



# ANALYSIS OF REINSURANCE DEVELOPMENT TRENDS IN THE GLOBAL MARKET AND IN THE PRACTICE OF UZBEKISTAN

**Norov Zarif**

*Independent Researcher, Tashkent State University of Economics*

## ABSTRACT

*This study examines the strategic transformations and resilience mechanisms shaping the global and Uzbekistan reinsurance markets amid rising financial instability and intensifying catastrophic risks. The analysis evaluates proportional and non-proportional reinsurance models, capital adequacy dynamics, retention and gearing ratios, and the growing role of alternative risk-transfer instruments such as insurance-linked securities (ILS) and catastrophe bonds. The findings show that reinsurance functions not only as a risk-transfer tool but also as a critical stabilizing mechanism that strengthens insurers' capital structures, enhances portfolio diversification, and increases market confidence. For Uzbekistan, the study highlights the rapid growth of reinsurance premiums, expanding cooperation with foreign reinsurers, and the need to align national solvency practices with international standards to reinforce financial stability.*

**KEY WORDS:** *Reinsurance, Capital Adequacy, Solvency II, Retention Ratio, Gearing Ratio, Catastrophe Bonds, Insurance-Linked Securities, Proportional Reinsurance, Non-Proportional Reinsurance, Uzbekistan Insurance Market.*

## INTRODUCTION

In recent years, the global reinsurance market has been undergoing profound structural transformation driven by escalating systemic uncertainties, ranging from climate-induced catastrophic losses to persistent macro-financial volatility. According to Swiss Re Institute (2024), insured natural catastrophe losses exceeded USD 100 billion for the fourth consecutive year, reinforcing the strategic importance of reinsurance as a capital-relief and risk-transfer mechanism. The sharp rise in interest rates across major economies, supply chain disruptions triggered by geopolitical conflicts, and tightening solvency regulations have collectively reshaped global insurers' risk-taking capacity. As a result, reinsurance has become a core instrument for stabilizing insurers' balance sheets, sustaining underwriting capacity, and enhancing resilience against low-probability but high-severity shocks. This emerging paradigm positions reinsurance not merely as a risk-sharing tool, but as an essential pillar of financial stability within the global insurance ecosystem.

For emerging markets such as Uzbekistan, the reinsurance sector is gaining increasing relevance as the insurance industry expands, capital requirements tighten, and exposure to large industrial, infrastructure and climate-related risks grows. The period 2022–2024 demonstrated accelerated growth in both ceded and assumed reinsurance premiums, reflecting the industry's transition toward international market integration and advanced risk-management practices. Despite the reinsurance share in GDP remaining comparatively low by international standards, the upward trajectory indicates improving market depth, diversification of risk portfolios, and growing reliance on external risk-bearing capacity. Strengthening the reinsurance framework therefore represents a strategic priority for Uzbekistan, enabling insurers to enhance solvency positions, meet international supervisory expectations, and participate more actively in cross-border risk distribution networks. In this context, analyzing global reinsurance development trends and aligning them with national market dynamics is essential for shaping a sustainable and competitive reinsurance model for the country.

## LITERATURE REVIEW

The global reinsurance market has undergone profound structural transformation over the past two decades, shaped by rising catastrophe risks, geopolitical disruptions, and tighter capital requirements. According to Swiss Re Institute (2023), global insured losses from natural catastrophes exceeded USD 100 billion for the third consecutive year, highlighting the pivotal role of reinsurance as a systemic stabilizer. Numerous studies emphasize that reinsurance not only mitigates volatility in insurers' loss ratios but also supports macro-financial stability by acting as a shock-absorbing mechanism (Cummins & Weiss, 2014). This perspective aligns with the IMF's Global Financial Stability Report (2023), which identifies inadequate catastrophe risk reinsurance as a major vulnerability for emerging insurance markets.



