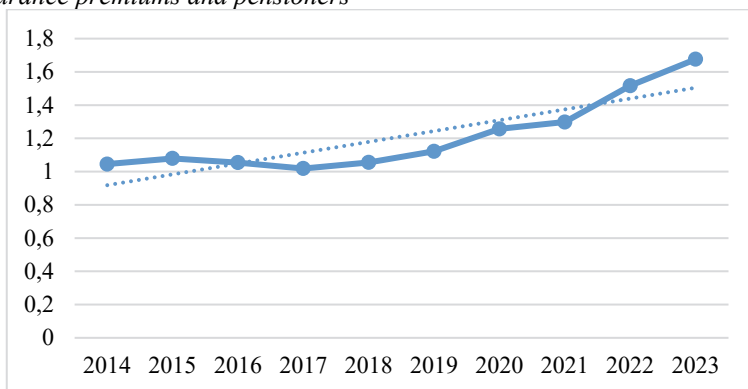
$$N_c = 5,197,700,000/0.25/12/934 = 1,854,996.43$$

and

$$R_n = 1,854,996,43/1,106,600 = 1,676.$$

If it take into account that according to the published data for 2022 (Budget revenues from..., 2023) and according to official statistics, the average monthly salary was 839.4 manat, and the number of pensioners is 1,200,475, then can be also calculated that in 2022 the specified coefficient will be 1,517 manat (Figure 2).

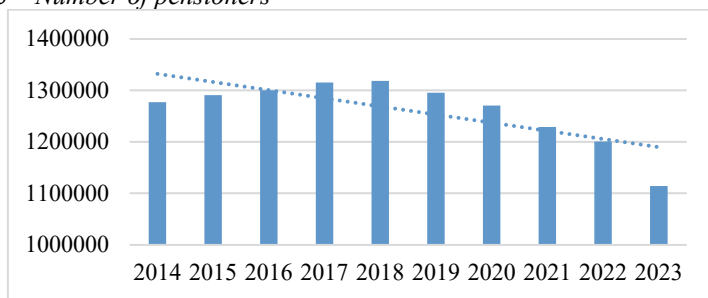
Figure 2 – Conditional replacement rate depending on the number of active payers of insurance premiums and pensioners



Source: Created by the author.

In Figure 3, it can be seen that, starting in 2018, the number of pensioners has sharply decreased.

Figure 3 – Number of pensioners



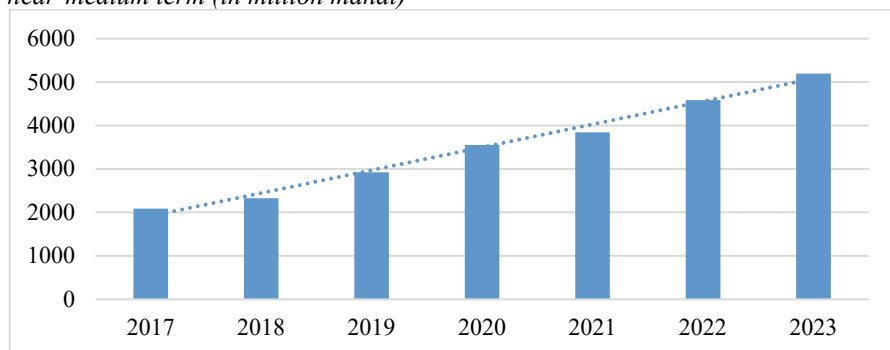
Source: State Statistical Committee of the Republic of Azerbaijan (2024c).

In recent years, there has been a marked upward trend in mandatory state social insurance contributions – the core funding mechanism of the insurance-pension system (Buribayev et al., 2016; Ibraev et al., 2017). According to Ministry of Labour and Social Protection of the Population of the Republic of Azerbaijan (2022) data, SSPF revenues from such

contributions have increased significantly during this period. During the specified period, the receipt of mandatory state social insurance contributions increased by 84.3% or by 1757.68 million manat. This growth is based on the positive results of the socio-economic reforms carried out in the country, including the regular growth of employment opportunities and wages, and the expansion of the legalization of labour relations. In 2021, the private sector accounted for 63.5% or 2441.2 million manat of the mentioned revenues. This is 1103.8 million manat or 82.5% more than in 2017.

As can be seen from the Figure 4, in the last medium-term period, the trend of increasing collection of contributions for mandatory state social insurance has been maintained, which is one of the important conditions for improving the conditional replacement rate in relation to the number of active payers of insurance contributions and pensioners. However, in relation to 2023 the coefficient calculated using formula (8) will be equal to 1.427, from which can be conclude that the improvement of the financial situation may be largely associated with the results of administrative measures.

