



FINANCIAL STABILITY OF INSURANCE COMPANIES UNDER SOLVENCY II REQUIREMENTS

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ABSTRACT	KEY WORDS
This study examines the financial stability of insurance companies within the framework of Solvency II requirements. The research focuses on the role of risk-based capital adequacy, technical provisions, asset-liability management, liquidity, and risk management in maintaining insurers' financial resilience. Particular attention is paid to the three-pillar structure of Solvency II, which combines quantitative capital requirements, supervisory review, and market discipline. The study analyzes how the application of Solvency II principles can improve the assessment of insurers' solvency positions and strengthen their ability to absorb unexpected losses. The findings indicate that effective capital management, adequate technical reserves, diversified investment portfolios, and continuous risk monitoring are key factors in ensuring the financial stability of insurance companies. The study also highlights the importance of adapting Solvency II principles to the specific characteristics of emerging insurance markets, including Uzbekistan. The results may serve as a basis for improving prudential regulation and developing more effective mechanisms for assessing and maintaining the financial stability of insurance companies.	Financial stability, insurance companies, Solvency II, solvency, capital adequacy, risk-based capital, technical provisions, asset-liability management, liquidity, risk management, prudential regulation.

Introduction

Financial stability plays an important role in the long-term and reliable operation of insurance companies. Since insurers deal with different types of financial and insurance risks, their ability to maintain sufficient capital and meet obligations to policyholders is essential. Solvency II was introduced as a risk-based regulatory framework to strengthen the financial position of insurance companies and improve the way risks are identified and managed. It covers not only capital requirements, but also technical provisions, governance, risk assessment, and supervisory control. One of its main advantages is that it allows insurers to assess their financial position based on the actual level of risk rather than relying only on fixed regulatory limits. This approach can help insurance companies detect possible financial problems earlier and respond to them more effectively. Solvency II principles are also relevant for developing insurance markets, where improving solvency regulation and risk management remains an important issue. Studying these requirements therefore provides a

useful basis for understanding how the financial stability of insurance companies can be strengthened in practice.

Literature Review and Conceptual Framework

The financial stability of insurance companies is closely related to solvency, capital adequacy, liquidity, technical provisions, and effective risk management. Earlier approaches to solvency regulation mainly relied on fixed capital requirements, while more recent studies emphasize the need to assess the actual risk profile of insurers. Solvency II follows this risk-based approach and is structured around three pillars covering quantitative capital requirements, governance and risk management, and disclosure. Scherer and Stahl note that the Solvency II standard formula is designed to reflect different risk exposures across insurance companies, although its application may not always capture every firm-specific characteristic.[1] Boonen also highlights the importance of appropriate calibration of the Solvency Capital Requirement when evaluating the ability of insurers to absorb unexpected losses.[2] More recent research by Cotticelli and Savelli shows that market risk and underwriting risk, together with their interaction, can have a significant effect on capital requirements.[3] Studies on investment structure also confirm that portfolio composition, asset allocation, firm size, and the structure of liabilities can influence insurers' solvency ratios.[4] Previous research therefore suggests that sufficient capital, adequate technical provisions, balanced assets and liabilities, and effective internal risk control are central to maintaining financial stability. Based on these findings, the conceptual framework of this study considers financial stability as the result of several interconnected factors, including capital strength, liquidity, technical provisions, investment structure, asset-liability management, and internal risk management. Solvency II provides a practical framework for assessing these factors together and strengthening the financial resilience of insurance companies.

Analysis and Results

An analysis of recent Solvency II indicators suggests that European insurance companies have continued to maintain strong capital positions despite changes in financial markets and the wider macroeconomic environment. EIOPA data show that the median Solvency Capital Requirement (SCR) ratio for life insurers was 230% at the end of 2024, down from 246% a year earlier. In the non-life segment, the ratio changed only slightly, falling from 217% to 214%, while composite insurers recorded a median SCR ratio of 216%. Reinsurance companies also remained in a relatively strong position, with the median SCR ratio reaching 223% at the end of 2024.[5] These results show that, in most cases, insurers maintained eligible own funds at levels more than twice the amount required under the Solvency II framework.

The situation remained broadly stable during 2025. By the second quarter of the year, the median SCR ratio had reached 235% for life insurers, 214% for non-life insurers and 218% for composite insurers. Reinsurers showed an even stronger position, with the ratio increasing to 239%, which was more than 17 percentage points higher than in the same quarter of the previous year.[6] Such figures suggest that the European insurance sector continued to maintain a substantial solvency buffer despite weaker economic growth, fluctuations in financial markets and growing geopolitical uncertainty. The results also indicate that insurers generally remained capable of absorbing potential losses without falling below regulatory capital requirements.

