Priority Directions for Life Insurance Development in Uzbekistan

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Abstract: The article was prepared within the framework of the practical project of AL-7823051642 "econometric modeling and forecasting of demand for insurance services in Uzbekistan on the basis of socio-economic and demographic factors" performed at the National University of Uzbekistan named after Mirzo Ulugbek.In this paper, the authors analyze the formation of life insurance in Uzbekistan, the ongoing reform of the insurance market of the republic, and ways of accelerating its development. It also looks at the development of higher-demand life insurance services. The paper examines the main drivers of insurance industry modernization, innovative product lines, regulatory modernization, and the importance of new digital technologies for increasing availability and quality of insurance services. The main risks in the activities of life insurance companies in Uzbekistan are insufficient literacy rate of society, frequent changes in laws and regulatory documents regulating the insurance industry in Uzbekistan, increased prices for raw materials and services of insurance companies, the presence of high financial, natural disasters and environmental risks in Uzbekistan,. it was found to be technology-related risks. In order to study the development of the insurance market in Uzbekistan, the relationship between GDP, inflation and demand for insurance services in the country was analyzed. According to him, an increase in GDP develops the insurance market, increases demand and volume. Inflation, on the other hand, increases risks in the insurance market, assuming a balance between premiums and payments. The results intended for calling attention to strategic ways how to increase the strength of the insurance sector, to support the economic stability and to increase insurance awareness of life insurance in Uzbekistan.

1 INTRODUCTION

The progress of the insurance industry is a key element of the financial system, which in turn affects macroeconomic stability as well as the long-term growth of the economy [1]. As nations pursue economic resilience in the face of global uncertainties, the role of insurance in risk management, savings mobilization, and social protection has never been greater. New research underscores the relevance of novel insurance products and the role of trust in consumers in sustaining mature markets, as well as in promoting financial inclusion [2]. In this regard, emerging economies such as Uzbekistan must address the issue of developing their insurance markets in line with global requirements and the ever-changing conditions of today's technology.

In Uzbekistan, aligning the insurance market with international best practices and fostering long-term sectorial growth requires reforming insurance and providing new services that meet the needs of the population [3]. The continued restructuring of the economy, together with the policy of liberalization and development of financial institutions, provides an enabling environment for the insurance industry to contribute to economic stability. The sector's growth is further supported by improved socio-economic education levels and the need to enhance risk absorption capacity.

Studies have shown that adopting modern technologies, such as digital platforms and fintech solutions, improves service delivery, access, transparency, and operational efficiency [4]. Digital

transformation not only lowers operational costs but also extends insurance products to underserved and rural areas, promoting financial inclusion. Additionally, big data analytics and AI enhance risk assessment accuracy, personalize products, and expedite claim payments, all critical for market development.

Further, promoting public vigilance and expanding regulatory frameworks are key to maintaining market stability and competitiveness [5]. Positive regulation fosters investment, innovation, and consumer protection. In Uzbekistan, applying internationally recognized regulatory standards will build consumer trust and stimulate foreign investment in the sector. Regulatory bodies and insurers must also enhance their capacities to address emerging challenges and technological advancements.

Combining global best practices with local economic realities will help create a dynamic and resilient insurance market in Uzbekistan, ultimately enhancing financial inclusion and economic resilience [6]. As the industry evolves, it will play a central role in risk-sharing, social safety nets, and wealth generation, supporting broader goals like poverty alleviation and sustainable development.

2 MATERIALS AND METHODS AND RELEVANCE OF STUDY

Emergent or unexpected incidents when extra financial resources are needed to meet a need; like medical treatment, funeral expenses, buying a house, or replacement of revenue when breadwinner has gone, any of these situations is an inseparable part of the day-today life of an individual in the present-day world. [1] states that listed above situations becomes a trouble for families with low living standards and lack of financial preparedness typical for the countries with developing economics. Notwithstanding, the significance level of the GDP per capita of a country in development of the insurance market is one the highest among other indicators. As a country's GDP per capita rises, people tend to have more disposable income and a greater need for financial protection against various risks. This can translate into higher demand for life, health, property, and other insurance products [7].

