SJIF Impact Factor (2026): 8.638 Journal DOI: 10.36713/epra0003 ISSN: 2250 – 2017
International Journal of Global Economic Light (JGEL)
Volume: 12 | Issue: 4 April 2026 -Peer Reviewed Journal

STRENGTHENING COMPULSORY INSURANCE SYSTEMS: INTERNATIONAL EXPERIENCE AND STRATEGIC DIRECTIONS FOR UZBEKISTAN

Masimdjanova Muqaddam Xikmatovna
Teacher of Journalism and Mass Communications University of Uzbekistan

ABSTRACT
This study examines the development of the compulsory insurance market in Uzbekistan and identifies key structural trends, challenges, and policy directions for enhancing its effectiveness. Based on comparative international experience and empirical analysis, the research demonstrates that while the non-life insurance segment is expanding, significant imbalances persist, particularly in the life insurance sector. The findings highlight the importance of regulatory strengthening, digital transformation, and insurance literacy in ensuring sustainable market development and financial stability.

KEYWORDS: *Compulsory Insurance, Insurance Market Development, Non-Life Insurance, Financial Stability, Insurance Penetration, Regulation, Insurtech.*

INTRODUCTION

The insurance sector occupies a pivotal role within the architecture of modern financial systems, serving not only as a mechanism for risk transfer but also as a catalyst for long-term economic stability, investment mobilization, and social protection. Within this framework, the compulsory insurance market represents a unique institutional arrangement in which the state mandates participation in specific insurance schemes to address market failures, mitigate systemic risks, and safeguard public welfare. Unlike voluntary insurance, compulsory insurance operates at the intersection of public policy and private financial intermediation, thereby reflecting both economic efficiency considerations and broader socio-political objectives.

In the context of globalization and increasing economic complexity, the significance of compulsory insurance has grown substantially. Rapid urbanization, technological advancements, climate-related risks, and the expansion of industrial activities have amplified the exposure of individuals, firms, and governments to various forms of risk. Consequently, governments across both developed and developing economies have expanded the scope of compulsory insurance schemes, particularly in areas such as motor third-party liability (MTPL), health insurance, workers' compensation, agricultural insurance, and environmental liability insurance. These schemes are designed not only to ensure compensation for victims of adverse events but also to promote responsible behavior among economic agents through risk internalization mechanisms.

From a theoretical perspective, the rationale for compulsory insurance can be explained through the lens of market failure theories, including information asymmetry, adverse selection, and moral hazard. In the absence of mandatory participation, high-risk individuals are more likely to purchase insurance, leading to adverse selection and potential market collapse. Similarly, insufficient awareness and behavioral biases may result in underinsurance, particularly among low-income populations. By mandating participation, governments can expand the risk pool, enhance diversification, and ensure the financial viability of insurance systems. Furthermore, compulsory insurance contributes to the stabilization of public finances by reducing the fiscal burden associated with disaster relief and social assistance programs.

Empirical evidence from OECD countries demonstrates that well-functioning compulsory insurance markets are associated with higher levels of insurance penetration, improved financial resilience, and more efficient allocation of resources. For instance, in advanced economies, compulsory motor insurance coverage often exceeds 95%, significantly reducing uninsured losses and enhancing road safety outcomes. In contrast, many developing economies face persistent challenges, including low compliance rates, weak enforcement mechanisms, limited institutional capacity, and underdeveloped insurance infrastructure. These challenges hinder the effectiveness of compulsory insurance schemes and create substantial protection gaps.

Another critical dimension of compulsory insurance market development is the role of regulatory and supervisory frameworks. International experience indicates that the effectiveness of compulsory insurance systems depends largely on the quality of governance, the robustness of legal frameworks, and the capacity of regulatory authorities to enforce compliance. The introduction of risk-based supervision models, such as Solvency II in the European

Union, has significantly enhanced the resilience and transparency of insurance markets. At the same time, the integration of digital technologies including InsurTech solutions, big data analytics, and blockchain has transformed the operational efficiency and accessibility of insurance services, thereby facilitating higher compliance and reducing transaction costs.