Capital quality is another important factor when assessing financial stability under Solvency II. According to EIOPA statistics, unrestricted Tier 1 capital accounted for at least 80% of eligible own funds used to cover the SCR in every EEA country. At the same time, the median SCR ratio remained above 149% across all countries, while the median Minimum Capital Requirement ratio exceeded 290%.[7] These figures are important because the level of solvency alone does not fully explain the financial strength of an insurer. The composition and quality of available capital also matter. A high proportion of Tier 1 capital provides a stronger financial base and gives insurers greater capacity to absorb unexpected losses during periods of financial stress.

Insurance business volumes also increased during the period under review. In 2024, gross written premiums in the European life insurance sector rose by 13.8% and reached approximately €758 billion. Non-life insurance premiums increased by 8.2% compared with the previous year. Data for major European insurance groups monitored by EIOPA show a similar trend. Gross written premiums among these groups reached around €1 trillion in 2024, representing an annual increase of 11%. However, higher premium income was not accompanied by an improvement in solvency ratios in all cases. The average SCR ratio for the same group of insurers declined from 225% in 2023 to 211% in 2024. Moreover, 35 out of 53 insurance groups, or approximately 66%, reported a decrease in their SCR ratios. This result demonstrates that growth in premium income does not automatically strengthen the financial stability of an insurance company. Changes in risk exposure, technical provisions, asset valuations and required capital can have an equally important effect on the overall solvency position.

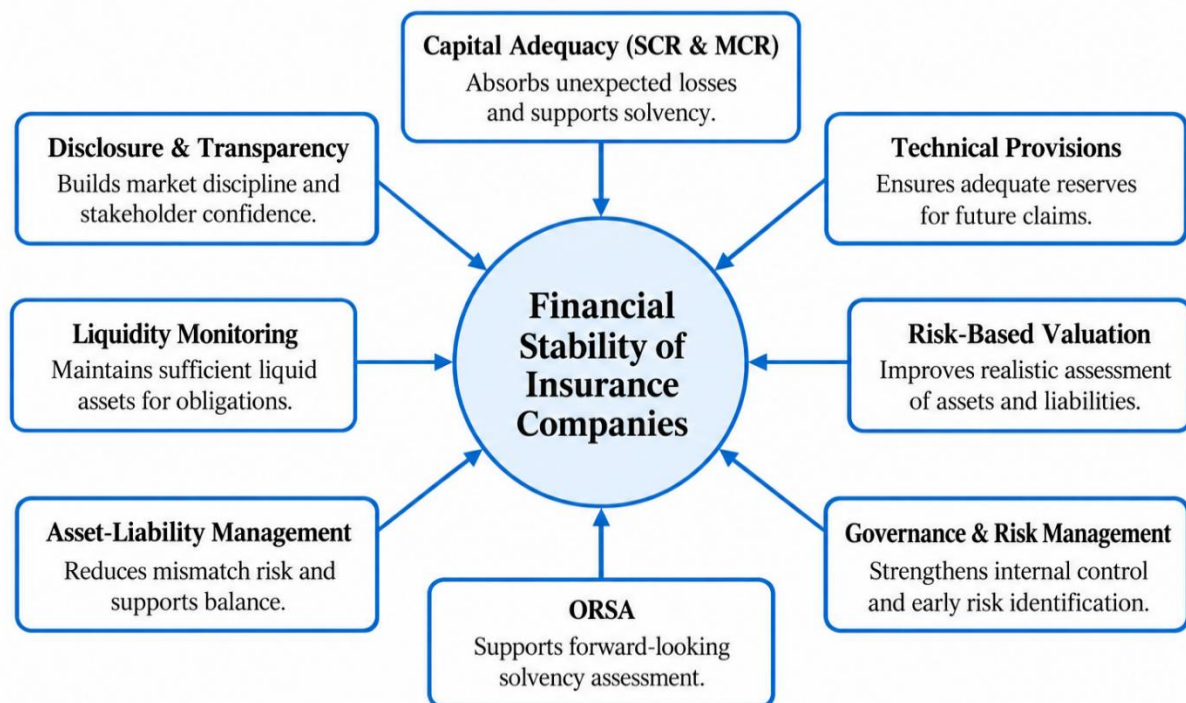
Table 1. Key Solvency II indicators of European insurers

