

STATISTICAL ANALYSIS OF THE DYNAMICS OF REINSURANCE
PREMIUMS AND CLAIM PAYMENTS IN UZBEKISTAN

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Abstract. *This paper presents a comprehensive statistical analysis of the dynamics of reinsurance premiums and claim payments in Uzbekistan. The study aims to assess the role of reinsurance in the risk management system of insurance companies and its impact on financial stability and solvency. The research is based on official statistical data covering recent years, including the third quarter of 2025. Using descriptive statistical methods, growth rate analysis, and graphical interpretation, the trends and structural changes in the reinsurance market are examined. The results indicate a steady increase in reinsurance premiums alongside a more balanced growth of claim payments, reflecting the strengthening role of reinsurance mechanisms in mitigating large and catastrophic risks. The findings contribute to a deeper understanding of the development prospects of the reinsurance market in Uzbekistan and provide practical insights for improving risk management policies.*

Keywords: *Reinsurance, insurance premiums, insurance claims, statistical analysis, risk management, insurance market, Uzbekistan.*

In the context of increasing economic uncertainty, globalization, and the growing frequency of large-scale risks, reinsurance has become a key instrument in ensuring the sustainability of national insurance markets. For emerging economies such as Uzbekistan, the development of an effective reinsurance system is particularly important for protecting insurance companies from excessive risk concentration and for maintaining financial stability.

In recent years, Uzbekistan's insurance market has undergone significant structural changes driven by regulatory reforms, market liberalization, and increased integration into the global financial system. These changes have led to a growing demand for reinsurance services, both domestic and international. Therefore, analyzing the dynamics of reinsurance premiums and claim payments is essential for evaluating the effectiveness of risk transfer mechanisms and identifying existing challenges in the market.

International studies emphasize that reinsurance plays a crucial role in stabilizing insurance markets by redistributing risks and reducing volatility in insurers' financial results (Cummins & Trainar, 2009; Swiss Re, 2023). Empirical research shows that well-developed reinsurance markets contribute to higher solvency levels and enhance insurers' capacity to underwrite large and complex risks.

Regional studies focusing on transition economies highlight that insufficient reinsurance capacity and low diversification can increase systemic vulnerability (Outreville, 2015). In the context of Uzbekistan, existing research mainly addresses general insurance market development, while in-depth statistical analyses of reinsurance premiums and claims remain limited. This paper seeks to fill this gap by providing a data-driven assessment of recent trends.

The study employs descriptive and comparative statistical methods to analyze the dynamics of reinsurance premiums and claim payments in Uzbekistan. The data set is based on official statistics published by national regulatory authorities and covers the period up to the third quarter of 2025.

The methodological approach includes:

- analysis of absolute and relative growth indicators;
- calculation of growth rates and structural shares;
- graphical visualization of premium and claim dynamics;
- comparative assessment of trends over time.

This approach allows for identifying key patterns and assessing the balance between reinsurance premiums and claim payments as an indicator of market stability.

The statistical analysis reveals a consistent upward trend in reinsurance premiums, reflecting the expansion of insurance portfolios and increased reliance on risk transfer mechanisms. The growth of premiums indicates that insurance companies are increasingly using reinsurance to manage underwriting risks and comply with solvency requirements. At the same time, reinsurance claim payments have grown at a more moderate pace. This suggests an improvement in risk selection, underwriting quality, and portfolio diversification. The observed gap between premium growth and claim payments contributes positively to the financial results of insurers and enhances their capacity to absorb shocks. Graphical analysis shows that periods of accelerated premium growth coincide with regulatory reforms and increased participation of international reinsurers. However, the concentration of reinsurance operations among a limited number of market participants remains a challenge, potentially increasing dependency risks.

Overall, the results confirm that reinsurance plays a stabilizing role in Uzbekistan's insurance market, though further diversification and market deepening are necessary to strengthen resilience.

Conclusion. The findings of this study demonstrate that the dynamics of reinsurance premiums and claim payments in Uzbekistan reflect a gradual strengthening of the reinsurance market and its role in risk management. The steady growth of premiums, combined with controlled claim payments, indicates improved financial stability and enhanced solvency of insurance companies.

To further develop the reinsurance sector, it is recommended to expand domestic reinsurance capacity, promote competition, and enhance regulatory oversight. Strengthening statistical transparency and encouraging the use of advanced risk modeling techniques would also contribute to more effective risk management and sustainable market development.

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