Risk-based capital frameworks, such as the European Union’s Solvency II regime, have further accelerated the adoption of reinsurance strategies. Academic research demonstrates that proportional (quota-share, surplus) and non-proportional (excess-of-loss, stop-loss) treaties optimize insurers’ retention and capital adequacy depending on portfolio composition and claim frequency (Gatzert & Schmeiser, 2012). Within this context, alternative reinsurance mechanisms—including Insurance-Linked Securities (ILS) and catastrophe bonds—have expanded insurers’ access to global capital markets, enabling diversification away from traditional reinsurance capacity (Finken & Laux, 2009). These innovations are particularly relevant in high-volatility environments where climate-induced risks are escalating.

Emerging markets, including Central Asia, face structural challenges such as limited domestic reinsurance capacity, high concentration of risk, and inadequate catastrophe modelling. International Association of Insurance Supervisors (IAIS) reports indicate that developing countries rely heavily on foreign reinsurers due to insufficient capitalization of local players. Empirical evidence further suggests that reinsurance penetration correlates positively with GDP per capita, financial market depth, and regulatory sophistication (Outreville, 2010). As Uzbekistan’s insurance sector expands, the growing share of premiums ceded to foreign reinsurers—combined with steady growth in solvency indicators—reflects an evolving market seeking to enhance stability through risk transfer. Yet, the literature underscores the need for developing domestic reinsurance capacity to retain value within the national economy and strengthen resilience to external shocks.

## ANALYSIS AND RESULTS

The global reinsurance market remains highly concentrated in several key jurisdictions, reflecting differences in regulatory environments, capital availability, and the scale of multinational reinsurance groups. According to IAIS SWM (2024) data, Bermuda, the United States, Germany, Switzerland, and the United Kingdom continue to dominate both gross and net reinsurance premiums, accounting for the largest share of global reinsurance transactions. These countries possess advanced regulatory frameworks, strong solvency positions, and highly diversified insurance groups, enabling them to absorb complex risks and maintain global leadership in reinsurance capacity. The dominance of these markets also reflects their ability to attract international capital and provide sophisticated risk-transfer solutions.

For emerging markets such as Uzbekistan, global reinsurance trends provide important benchmarks for market development and integration. Uzbekistan’s growing reliance on foreign reinsurers—due to limited domestic reinsurance capacity and capital constraints—makes the structure of the global market particularly relevant. By analyzing the distribution of global gross and net reinsurance premiums, policymakers and insurers in Uzbekistan can better understand the competitive landscape, identify potential strategic partners, and design reforms to strengthen the local reinsurance sector. This includes building national reinsurance capacity, improving regulatory alignment with Solvency II and IAIS standards, and expanding cooperation with leading global reinsurers.

**Table 2. Share of gross and net reinsurance premiums by regions (2023)<sup>1</sup>**

Region / Country	Share of Gross Reinsurance Premiums (%)	Share of Net Reinsurance Premiums (%)
Bermuda	28.7%	30.0%
United States	19.4%	25.4%
Germany	13.2%	12.7%
Switzerland	9.5%	9.9%
United Kingdom	5.9%	2.2%
Ireland	4.5%	4.0%
China	3.8%	3.4%
France	2.6%	2.6%
Singapore	2.3%	2.6%
Luxembourg	2.1%	2.1%
Others	8.1%	5.9%

The table-2 demonstrates that Bermuda and the United States collectively account for nearly 50% of the global reinsurance market, highlighting their central role in global risk redistribution. Bermuda’s leadership is primarily linked to its favorable tax environment, strong regulatory infrastructure, and concentration of major global reinsurance groups. The United States shows a considerably higher share in net reinsurance premiums, indicating its role not only as a reinsurance production hub but also as a major global risk absorber. Meanwhile, Germany

<sup>1</sup> Prepared based on IAIS SWM 2024 (reinsurance component and GRMS)

and Switzerland continue their longstanding position as traditional reinsurance centers, supported by major global players such as Munich Re and Swiss Re.