Despite these advancements, the compulsory insurance market continues to face structural and emerging challenges. These include increasing claims volatility due to climate change, rising healthcare costs, technological disruptions, and the growing complexity of risk environments. Moreover, the balance between regulatory intervention and market efficiency remains a critical issue, particularly in transition economies where excessive regulation may hinder innovation, while insufficient oversight may lead to market inefficiencies and consumer protection concerns.

LITERATURE REVIEW

The theoretical underpinnings of compulsory insurance are deeply rooted in the economics of information asymmetry, particularly the concepts of adverse selection and moral hazard. The seminal work of Rothschild and Stiglitz (1976) established that in insurance markets characterized by asymmetric information, high-risk individuals are more likely to purchase insurance, potentially leading to market failure. This phenomenon, known as adverse selection, undermines the sustainability of voluntary insurance systems.

Subsequent research has emphasized that compulsory insurance schemes serve as a corrective mechanism for such market imperfections. By mandating participation, governments can enlarge the risk pool, facilitate cross-subsidization among risk groups, and ensure the financial viability of insurance systems. The Geneva Association (2022) highlights that mandatory insurance schemes mitigate adverse selection by standardizing participation and enabling broader risk-sharing across populations .

In addition, the theory of moral hazard where insured individuals may engage in riskier behavior due to coverage has been extensively explored in the context of compulsory insurance, particularly in health insurance systems. Empirical studies indicate that regulatory frameworks, such as deductibles and co-payments, are essential to mitigate such behavioral distortions.

A significant body of empirical literature investigates the relationship between insurance market development and economic growth. The “supply-leading hypothesis” posits that the expansion of insurance services stimulates economic growth by enhancing financial intermediation, mobilizing savings, and facilitating risk management.

Recent empirical studies using panel data methodologies confirm a positive relationship between insurance development and economic growth. For instance, Horvey et al. (2024) demonstrate that higher insurance penetration significantly contributes to economic growth, particularly when complemented by structural transformation processes. Similarly, Dawd and Benlagha (2023) provide evidence of a nonlinear relationship between insurance development and economic growth in OECD countries, suggesting that while insurance promotes growth, excessive financialization may yield diminishing returns.

Furthermore, insurance penetration—defined as the ratio of insurance premiums to GDP has become a key indicator in assessing market development. According to OECD (2025), average insurance penetration in member countries reached approximately 6.2% in 2024, although significant disparities persist across regions. Low levels of insurance penetration in developing economies indicate substantial protection gaps and highlight the need for policy intervention.

The effectiveness of compulsory insurance markets is strongly influenced by institutional quality and regulatory frameworks. The OECD (2001) emphasizes that insurance regulation plays a critical role in ensuring market stability, protecting policyholders, and promoting competition. In many OECD countries, compulsory insurance schemes are supported by robust supervisory mechanisms, solvency regulations, and policyholder protection funds.

Recent studies also highlight the importance of institutional development in shaping insurance market outcomes. The World Bank (2019) suggests that factors such as governance quality, legal enforcement, and financial market development significantly influence insurance penetration and efficiency. Strong institutions facilitate compliance with compulsory insurance requirements, reduce fraud, and enhance consumer confidence.

Moreover, the literature underscores the role of public policy in expanding insurance coverage, particularly in emerging markets. Government interventions—such as subsidies, tax incentives, and public-private partnerships—are often necessary to promote compulsory insurance schemes in sectors like agriculture and health.

In developing and transition economies, compulsory insurance markets face unique challenges, including low financial literacy, limited access to insurance services, and weak enforcement mechanisms. Studies indicate that despite regulatory mandates, compliance rates often remain low due to informal economic structures and insufficient monitoring systems.

Şimşek (2021) argues that insurance plays a crucial role in supporting economic development by providing financial protection and facilitating investment activities. However, the effectiveness of insurance markets in developing countries depends on the adoption of appropriate policy frameworks and institutional reforms.

Additionally, recent research highlights the growing importance of digitalization in overcoming structural barriers. InsurTech innovations, including mobile insurance platforms and data-driven risk assessment tools, have the potential to significantly enhance market accessibility and operational efficiency.