Moreover, developed countries' economies demonstrate that the most superior form of protection for families' financial stability is a life insurance policy. Life insurance contributes to long-term financial protection, minimizes risks associated with unforeseen events and grantees an opportunity for wealth accumulation, with a system of savings and investment part of insurance products [8]. Market share of insurance sector in many developed countries accounts for 4-6% of GDP, which indicates the critical role that industry plays in social protection and economic safety systems.

2.1 Methodology

The pervious and the presented study is of complex nature involving the technique of quantitative and qualitative analysis of the development potential of life insurance in Uzbekistan [9]. The resulting quantitative methods are in: statistical study of official statistics provided by the National Bank and the Insurance Association of Uzbekistan; regression modeling; correlation analysis identification of factors affecting insurance penetration and quality of service. Intermediate Qualitative techniques, Intermediate techniques include interviews with experts, benchmarking against international practices, all of which help form a holistic picture of the sector's status and potential for growth. The main regression analysis is based on OLS regression model in Stata, where we are considering insurance percentage out of GDP amount as a dependent variable and main independent variable is GDP and control variables are inflation rate and investment amount.

2.2 Relevance and Rationale

The importance of the study depends on continuous increase of the role of life insurance both in social and economic security. Amidst changing demographics and evolving socio-economic dynamics, there is increasing need for pioneering, cost-effective and dependable insurance solutions. In addition, the adoption of international standards and best practices, and technological innovations are needed to enhance efficiency in the sector and to build greater confidence in the public.

Distinguishing the clear causal relationship between all our variables we need to extract the context of global economic difficulties (especially the consequences of the COVID-19 pandemic, inflationary pressures, and demographic changes), considering the present situation and determining the strategic ways of development of the life insurance in Uzbekistan is of particular importance. Thus, the regression analysis includes the database for the time period from 2020 to 2024. This study is expected to provide policy enabling recommendations to

policymakers, industries, consumers for enhancing sector growth, financial inclusion and social protection.

3 DETAILED ANALYSIS OF THE PECULIARITIES OF THE MODERN TENDENCIES OF THE DEVELOPMENT AND PROSPECTS OF THE UZBEK INSURANCE MARKET

3.1 The Structure of Markets, Capitalization and Segmentation

As shown in Table 1, the insurance market in Uzbekistan has been growing steadily in recent years, and the life insurance segment experienced dramatic ups and downs due mainly to legislative changes, macroeconomic factors and market forces. At the end of 2023, 38 insurance companies were registered, 7 of which were exclusively focused on life insurance, estimated at up to 22% of total industry capital [10]. That's a market that is still in the development phase, with a small and possibly high-growth portion.

The data in Table 1 clearly demonstrates that despite the insurance sector's total capital growing almost 22.6% between 2023 and 2024, the life insurance sub-segment has seen a significant reduction in its contribution, one that came predominantly with legislative reform that ended the tax advantage of life policies funded voluntarily. Accordingly, at the end of 2024 the ratio of life insurance over aggregate capital had declined from 24% in 2022 to 3% in 2024, denoting a move in the wrong direction.

3.2 Volume and Sectoral Dynamics

The trends presented in Table 2 show that the aggregate sum of insurance premia in 2024 amounted to 9.8 trillion sums or 21.2% more than the previous year. The decrease in the life insurance sphere is especially dramatic: premiums on voluntary life insurance sank by 11.2% to 0.29 trillion sums in 2024 compared to 0.3 trillion sums in 2023 [10]. This decrease is directly tied to the legal changes and law reforms in 2023-2024 [11].

The precipitous decrease in life insurance segment values reveals weaknesses in the current policy regime and market trust. Once tax subsidies ended in April 2023, consumer interest plummeted, aggravated by macroeconomic volatility, inflation orders of magnitude higher than in Japan, and currency devaluation [1, 2, 3].

3.3 Macroeconomic Constraints

The industry has a number of macroeconomic challenges that it must face to preserve its growth potential. High inflation, which rose by more than 15% in 2022, undercuts the purchasing power of consumers, and weakens demand for voluntary coverage [10]. Currency devaluation – and specifically the devaluation of the Uzbek sum – causes [insurers with obligations in that currency to have] increased liabilities, therefore increasing the risk of insolvency, and lowers investor confidence".