For Uzbekistan, these patterns suggest that meaningful cooperation with global leaders—especially reinsurers in Bermuda, the U.S., Germany, and Switzerland—can significantly enhance underwriting stability and improve risk transfer mechanisms. At the same time, the relatively small but growing roles of Singapore, China, and Ireland reveal opportunities for partnership with rapidly developing Asian and European markets. Strengthening domestic reinsurance capacity, harmonizing local regulations with international standards, and expanding global partnerships will be crucial for Uzbekistan to increase resilience, reduce foreign dependency, and build a more competitive reinsurance ecosystem.

According to IAIS (2024), the global reinsurance sector’s investment structure is dominated by corporate debt instruments (24%) and equities (25%). This asset allocation reflects a strategic preference for highly liquid and stable financial instruments, enabling reinsurers to maintain robust capital buffers while ensuring sufficient investment return. The prevalence of these asset classes also demonstrates reinsurers’ reliance on diversified market-traded securities, which provide both yield and flexibility in managing large-scale risk exposures. The remaining components—such as real estate, loans, mortgages, and alternative reinsurance-linked instruments—appear in relatively smaller proportions, indicating a cautious approach toward long-term or illiquid asset categories.

Regionally, asset structures show meaningful differences driven by business composition. In the Americas, for instance, the dominance of life reinsurance leads to greater exposure to long-term assets such as mortgages and private debt, reflecting the need for duration matching with long-term liabilities. Meanwhile, Asia & Oceania allocate a higher share to equities, supported by stronger market growth and higher risk-return expectations. Europe & Africa maintain a more balanced portfolio, combining both corporate bonds and equities with moderate allocations to alternative instruments. Overall, the IAIS data suggests that reinsurers globally practice prudent diversification while adapting asset strategies to regional regulatory regimes and business models. Importantly, the solvency ratio trend—declining from 2014 to 2020 but rising again after 2021—illustrates the sector’s recovery and growing resilience following macroeconomic shocks and heightened catastrophe losses.