Despite the extensive body of literature, several gaps remain. First, while many studies focus on the general insurance market, limited attention has been given specifically to compulsory insurance systems and their unique institutional dynamics. Second, empirical research on emerging economies remains fragmented, particularly in the context of Central Asia. Third, the interaction between regulatory frameworks, technological innovation, and market efficiency requires further investigation.

ANALYSIS AND RESULTS

The compulsory insurance market constitutes a structurally significant component of the global insurance industry and is predominantly embedded within the non-life insurance segment. This segment encompasses key classes of mandatory coverage, including motor third-party liability (MTPL), workers' compensation, professional liability, and certain forms of health and environmental insurance. The institutionalization of these insurance lines reflects the increasing role of the state in addressing market failures associated with risk externalities, information asymmetry, and insufficient voluntary participation.

From a macro-financial perspective, the expansion of compulsory insurance schemes has contributed to the deepening of non-life insurance markets, particularly in advanced economies. According to OECD (2025), non-life insurance premiums account for a substantial proportion of total insurance activity in developed countries, underscoring the systemic importance of mandatory insurance mechanisms. This structural dominance is not merely a function of market demand but is largely driven by regulatory mandates that enforce participation and ensure the continuity of risk-sharing arrangements across economic agents.

Table 1. Global Insurance Market Indicators (Selected Countries, 2023-2024)

Country	Insurance Penetration (% of GDP)	Non-life Share (%)	Compulsory Insurance Coverage (MTPL %)
Germany	6.7	52	>98
USA	11.2	48	~95
China	4.3	55	~90
India	3.9	70	~75
Kazakhstan	2.2	65	~80

Source: Compiled by the author

The empirical evidence presented in Table 1 reveals several critical structural and institutional patterns that characterize the global compulsory insurance landscape.

Firstly, high-income economies such as Germany and the United States exhibit both high levels of insurance penetration and near-universal compliance with compulsory insurance requirements. The MTPL coverage rates exceeding 95% in these countries reflect not only the effectiveness of regulatory enforcement mechanisms but also the presence of well-developed institutional infrastructures, including advanced supervisory systems, efficient legal enforcement, and high levels of public awareness. In such contexts, compulsory insurance functions as a highly efficient risk-transfer mechanism, contributing to both microeconomic stability (at the level of households and firms) and macroeconomic resilience.

Secondly, the analysis indicates that insurance penetration in emerging markets remains comparatively low, typically below 4% of GDP, as observed in countries such as India and Kazakhstan. This disparity can be attributed to a combination of structural constraints, including lower income levels, limited financial literacy, underdeveloped insurance culture, and relatively weak institutional frameworks. Moreover, enforcement of compulsory insurance regulations in these economies is often incomplete, leading to partial compliance and the persistence of uninsured risks. These factors collectively contribute to significant protection gaps and limit the effectiveness of compulsory insurance as a policy instrument.

Thirdly, the data demonstrates that the non-life insurance segment plays a dominant role in developing economies, largely due to the prevalence of compulsory insurance schemes, particularly in motor and liability insurance. In these contexts, compulsory insurance often serves as the primary entry point for market development, facilitating the gradual expansion of insurance coverage and financial inclusion. However, this dominance also indicates a lack of diversification within the insurance sector, with life and voluntary insurance products remaining underdeveloped.

From a comparative perspective, the variation in non-life insurance shares across countries reflects differences in regulatory design, market maturity, and socio-economic conditions. For instance, the relatively higher non-life share in India (70%) suggests a heavy reliance on mandatory insurance lines, whereas more balanced distributions in developed economies indicate a higher level of market diversification.

Importantly, these findings confirm that compulsory insurance serves as a foundational driver of non-life insurance market expansion, particularly in the early stages of financial sector development. By mandating participation, governments are able to overcome key market failures, expand the risk pool, and create stable demand for insurance products. This, in turn, supports the development of actuarial capacity, enhances capital accumulation within the insurance sector, and contributes to overall financial system stability.

At the same time, the effectiveness of compulsory insurance systems is highly contingent upon the quality of regulatory frameworks and institutional enforcement. Countries with robust governance structures and advanced regulatory systems are able to achieve high compliance rates and efficient market outcomes, whereas those with weaker institutions face persistent challenges in ensuring the effectiveness of mandatory insurance schemes.