Figure 4 – Collection of mandatory state social insurance contributions in the latest near-medium term (in million manat)



Source: Created by the author based on Ministry of Labour and Social Protection of the Population of the Republic of Azerbaijan (2022; n.d.).

The number of insured persons registered individually during 2021 increased from year to year, and in the last year alone it increased by 219.4 thousand people or 5% by January 1, 2022 and constituted 4.60 million people (Azerbaijan State News Agency, 2022). If author applies the formula (6) compiled as the coefficient of the current financial sustainability of the system of retirement income support to the corresponding indicators for 2023, taking into account that the average monthly pension in 2023 is 436 manat, can be get a result of 0.897, then:

$$R_f = 1.676 \times (934 \times 0.25)/436 = 0.897.$$

As reported by the SSPF, the number of individual personal accounts opened in the individual accounting system, which represents the accounting and organization of mandatory state social insurance premium payments to form pension capital, which plays a fundamental role in calculating pensions, reached 5.08 million by the end of the 2023 half-year period (Ministry of Labour and Social Protection of the Population of the Republic of Azerbaijan, 2023).

In this regard, in the context of the Azerbaijan Republic, the reasons for the discrepancies between the projected and subsequently achieved performance indicators of mandatory state social insurance contributions depend primarily on the calculation-forecasting methodology, as well as on the level of organization of the work of state tax authorities on collection issues. The Chamber of Accounts' official assessment highlights a noteworthy improvement in the Fund's financial position during 2021, with a substantial reduction in outstanding liabilities compared to the year's beginning. Their analysis emphasizes that maintaining minimal accounts payable represents a crucial parameter for developing accurate revenue projections based on actual financial conditions rather than theoretical estimates. This relationship between reduced outstanding obligations and forecasting accuracy demonstrates the interconnection between current financial health and future planning reliability (Issayeva et al., 2024; Prokhorova et al., 2025). Compared to the beginning of the year, the increase in both accounts receivable and accounts payable in the first half of the year is associated with the payment of social insurance contributions by insurers, but the report was not provided as of the date of information generation (Draft Budget of ..., 2022).

In accordance with legislative procedures, the Ministry of Economy submits key economic indicators for forecasting the SSPF's budget to the Ministry of Labour and Social Protection. The Ministry of Finance also provides information on wage and social insurance deductions from budgetary organizations. Budget projects are submitted to both ministries by March 15 and July 1 each year. These projects include data from the State Tax Service on insurers' debts for social insurance and unemployment contributions. Table 2 reflects the forecast and performance indicators of the SSPF under current conditions.

These results highlight the main challenges to the financial sustainability of Azerbaijan's pension system, particularly in the context of demographic change and the increasing ratio of pensioners to workers. Despite positive trends such as growth in mandatory contributions, dependence on

government transfers to cover historical liabilities and fluctuations in financial indicators point to the need to develop a long-term strategy. To ensure the stability of the pension system, it is necessary to optimise expenditure, increase the number of active contributors and take demographic changes into account.

Table 2 – Forecast and performance indicators of the SSPF

<i>Year</i>	<i>Initial forecast indicator</i>	<i>Fact</i>	<i>Execution (in%)</i>
2017	2125	2085.7	98.2
2018	2273.26	2327.1	102.4
2019	2419.37	2921.6	120.8
2020	3392.59	3553.2	104.7
2021	3502.499	3843.4	109.7
2022	4148.202	4586.3	110.6
2023	4783.6	5197.7	108.7

Source: Created by the author based on Ministry of Labour and Social Protection of the Population of the Republic of Azerbaijan (2022; n.d.), Law of the Republic of Azerbaijan No. 449-VQ “On the 2017 Budget of the Relevant Executive Authority Implementing Social Security and Protection” (2016), Law of the Republic of Azerbaijan No. 904-VQ “On the 2018 Budget of the Relevant Executive Authority Implementing Social Security and Protection” (2017), Law of the Republic of Azerbaijan No. 1350-VQ “On the 2019 Budget of the Relevant Executive Authority Implementing Social Security and Protection” (2018), Law of the Republic of Azerbaijan No. 1697-VQ “On the 2020 Budget of the Body (Institution) Determined by the Relevant Executive Authority Implementing Social Security and Protection” (2019), Law of the Republic of Azerbaijan No. 234-VIQ “On the 2021 Budget of the State Social Protection Fund” (2020), Law of the Republic of Azerbaijan No. 402-VIQ “On the 2022 Budget of the State Social Protection Fund” (2021), Law of the Republic of Azerbaijan No. 673-VIQ “On the 2023 Budget of the State Social Protection Fund” (2022).