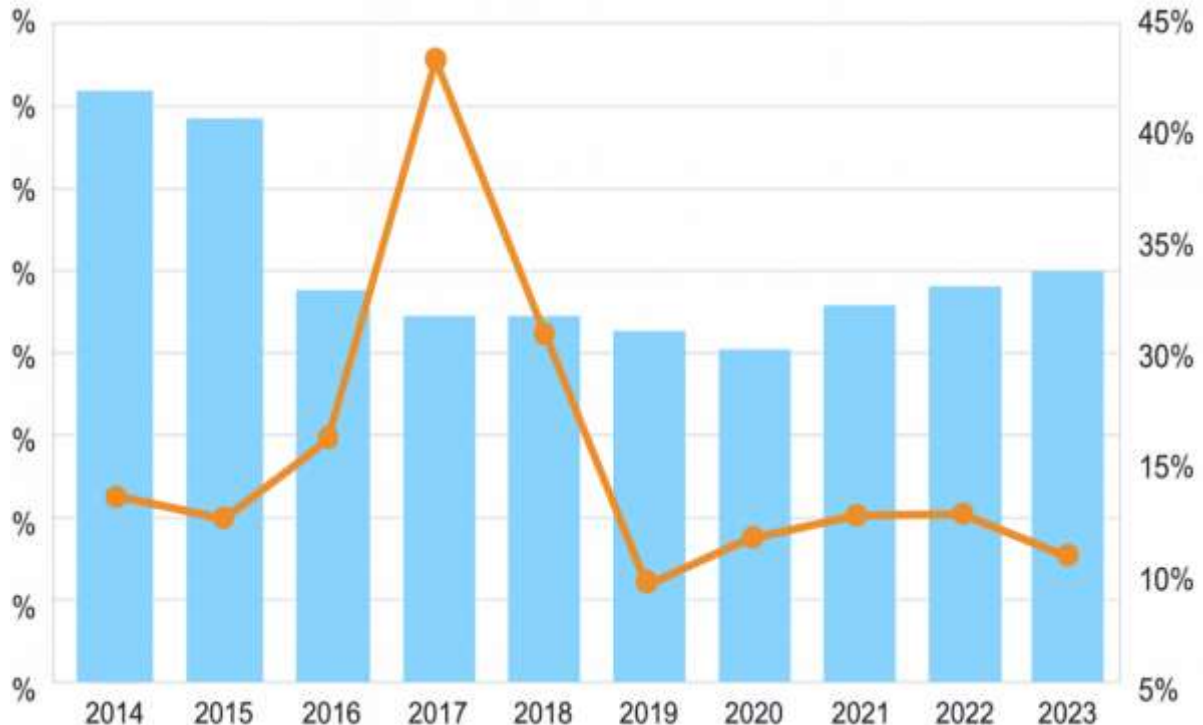


Figure 2. Solvency (capital adequacy) indicators of reinsurance companies<sup>2</sup>

<sup>2</sup> Prepared based on IAIS SWM 2024 (reinsurance component and GRMS)



The chart illustrates the long-term dynamics of the solvency ratio in the global reinsurance sector alongside the ratio of natural catastrophe (NatCat) claims to available capital for the period 2014–2023. The results clearly demonstrate that the solvency ratio experienced a noticeable downward trend from 2014 to 2020, falling from above 350% to around 200%. This decline is largely attributed to increasing catastrophe losses, tightening regulatory capital requirements, and a shift in investment portfolios toward lower-yield but safer instruments. The sharp spike in NatCat losses in 2017—reaching nearly 40% of available capital—is consistent with the record-breaking catastrophe year that included Hurricanes Harvey, Irma, and Maria. This event significantly pressured reinsurer capital levels and accelerated a temporary decline in solvency metrics during subsequent years.

Beginning in 2021, the solvency ratio shows a structural recovery, climbing steadily to around 250% in 2022–2023. This improvement reflects a combination of factors, including strengthened capital buffers, more conservative underwriting strategies, increased reinsurance pricing, and wider deployment of alternative capital such as insurance-linked securities (ILS). The parallel stabilization of NatCat-to-capital ratios in the 2020–2023 period—remaining mostly within the 8–12% range—further confirms that reinsurers have enhanced their resilience to extreme loss events through better risk modelling, stricter underwriting, and diversified retrocession strategies.

The observed global dynamics have important implications for emerging markets, including Uzbekistan. The convergence of higher solvency levels and controlled catastrophe exposure indicates that strong capital adequacy is paramount for reinsurance sector sustainability. Uzbekistan’s reinsurance premiums relative to GDP (0.10–0.12% in 2022–2023) remain low compared to international benchmarks (1–2% in Europe, 0.2–0.5% in major Asian markets). However, the upward trajectory observed in recent years demonstrates that the country is moving toward deeper integration with global risk-transfer mechanisms. The rise in cession volumes—from UZS 2.2 trillion in 2023 to UZS 3.8 trillion in 2024—shows that insurers are increasingly relying on reinsurance to improve capital efficiency, smooth loss volatility, and comply with tightening solvency requirements.

As Uzbekistan strengthens regulatory oversight and introduces more risk-sensitive capital standards, reinsurance will continue to play a critical role as a stabilizing mechanism. The global evidence presented in the solvency chart suggests that countries adopting risk-based capital regimes and catastrophe-sensitive underwriting practices achieve more stable solvency outcomes. Thus, implementing similar mechanisms—including domestic solvency stress-tests, NatCat modeling requirements, and enhanced reinsurance quality assessment—will be essential for Uzbekistan to build a resilient insurance–reinsurance ecosystem capable of supporting long-term economic growth.