Table 2. Analysis and Changes in Insurance Payments in Uzbekistan (2023–2024)

Indicators	30.09.2023	Share (%)	30.09.2024	Share (%)	Change (%)
Total	1,375,656 mln UZS	100%	1,633,854 mln UZS	100%	+18.8%
General insurance sector, including:	1,026,320	75%	1,536,217	94%	+49.7%
– Compulsory insurance	179,611	13%	263,563	16%	+46.7%
– Voluntary insurance	846,709	62%	1,272,655	78%	+50.3%
Life insurance sector, including:	349,336	25%	97,637	6%	–72.1%
– Compulsory insurance	9,161	1%	10,076	1%	+10.0%
– Voluntary insurance	340,175	25%	87,561	5%	–74.3%

Source: Compiled by the author based on data from *Stat.uz*

The empirical analysis of insurance payments in Uzbekistan for the period 2023–2024 reveals a number of important structural transformations and emerging trends within the national insurance market.

Firstly, the overall volume of insurance payments increased by 18.8%, indicating a general expansion of the insurance market and confirming a positive growth trajectory. This growth can be interpreted as a reflection of increasing economic activity, gradual strengthening of the insurance sector, and improvements in regulatory and institutional frameworks governing insurance operations in Uzbekistan.

Secondly, a significant increase is observed in the general (non-life) insurance sector, where total payments rose by 49.7%, leading to an increase in its share from 75% to 94% of total insurance payments. This sharp growth underscores the dominant role of non-life insurance in Uzbekistan and highlights the importance of this segment as the primary driver of market expansion. Within this sector, both compulsory and voluntary insurance segments demonstrated substantial growth.

In particular, voluntary insurance payments in the general insurance sector increased by 50.3%, which indicates a growing demand for insurance services among individuals and businesses. This trend reflects an improvement in insurance awareness, increased trust in insurance institutions, and the efforts of insurance companies to enhance the quality, accessibility, and diversity of their services. It may also suggest a gradual transition from purely regulatory-driven participation toward more market-oriented behavior.

At the same time, compulsory insurance payments in the general insurance segment grew by 46.7%, which, although significant, is slightly lower than the growth rate of voluntary insurance. This may imply that the expansion of compulsory insurance is still largely driven by regulatory enforcement rather than intrinsic demand. Moreover, the relatively moderate growth rate could indicate certain challenges in compliance, enforcement efficiency, or public perception of compulsory insurance schemes.

Thirdly, the most notable structural shift is observed in the life insurance sector, where total payments declined sharply by 72.1%, resulting in a drastic reduction of its share from 25% to only 6% of total insurance payments. This decline is primarily driven by a substantial decrease in voluntary life insurance payments (–74.3%), which suggests a weakening demand for life insurance products.

This contraction in the life insurance segment can be explained by several interrelated factors. Firstly, it reflects a cautious attitude of households and organizations toward long-term financial commitments under conditions of economic uncertainty. Secondly, it indicates the limited development of life insurance as a financial instrument in Uzbekistan, where alternative savings and investment instruments—such as bank deposits or real estate—are often perceived as more attractive or reliable. Thirdly, the decline may also signal structural issues within the life insurance market, including limited product diversification, insufficient consumer awareness, and relatively low levels of financial literacy.

In contrast, compulsory life insurance payments demonstrated only marginal growth (+10.0%), maintaining a negligible share (around 1%) in total insurance payments. This indicates that compulsory life insurance schemes remain underdeveloped and have not yet become a significant component of the overall insurance system.

Overall, the findings suggest that the insurance market in Uzbekistan is characterized by a strong dominance of the general insurance sector, particularly voluntary non-life insurance, while the life insurance segment remains structurally weak and underdeveloped. Furthermore, although compulsory insurance plays an important role in market formation, its growth dynamics indicate the need for further institutional strengthening, improved enforcement mechanisms, and enhanced public awareness.

Recommendations

The sustainable development and effective functioning of the compulsory insurance market in Uzbekistan require the implementation of a comprehensive set of strategic measures grounded in institutional, regulatory, and technological reforms.