Indicator	2024 Q4	2025 Q1	2025 Q2	2025 Q3	2025 Q4
SCR ratio – Insurance groups (%)	208.5	197.8	202.5	202.6	220.0
SCR ratio – Life insurers (%)	216.0	215.2	231.4	238.4	244.0
SCR ratio – Non-life insurers (%)	213.5	211.2	211.3	216.8	219.0
Tier 1 own funds / Total own funds (%)	—	—	87.1	86.1	87.0
Non-life combined ratio (%)	97.0	95.5	95.1	94.8	94.8

Profitability indicators provide further information about the financial condition of the sector. The median combined ratio for non-life insurers was around 97% at the end of 2024 and improved to approximately 95.5% during the first quarter of 2025. By the fourth quarter of 2025, the combined ratio had declined further to around 94.8%. During the same period, median solvency ratios increased to 244% for life insurers, 219% for non-life insurers and 220% for insurance groups. A combined ratio below 100% generally means that premium income is sufficient to cover claims and operating expenses even before investment income is taken into account. The improvement in this indicator therefore points to stronger underwriting performance and contributes positively to the overall financial position of insurance companies.

The structure of insurers' assets also needs to be considered when analysing financial resilience. At the end of 2024, European insurance companies held approximately €514 billion in private credit investments, representing about 5.1% of their total assets. Nearly 70% of these exposures were related to mortgages and loans held either directly by insurers or indirectly through investment funds. Private credit may offer insurers higher returns and additional opportunities for portfolio diversification, but it can also create higher credit, liquidity and valuation risks. An increase in less liquid or more difficult-to-value assets may therefore affect the financial position of insurers during periods of market stress. In this respect, Solvency II capital requirements and supervisory assessment mechanisms help ensure that investment risks are reflected in capital needs and that excessive concentrations of risk are identified at an early stage.

The statistical evidence therefore shows that the European insurance sector has maintained a relatively high level of capitalisation under the Solvency II framework. SCR ratios have remained considerably above minimum regulatory requirements, while the structure of eligible own funds has been dominated by high-quality Tier 1 capital. Premium volumes continued to grow, and underwriting profitability also improved during 2025. At the same time, the decline in solvency ratios among a number of major insurance groups shows that financial stability cannot be assessed only through premium growth or the absolute amount of capital. Risk exposure, the composition and quality of assets, the adequacy of technical provisions, capital structure and the effectiveness of risk management all have a direct influence on the ability of insurance companies to remain financially stable. The results suggest that Solvency II provides a broader approach to financial stability by linking capital requirements more closely to the actual risks taken by insurers.



Picture 1. The role of solvency requirements in ensuring the financial stability of insurance companies.[8]

Conclusion

The analysis shows that Solvency II has played an important role in strengthening the financial stability of European insurance companies by linking capital requirements more closely to the actual risks faced by insurers. Recent indicators confirm that most insurance companies continue to maintain solvency ratios well above regulatory minimums, while the high share of Tier 1 capital supports their ability to absorb unexpected losses. At the same time, the results show that financial stability cannot be assessed only through capital adequacy or premium growth. Liquidity, technical provisions, asset quality, investment structure, underwriting performance, and effective risk management also have a significant influence on the overall financial position of insurers. The experience of European insurance companies demonstrates that a risk-based regulatory approach provides a more comprehensive assessment of solvency and financial resilience. For developing insurance markets, the main value of Solvency II lies in its ability to combine capital requirements with internal risk management, supervisory control, and greater transparency. Applying these principles can contribute to stronger financial discipline, earlier identification of risks, and more sustainable development of insurance companies.

References

1. Scherer, M., & Stahl, G. (2021). The standard formula of Solvency II: A critical discussion. *European Actuarial Journal*, 11, 3–20
2. Boonen, T. J. (2017). Solvency II solvency capital requirement for life insurance companies based on expected shortfall. *European Actuarial Journal*, 7, 405–434.
3. Cotticelli, S., & Savelli, N. (2024). Capital requirement modeling for market and non-life premium risk in a dynamic insurance portfolio. *Annals of Actuarial Science*, 18(1), 205–236.
4. Sherris, M., et al. (2024). Investment portfolio allocation and insurance solvency: New evidence from insurance groups in the era of Solvency II. *Risks*, 12(12), 191.
5. European Insurance and Occupational Pensions Authority. (2025). European insurance overview 2025.
6. European Insurance and Occupational Pensions Authority. (2025). Financial stability report: December 2025.
7. European Insurance and Occupational Pensions Authority. (2025). Insurance risk dashboard: April 2025
8. European Insurance and Occupational Pensions Authority. (2025). European insurance overview 2025.