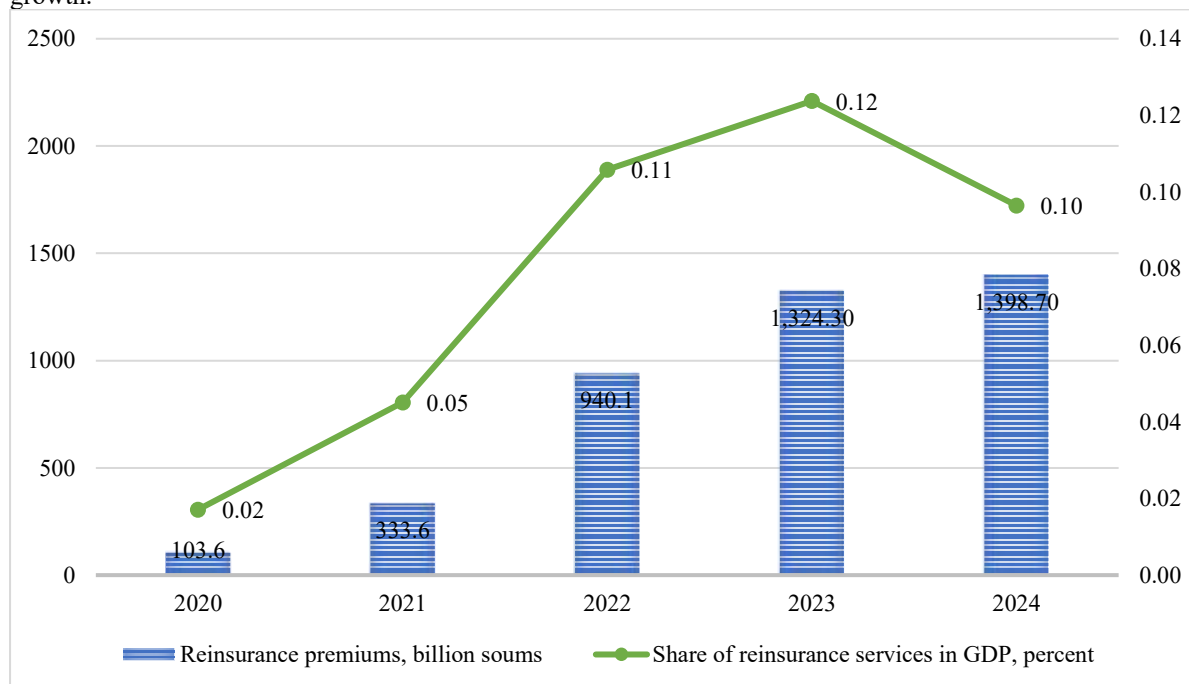


Figure 3. Dynamics of key indicators of the reinsurance market, in billion soums<sup>3</sup>

<sup>3</sup> Prepared based on statistical data from the National Agency for Promising Projects of the Republic of Uzbekistan.



The comparative assessment of Uzbekistan’s reinsurance indicators with international benchmarks demonstrates that the sector still possesses substantial untapped potential. The current level of reinsurance penetration remains significantly lower than that observed in developed markets, where reinsurance contributes more visibly to financial stability and economic resilience. This gap suggests that expanding reinsurance services, strengthening cooperation with global reinsurance groups, and increasing the capitalization of national reinsurers could accelerate not only the development of the insurance industry but also the broader economic growth of the country. Enhanced participation in international risk-sharing mechanisms would also improve systemic stability by mitigating exposure to large-scale industrial and infrastructural risks.

The relationship between total insurance premiums and the volume ceded to reinsurance clearly illustrates the evolving dynamics of Uzbekistan’s insurance market. In 2022, total insurance premiums amounted to 4.7 trillion UZS, of which 1.1 trillion UZS (24.5 percent) was transferred to reinsurance. By 2024, total premiums had increased to 9.5 trillion UZS, with the share ceded reaching 3.8 trillion UZS (40.2 percent). This upward trend confirms that domestic insurers are increasingly transferring large and complex risks to external markets. The expansion of industrial, infrastructure, and transport-related projects, combined with improved access to international reinsurance capacity, has played a decisive role in this shift. Consequently, the growing reliance on reinsurance reflects both the diversification needs of local insurers and the structural transformation of the national economy toward greater integration with global financial markets.