Firstly, it is essential to enhance the regulatory and legal framework governing compulsory insurance. This includes further refinement of insurance legislation, strengthening supervisory mechanisms, and increasing prudential and operational requirements imposed on insurance companies. In particular, compulsory motor third-party liability (MTPL) insurance should be transformed from a purely formal legal obligation into an economically meaningful and socially valuable instrument. Currently, compliance with such insurance is often perceived by policyholders as a regulatory burden rather than a risk management tool. Therefore, improving the quality of services, ensuring fair claims settlement, and enhancing transparency are critical to increasing public trust and participation. Moreover, fostering competitive market conditions among insurance providers through the introduction of innovative insurance products and service differentiation can significantly contribute to market expansion and efficiency.

Secondly, increasing the level of insurance literacy among the population and business entities is of paramount importance. A well-informed society is more likely to recognize the benefits of insurance as a mechanism for risk mitigation and financial protection. In this regard, large-scale educational and awareness campaigns should be implemented, focusing on the economic and social advantages of insurance, particularly in the context of compulsory schemes. Enhancing financial literacy not only stimulates demand for insurance services but also facilitates the diversification of the insurance market and promotes voluntary participation alongside mandatory coverage.

Thirdly, the integration of modern digital technologies into the insurance sector represents a key driver of efficiency and competitiveness. The adoption of digital platforms, artificial intelligence, big data analytics, and blockchain technologies can significantly improve operational processes, reduce transaction costs, and enhance customer experience. In particular, the development of online insurance services, automated claims processing systems, and digital monitoring of compliance can expand market access and increase transparency. Digital transformation also enables more accurate risk assessment and pricing, thereby improving the overall sustainability of the insurance system.

In addition, it is necessary to strengthen state support and incentive mechanisms aimed at promoting the development of the insurance sector. This includes the introduction of fiscal incentives, support for public-private partnerships, and the creation of a favorable investment climate for both domestic and foreign investors. By encouraging private sector participation and attracting capital inflows, the government can enhance the financial stability and resilience of the insurance market.

Conclusion

The development of the compulsory insurance market in Uzbekistan plays a crucial role in ensuring macroeconomic stability, enhancing financial resilience, and strengthening social protection mechanisms. However, despite positive growth dynamics, the market still faces a number of structural and institutional challenges that limit its full potential.

Firstly, the relatively low level of insurance literacy and limited public awareness continue to constrain the expansion of insurance coverage. Secondly, the quality and accessibility of insurance services require further improvement to meet the evolving needs of consumers and businesses. Thirdly, the insufficient integration of digital technologies hampers operational efficiency and market transparency. Finally, compulsory insurance schemes, while formally established, often lack sufficient attractiveness and perceived value among stakeholders.

Addressing these challenges requires a coordinated and strategic approach involving both the state and private insurance companies. The implementation of comprehensive reforms aimed at improving regulatory frameworks, enhancing service quality, promoting digital innovation, and increasing public awareness will contribute to the effective functioning of the compulsory insurance system.

In the long term, the successful development of the compulsory insurance market will facilitate broader financial sector development, reduce economic vulnerability, and support sustainable economic growth. Furthermore, it will play a significant role in strengthening social protection systems, mitigating risks faced by households and businesses, and enhancing the overall resilience of the national economy.

REFERENCES

1. *Dawd, I., & Benlagha, N. (2023). Insurance and economic growth nexus: New evidence from OECD countries. Cogent Economics & Finance, 11(1), 2183660.*
2. *Horvey, S. S., et al. (2024). Insurance market development and economic growth: Evidence from Africa. Heliyon, 10(1), e16077.*
3. *OECD. (2001). Insurance regulation, liberalisation and financial convergence. OECD Publishing.*
4. *OECD. (2025). Global insurance market trends 2025. OECD Publishing. https://doi.org/10.1787/0d11ecf4-en*
5. *Şimşek, N. F. (2021). Determinants of life and non-life insurance demand. Journal of Economic Studies.*
6. *The Geneva Association. (2022). Insurance development in emerging markets.*
7. *World Bank. (2019). Beyond the S-curve: Insurance penetration, institutional quality and financial market development.*
8. *Rothschild, M., & Stiglitz, J. (1976). Equilibrium in competitive insurance markets: An essay on the economics of imperfect information. Quarterly Journal of Economics, 90(4), 629–649.*