4. Discussion

The current single-tier pension system in Azerbaijan presents notable contrasts with multi-tier systems implemented in various nations globally. Unlike diversified pension frameworks that incorporate private pension funds and occupational schemes, Azerbaijan’s reliance on a single state-managed system creates both advantages in terms of administrative oversight and challenges regarding long-term sustainability. This aligns with observations by Ijzereef et al. (2023), Alifiana and Najjiyya (2024), who note that pension systems with limited diversification often face heightened sustainability challenges during demographic transitions. The statistical data

presented in the results section demonstrates that Azerbaijan's system of retirement income support currently maintains adequate financial stability. The coefficients calculated in this study, particularly the conditional replacement rate dependent on the number of active insurance premium payers and pensioners, indicate a concerning trend. This finding corresponds with research by Anantanasuwong (2023), who emphasizes the importance of looking beyond short-term financial indicators when assessing pension system sustainability. The growing dependence on treasury transfers to maintain fiscal equilibrium suggests potential weaknesses in the system's self-sustainability (Khamzin et al., 2015; Khamzina et al., 2015). Willows (2023) similarly emphasizes that system of retirement income supports requiring increasing budgetary support often signal fundamental structural issues.

The primary financial challenge for Azerbaijan's pension system stems from sustainability concerns. Financial viability depends on the system's ability to meet social insurance commitments using internal revenue sources. Treasury transfers, made by the government to the SSPF, help cover pension obligations and maintain fiscal equilibrium. These transfers act as subsidies, particularly for non-contributory benefits or to fill funding gaps due to insufficient revenue from mandatory contributions, and are crucial for covering any budget deficits in the pension system. The financial stability coefficient of the insurance and old-age security framework, used to assess the system's ability to meet its obligations to the population (including pensions and benefits financed through mandatory state social insurance contributions), may be theoretically determined by formula (1).

The gap between projected and actual collection rates suggests limitations in current forecasting methodologies. Improved forecasting models could significantly enhance financial planning capabilities, allowing for more proactive policy responses to emerging challenges. This finding is consistent with international experiences documented by Muslumov and Ibrahimov (2009). A critical finding from the study is that Azerbaijan's pension system lacks a maximum benefit ceiling, allowing pensions to scale indefinitely with higher lifetime earnings and contributions. Aliyev et al. (2011), Bayramov et al. (2020) similarly identified benefit structure design as a critical element of social protection sustainability in Azerbaijan.

Developing more effective mechanisms for integrating self-employed individuals and agricultural landowners into the formal social insurance system could substantially enhance financial sustainability (Abdullayeva, 2021; Işık et al., 2025). Mammadov (2023) similarly noted that administrative arrangements significantly influence the effectiveness of public financial systems in Azerbaijan.

The sustainability coefficient analysed in the study provides a valuable metric for evaluating the current financial health of Azerbaijan's system of retirement income support. The integral financial sustainability ratio calculated for Azerbaijan's system of retirement income support demonstrates an improving long-term retrospective trend. However, the observed fluctuations in this ratio suggest potential instability in the system's financial foundation.

5. Conclusion

The analysis of financial sustainability in Azerbaijan's pension system reveals multiple challenges requiring systematic policy responses. Through examination of the current financial management model implemented through the SSPF, several key aspects have been identified.

The financial sustainability of Azerbaijan's state system of retirement income support presents distinctive characteristics compared to Eurozone pension schemes. Challenges stem primarily from managerial factors rather than solely demographic issues, with a significant limitation being the non-diversified structure of the system. Since its inception in 2006, the system of retirement income support has operated as a single-pillar structure based exclusively on mandatory state social insurance contributions, lacking both occupational pension schemes and an active funded component within the system.

The research demonstrates that traditional parametric reforms, such as increasing retirement age or tightening regulatory requirements, provide insufficient solutions for reducing fiscal burden. More promising approaches include expanding mandatory state social insurance coverage through labour relation legalization and implementing strategies to encourage extended labour market participation among older workers. A significant methodological limitation identified relates to forecasting practices. Under existing budget system legislation, pension forecasting operates on a medium-term basis, which proves inadequate for long-term financial stability analysis. Contemporary pension management requires multi-spectral calculations using comprehensive databases to project long-term viability accurately. While actuarial methods would enhance long-term forecasting capacity, their implementation faces practical challenges related to institutional competence and management structures.

The research highlights a structural issue: the retirement income support system is funded through a PAYG system based on mandatory state social insurance, requiring efficient management and control. Legislative changes

in 2018 improved efficiency for payers but weakened the Fund's ability to assess and forecast insurance potential. This consolidation of functions within one entity, lacking direct responsibility for the pension system, complicates accurate forecasting. Without precise electronic management, inaccurate transfers may deplete reserves. The focus should be on diversifying the pension system, improving forecasting, enhancing institutional coordination, and expanding the contribution base through better labor market formalization.

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