The analysis in Table 3 reveals that at the same time, sluggishness of domestic investment and price volatility in the global commodities market (particularly the energy commodities) present additional uncertainties [6]. In conjunction with political instability and policy, these macroeconomic forces impact the stability and long-term health of the insurance sector.

At the microeconomic level, insurers experience a set of internal barriers that make them unable to successfully invest, including mis-estimation of the risks, absence of technical infrastructure, and low awareness among the public [4]. Advanced analytics continues to be absent (and much needed) in many insurance companies, which makes it difficult to accurately assess and price risk. Also, consumer awareness in this area is low as much of the population are unaware of the advantages of life insurance, causing limited geographical reach [12].

3.4 Results of Regression Analysis

According to the three models it is preferable to consider that GDP is the one of the most important variables with the perfect significance level where the p-value is equal to 0.009. Moreover, the first model demonstrates the reverse relationship between the variables insurance and inflation as the coefficient and t-value have the minus sign. This result towards relationship between inflation rate and insurance level is explained by the tendency of citizens to keep their money for the basic needs while the value of the national currency drops in international market [3]. Furthermore, this phenomenon decreases the level of trust in national currency and the demand for insurance expenses fades into the secondary needs,

which is obvious for the developing countries economy.

As shown in Table 4, the R-squared of all three models shows perfect reliability with the reality remaining all other factors are constant and stable. However, the models two and three show less significance level with p-values of gdp and investment equal to 0.756; 0.125 and 0.040 respectively.

Tests for autocorrelation, heteroscedasticity and multicollinearity showed that none of these problems are present in dataset used for regression analysis [9]. To assess and address autocorrelation, heteroscedasticity, and multicollinearity in regression analysis, several tests are used. Autocorrelation is tested using the Durbin-Watson test or Breusch-

Table 1: Market composition and capital dynamics (2020–2024).

Year	Number of Insurance Companies	Total Capital (trillion sums)	Life Insurance Capital (trillion sums)	Share of Life Insurance in Total Capital (%)
2020	40	1.4	0.3	10.5
2021	42	1.6	0.7	18.5
2022	41	1.9	1.5	24.0
2023	38	2.3	0.3	4
2024	33	2,9	0,2	3

Table 2: Sectoral premiums and growth rates (2020–2024).

Indicator	2020	2021	2022	2023	2024	Change in 2024 (%)
Total premiums (trillion sums)	1.9	3.0	4.7	7.7	9.5	+22.6
Premiums from life insurance (trillion sums)	0.3	0.7	1.5	0.3	0.29	-11.2
Share of life insurance premiums in total (%)	15.8	23.3	31.9	3.9	3	—

Table 3: Key macroeconomic risks affecting the sector (2020–2024).

Risk Factor	2020	2021	2022	2023	2024	Impact on Insurance Sector
Inflation Rate	13 %	10.9 %	11.4 %	17.3%	9.6%	Reduces consumer purchasing power, limits premium affordability
Currency Exchange Rate	1 USD = 10000-10500 sums	1 USD = 10500-11000 sums	1 USD = 11000-11500 sums	1 USD = 11500-12000 sums	1 USD = 12000-12900 sums	Increases liabilities for foreign currency obligations
Investment Levels	2.87 % of GDP	3.28 % of GDP	3.27 % of GDP	2.36 % of GDP	10.3 % of GDP	Low investment hampers product innovation and sector expansion
Raw Material Prices	Volatile	Volatile	Volatile	Volatile	Volatile	Affects macroeconomic stability and sector confidence

Table 4. Regression analysis results of insurance market development factors.

v1	v2	v3	v4
	(1)	(2)	(3)
VARIABLES	Model 1	Model 2	Model 3
gdp (GDP in mln UZS)	0.001***	0.000	0.003
	(0.0000)	(0.0008)	(0.0013)
invest (investment percentage)	0.597***	1.217**	
	(0.0063)	(0.2524)	
inf (inflation level in percent)	-0.270***		
	(0.0024)		
Constant	4.319***	-2.413	5.047***
	(0.0627)	(1.5736)	(0.8314)
Observations	5	5	5
R-squared	1.000	0.968	0.599

Godfrey test, while the Breusch-Pagan test and visual inspection of residuals are common methods for detecting heteroscedasticity. Multicollinearity is identified using Variance Inflation Factor (VIF) tests or by examining correlation matrices.