The dynamics of reinsurance premiums ceded to and accepted from foreign insurers demonstrate substantial structural shifts in Uzbekistan’s reinsurance market. Reinsurance premiums ceded abroad grew sharply from 755.1 billion UZS in 2022 to 2.38 trillion UZS in 2024, an increase of 215.5%. As a result, foreign reinsurers accounted for 62.8% of total reinsurance flows in 2024. This rapid expansion reflects the increasing willingness of domestic insurers to transfer large and complex risks abroad. The driving forces behind this trend include the implementation of capital adequacy requirements, the growth of infrastructure and industrial megaprojects, and improved access to international reinsurance markets.

**Table 2. Analysis of reinsurance premiums ceded to and accepted from foreign insurers, million uzs<sup>4</sup>**

Indicators	2022	2023	2024	Share in 2024 Total, %	Change 2024/2022, %
<b>Non-life insurance sector</b>					
Reinsurance premiums ceded	755,117	1,522,557	2,382,597	62.8	+215.5
Reinsurance premiums accepted	940,087	1,324,269	1,398,669	36.8	+48.8
<b>Life insurance sector</b>					
Reinsurance premiums ceded	131	131	15,687	0.4	+11,874.8
Reinsurance premiums accepted	468	904	0	0.0	-100.0
<b>Total</b>	1,695,803	2,847,861	3,796,953	100.0	+123.9

At the same time, reinsurance accepted from abroad remained more stable, increasing from 940.1 billion UZS in 2022 to 1.39 trillion UZS in 2024 (a 48.8% growth). However, its share in the total reinsurance volume declined to 36.8%. This indicates that although Uzbek insurers’ capacity to underwrite foreign risks is growing, it still remains limited compared with the volume of risks ceded. The life insurance segment shows an even sharper divergence: while life reinsurance premiums ceded increased dramatically to 15.7 billion UZS, accepted life reinsurance premiums dropped to zero, reflecting structural changes in life reinsurance arrangements.

These trends confirm that Uzbekistan’s reinsurance market is increasingly integrated with global financial–insurance networks. The growing share of ceded premiums, which rose from 16% of gross written premiums in 2022 to 25% in 2024, suggests that domestic insurers are prioritizing risk transfer through external partners to strengthen solvency positions and comply with new regulatory capital requirements. At the same time, the moderate growth in inward reinsurance indicates the gradual development of national underwriting capacity, which still requires further deepening, modernization, and capital expansion.

<sup>4</sup> Prepared based on statistical data from the National Agency for Promising Projects of the Republic of Uzbekistan.



During 2022–2024, the volume of reinsurance ceded by insurance companies increased sharply from 1.1 trillion UZS to 3.8 trillion UZS, meaning that the overall market expanded by almost 3.3 times (+232.5%). This growth rate significantly outpaced the expansion of net written premiums, indicating that insurers are increasingly transferring large risks to both domestic and international reinsurance markets. The largest market share belonged to Apex Insurance JSC (41.8%), whose ceded premium volume grew from 205.5 billion UZS in 2022 to 1.59 trillion UZS in 2024 (+673.6%). Similarly, Uzbekinvest Export-Import Insurance Company JSC (21.4%) and Kafolat Insurance Company JSC (9.5%) were among the leading contributors, significantly expanding their reinsurance cessions over the period.

**Table 3. Market share of ceded reinsurance premiums by insurance companies (2022–2024), billion UZS<sup>5</sup>**

№	Insurance Company	2022	2023	2024	Share in 2024, %	Change 2024/2022, %
1	Apex Insurance JSC	205.5	480.6	1,590.1	41.8	+673.6
2	Uzbekinvest EISK JSC	364.9	337.8	813.2	21.4	+122.9
3	Kafolat Insurance JSC	63.0	211.6	362.7	9.5	+475.7
4	My-Insurance JSC	1.4	1.0	306.0	8.0	+21,123.7
5	Gross Insurance JSC	80.9	129.2	177.8	4.7	+119.8
6	Kapital Sug'urta JSC	31.9	56.1	23.1	0.6	-27.6
7	Kafil Sug'urta JSC	83.3	86.6	95.8	2.5	+15.1
8	Uzagrosugurta JSC	428.9	260.8	274.0	7.2	-36.1
9	Alfa Invest JSC	209.0	116.6	24.6	0.7	-88.2
10	Alskom JSC	29.9	49.9	6.0	0.2	-80.0
<b>Total Market</b>	<b>1,145.2</b>	<b>1,951.0</b>	<b>3,808.4</b>	<b>100.0</b>	<b>+232.5</b>	