3.5 Strategic Focus and Policy Recommendations

Uzbekistan needs a multifaceted approach to revitalize and speed up development in this sector. According to the Decree of the President of the Republic of Uzbekistan PP No. 5265 dated October 23, 2021 "On additional measures for the digitalization of the insurance market and the development of the life insurance sector" [10], provides 50% decrease of tax rates for life insurers within 2022–2025 which is a move forward. But more is needed, including:

Strengthening the existing and new legislative and regulatory framework to ensure transparency and trust towards the consumer [13].

- Launching digital platforms and new distribution channels to widen reach [4].
- Promoting the positive aspects of life insurance by creating financial literacy programs for the public [2].
- Rebalancing macroeconomic policies to stabilize inflation and exchange rate movements [3].
- Strengthening partnership with FALIA and OLICD to share best practices and develop professionals [8].

4 DETAILED RESEARCH OF STRATEGIC DIRECTIONS THE LIFE INSURANCE ON UZBEKISTAN DEVELOPMENT: THE BASIS OF THE STABLE SECTOR

4.1 Aims and Evidence for Priorities

Taking into account the comprehensive study of the industry, expert opinions, and the best international experience, the following strategic areas are considered important for the sustainable development and stability of the life insurance market in Uzbekistan. The priorities serve to address current difficulties, tackle opportunities, and build robustness against international economic variances.

4.2 Strengthening the Financial Cognition of the Population

Boosting the financial literacy of the population and insurance awareness are also essential to the increase in the use of services. Higher financial literacy is positively related to making decisions in favor of the use of insurance services and making more informed financial decisions or create better risk management [14]. Propagating both at the school-level in curricula and courses in higher education across the nation, and in the public through initiatives such as mobile applications and online courses, opens awareness on a massive scale, particularly for younger generations. The theory of financial resilience [15] suggests that, by increasing financial literacy, information asymmetry is reduced, the efficiency of the market is improved, and consumer confidence is strengthened, eventually leading to faster sector growth.

4.3 Theoretical and Practical Aspects to Innovative Insurance Products Designing

The creation of special insurance products aimed at various age groups – from the young to the family to pensioners, is crucial to appeal to a wider range of customers. They must be flexible, digital-based, and personalized by integrating modern solutions like AI and big data analytics – as [16] have highlighted. For instance, hybrid policies that integrate protection and investment features, and which offer automatic premiums and tailored coverage choices, are known to better engage and satisfy consumers. As per the portfolio diversification theory [17], diversified products in turn, reduce the overall sectoral risk and add to the financial security, particularly, when it is in tune with the demographic shifts.

4.4 Harnessing Digital Technology: Trends and Strategies for Integration

Use of digital platforms for policy sales, customer service, and claims is essential for modernization of the industry. As per the definition by [18], digitalization cuts costs and enhances customer experiences whilst making operations more efficient. Introduction of online portals, mobile apps, chatbots and automated risk assessment tools would ensure open, transparent and efficient services, appealing to

tech friendly generations and spread coverage geographically. To realize the benefit and trust, we also need to consider data security, compliance with international cyber-security standards, and user-friendly design.

4.5 State Support and Regulatory Frameworks: Policy Creation and Institution Building

Establishing transparent and predictable legal and regulatory regimes is essential to developing this sector. The recent legislative steps, i.e. the tax rates reduction on activities of insurance for 50% for the period of 2022-2025 [13], give stimuli for insurance companies. There is also the potential for increased transparency, enhanced risk management, and greater investor confidence by conforming to international standards, like IFRS 17 on insurance contracts and principles from Solvency II. According to [19] successful regulation will lead to decreased information asymmetry and moral hazard, and will 29 promote market stability which in turn attracts domestic and foreign investment.