The extremely rapid increase observed at My-Insurance JSC (+21,123.7%) reflects the company's aggressive portfolio restructuring and the transfer of high-risk segments to external reinsurers. In contrast, several companies such as Kapital Sug'urta JSC, O'zagrosug'urta JSC, Alfa Invest JSC, and Alskom JSC demonstrated negative growth rates, primarily due to portfolio optimization, reduced exposure to high-risk lines, or tightened solvency requirements. Overall, the sharp increase in ceded reinsurance premiums shows that the Uzbek insurance market is actively strengthening its integration with global reinsurance networks, enhancing capital risk mitigation, and increasing the sector's financial resilience.

## CONCLUSION

The findings of this study demonstrate that the global reinsurance market is evolving from a traditional risk-sharing mechanism into a strategic financial instrument that enhances insurers' capital management and long-term solvency. International experience confirms that reinsurance allows insurers to mitigate the impact of catastrophic losses, stabilize their capital base, and ensure the timely fulfillment of obligations to policyholders. As a result, reinsurance not only strengthens financial resilience at the company level but also contributes to the stability and credibility of the entire insurance sector within the broader financial system.

The analysis further shows that, under conditions of global financial volatility, reinsurance increasingly functions as a critical "stability buffer" for insurance companies. Trends in key indicators—such as the retention ratio and gearing ratio—illustrate that reinsurance enables insurers to maintain an optimal balance between retaining risks internally and transferring them to external markets. The stabilization of these indicators reflects improvements in insurers' financial discipline, risk management practices, and internal governance mechanisms.

Moreover, the dual use of proportional (quota-share, surplus) and non-proportional (excess-of-loss, stop-loss) reinsurance models creates a complementary system that enhances risk allocation efficiency. While proportional treaties ensure predictable sharing of premiums and losses, non-proportional structures protect against severe and unexpected shocks. This layered protection allows insurers to manage routine risks independently while securing the ability to withstand high-severity events through reinsurance capacity, thereby preserving long-term solvency.

Finally, the growing adoption of alternative reinsurance instruments—such as Insurance-Linked Securities (ILS) and catastrophe bonds—reflects the increasing integration of the insurance industry with global capital

<sup>5</sup> Prepared based on statistical data from the National Agency for Promising Projects of the Republic of Uzbekistan.



markets. These tools expand access to diversified investor capital and improve the capacity to manage emerging risks related to climate change, pandemics, and cyber threats. By leveraging such innovative solutions, insurers can strengthen their capital adequacy, enhance market competitiveness, and support sustainable sectoral development.

## REFERENCES

1. Cummins, J. D., & Weiss, M. A. (2014). *Systemic risk and the insurance industry*. *Journal of Risk and Insurance*, 81(3), 489–528.
2. Finken, S., & Laux, C. (2009). *Catastrophe bonds and reinsurance: The competitive effect of information-insensitive triggers*. *Journal of Risk and Insurance*, 76(3), 579–605.
3. Gatzert, N., & Schmeiser, H. (2012). *Representing default risk in surplus models and its impact on optimal reinsurance strategies*. *Insurance: Mathematics and Economics*, 50(2), 299–307.
4. IAIS. (2023). *Global Insurance Market Report (GIMAR)*. International Association of Insurance Supervisors.
5. IMF. (2023). *Global Financial Stability Report*. International Monetary Fund.
6. Outreville, J. F. (2010). *The relationship between insurance and economic development: 85 empirical papers for a review of the literature*. *Risk Management and Insurance Review*, 13(2), 133–197.
7. Swiss Re Institute. (2023). *Sigma Report: Natural Catastrophes and Reinsurance Trends*. Swiss Re Ltd.