4.6 International Cooperation and Transfer of Knowledge

Working with international organizations like FALIA (The Foundation for the Advancement of Life & Insurance Around the World) and Japan's OLICD promotes information exchange and staff development and encourages a best practice approach. Such international co-operations help Uzbekistan to implement advanced risk management methodologies, product innovations and digital solutions and promote sector modernization. The globalization of markets [20] insists on the fact that international cooperation can expedite the diffusion of innovation, help cut standards reference for companies while it can also enhance competitiveness.

4.7 Adjusting to Demographic Shift: Product and Market Innovation.

Insurance products need to evolve, given changes in demographics including aging societies and burgeoning youth populations. For example, the creation of pension products offering flexible contribution requirements, micro-insurance for low-income segments and insurance products for migrants could lead not only to increased product

diversity but also to a broader market participation. Population cycle theory [21] suggests that if insurance options are carefully linked to demographic circumstances, the sector will remain viable and the guarantee of social protection will have substantive credibility.

4.8 Mission to Enhance Service Quality and Professional Capability

Quality of Customer Service Trust is derived from a high-quality service and can determine how loyal customers will be. Training programs, progress of standards, and feedback systems need to be institutionalized. Implementing CRM systems, automation of business processes and use of data analytics will improve the efficiency of operations and customer satisfaction. As [22], quality significantly impacts customer loyalty and company image that play an essential role in industry growth.

4.9 Measures to be Taken for Implementation and Technical Innovation

To achieve these strategic directions, the detailed action plan would comprise:
- Stimulating economic growth and providing basic infrastructure and social security, which will ensure the basic needs of the population and rise to the next level of living standards;
- Designing educational programs and financial literacy campaigns aimed at schools, universities and community centers;
- Market research and customer surveys to discover unmet wants and to shape (PDP);
- Development of IT infrastructure, user-friendly mobile apps, online insurance platforms, and automated process;
- Enhance legal and regulatory frameworks consistent with international standards, also with consumer protection laws;
- Developing strategic alliances with offshore insurers and financial institutions;
- Conducting insurance professionals training workshops & certification programs;
- Launching marketing strategies to inform and draw in new customers;
- Developing monitoring and evaluation systems to monitor the use of these measures and adjust approaches.

A comprehensive, multi-vector solution represented by legal changes, development of technology, educational initiatives, and international collaboration shall ajust the necessary frameworks for the sustainable development of life insurance in Uzbekistan. By instilling in consumers a greater level of confidence in the market, encouraging product innovation, and improving service quality, life insurance will move from a new-niche market to an indispensable tool for social stability and protect consumers against financial risk. Although today some of those opportunities have been shadowed by amendments to the law and macroeconomic instability, we believe that the sector's future is still bright if its strategic priorities are successfully implemented. The government and sector must collaborate, while the sector evolves in accordance with world best practice and the needs of the country's socio-economic context.

5 CONCLUSIONS

This article focuses on the formation of the life insurance market in Uzbekistan, the ongoing reform of the sector and the measures needed for its rapid development. The main message is that the insurance industry is crucial for ensuring macroeconomic stability, social well-being and financial development. Creativity, digitalization and standardization will be key to further development of the industry in the future. However, there is still much room for growth, especially through active stimulation of economic growth and strengthening of public-private partnerships. Especially considering the results of the regression analysis, where economic growth in the form of GDP growth and investment growth are the basic factors for improving the living standards of the state's residents.

High standards and sufficiently high earnings of citizens instill confidence and trust in the government system. In turn, improving the standard of living requires more decent ways to ensure economic and social security, namely life and property insurance. In general, further progress in the insurance market of Uzbekistan. Continuous improvement of regulatory regimes, the use of new and digital technologies and the development of competition have a complementary effect against the background of sustainable economic development and ensuring economic security for success. These measures will not only stabilize the sector but will also increase consumer confidence, which will further strengthen the country's economy. Whether there is a dual causal effect among these factors is the next question that requires more sophisticated data analysis and research.

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