IAIS International Association of Insurance Supervisors

Global Insurance Market Report (GIMAR)

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About the IAIS

The International Association of Insurance Supervisors (IAIS) is a voluntary membership organisation of insurance supervisors and regulators from more than 200 jurisdictions. The mission of the IAIS is to promote effective and globally consistent supervision of the insurance industry in order to develop and maintain fair, safe and stable insurance markets for the benefit and protection of policyholders and to contribute to global financial stability.

Established in 1994, the IAIS is the international standard-setting body responsible for developing principles, standards and other supporting material for the supervision of the insurance sector and assisting in their implementation. The IAIS also provides a forum for members to share their experiences and understanding of insurance supervision and insurance markets.

The IAIS coordinates its work with other international financial policymakers and associations of supervisors or regulators, and assists in shaping financial systems globally. In particular, the IAIS is a member of the Financial Stability Board (FSB), member of the Standards Advisory Council of the International Accounting Standards Board (IASB) and partner in the Access to Insurance Initiative (A2ii). In recognition of its collective expertise, the IAIS also is routinely called upon by the G20 leaders and other international standard-setting bodies for input on insurance issues as well as on issues related to the regulation and supervision of the global financial sector.

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About the GIMAR

This is the thirteenth issue of the Global Insurance Market Report (GIMAR). The GIMAR reports on the outcomes of the IAIS' Global Monitoring Exercise (GME). The GME is the IAIS' framework for monitoring risks and trends in the global insurance sector and assessing the possible build-up of systemic risk.

This document is available on the IAIS website (www.iais.org).

Acronyms and abbreviations

AE	Advanced economy
AI	Artificial intelligence
ALM	Asset-liability management
BCBS	Basel Committee on Banking Supervision
CSA	Cross-sectoral analysis
EMDE	Emerging market and developing economy
FX	Foreign exchange
FSB	Financial Stability Board
GenAI	Generative artificial intelligence
GIMAR	Global Insurance Market Report
GME	Global Monitoring Exercise
GNA	Gross notional amount
GRMS	Global Reinsurance Market Survey
GWP	Gross written premiums
IAIS	International Association of Insurance Supervisors
IIM	Individual insurer monitoring
ILR	Insurance liquidity ratio
ILS	Insurance-linked securities
IMF	International Monetary Fund
L&M	Loans and mortgages
NatCat	Natural catastrophe
ORSA	Own risk and solvency assessment
OTC	Over-the-counter
PIK	Payment-in-kind
SWM	Sector-wide monitoring
UK	United Kingdom
US	United States
VaR	Value at Risk

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Executive summary

The 2025 Global Insurance Market Report (GIMAR) shares the outcomes of the 2025 Global Monitoring Exercise (GME), the International Association of Insurance Supervisors' (IAIS') risk assessment framework to monitor key risks and trends and detect the potential build-up of systemic risk in the global insurance sector.

Section 1 introduces the GME and its data collections. The GME builds on individual insurer monitoring (IIM) data collected from 57 of the largest international insurance groups, as well as aggregate sector-wide monitoring (SWM) data from supervisors across the globe, covering over 90% of global written premiums. The analysis covers data to the end of 2024, updated with more recent financial market data where available.

Section 2 provides an overview of global macro-financial trends and key developments in the insurance sector, focusing on assets, liabilities, solvency, liquidity and profitability. Global economic growth has slowed, hindered by changing policies, protectionist measures and fiscal constraints. However, opportunities through trade reforms, structural adjustments and technological innovation still exist. Financial markets continue to experience elevated risks and uncertainty due to higher borrowing costs and ongoing geopolitical tensions. Insurers saw growth in total assets, supported by favourable financial market performance, while liabilities increased due to heightened business activity and inflationary pressures. Solvency and profitability remained stable, driven by strong underwriting performance and robust investment income. Liquidity positions improved slightly, primarily supported by liquid investments and premium income to meet outflows such as surrender values, claims, operational expenses and funding needs.

The outlook for the insurance sector in 2026 remains stable despite an uncertain macroeconomic and geopolitical landscape. Insurers expect to maintain profitability, supported by stable earnings and strategic reinvestments. Life insurers are likely to benefit from favourable interest rates, which could boost investment returns and solvency. Non-life insurers are expected to maintain strong capital positions but may face possible challenges from increasing natural catastrophe (NatCat) risks and shifting market conditions. Stable cash flows will enable reinvestment in higher-yielding bonds, while liquidity risks could be mitigated by substantial liquid asset buffers. Disciplined financial practices, robust risk management and digital innovation will help insurers navigate slowing premium growth and rising competition.

Section 3 outlines three sector-wide themes identified through the 2025 GME: (1) Impact of geoeconomic fragmentation on insurers' management of assets and liabilities; (2) Insurers' increasing investments in private credit; and (3) Insurers' adoption and governance of artificial intelligence (AI).

Impact of geoeconomic fragmentation on insurers' management of assets and liabilities

- Geoeconomic fragmentation is impacting insurers' management of assets and liabilities, introducing challenges such as financial market volatility, inflationary pressures, currency mismatches, and supply chain disruptions. Key areas of attention for insurers and supervisors include understanding the transmission channels and risks relating to financial markets and underwriting practices. Supervisory and insurer responses aim to address these vulnerabilities through ensuring high-quality investments, enhanced asset-liability management (ALM), diversification of markets and products, stress testing, granular data monitoring and international collaboration.

- Geoeconomic fragmentation potentially impacts insurers through key transmission channels, including financial market volatility, inflationary pressures and supply chain disruptions. These factors could adversely impact insurers' asset valuations, solvency positions, and claims inflation, particularly within non-life insurance lines.

- Regulatory divergence further increases operational complexity, while slower economic growth and recessionary pressures could reduce demand for insurance products. Additionally, currency mismatches and rising credit risks amplify financial vulnerabilities, posing additional challenges to insurers' profitability and overall resilience.

- Geoeconomic fragmentation introduces potential financial market risks, affecting assets and adding complexity to diversification efforts. While insurers' focus on high-quality assets offers some protection, challenges such as diverging monetary policies, duration gaps and rising foreign exchange (FX) volatility may create pressures on balance sheets and profitability.

- Underwriting risks remain a key focus, particularly in trade credit insurance, which faces vulnerabilities from supply chain disruptions and policy changes that could heighten counterparty default risks. Additionally, geopolitical tensions have contributed to a rise in cybercrime, heightening insurers' exposure to operational and liability cyber risks.

Insurers' increasing investments in private credit

- Private credit is a growing subsector of alternative assets with distinctive characteristics. Private credit offers life insurers potential benefits such as diversification, illiquidity risk premiums and improved asset-liability matching. This asset class can be attractive to life insurers seeking stable, long-term cash flows to match their liabilities. It can support the real economy through long-term financing for sectors like infrastructure, while potentially offering insurers higher yields and lender-friendly protections. On global aggregate, private credit remains a small share of insurers' portfolios, with exposures varying across jurisdictions. However, exposures are expected to grow in the coming years.

- Despite its benefits, private credit presents unique risks that require careful management. Credit risk is a primary concern, particularly for smaller or highly leveraged borrowers, with rising interest rates and geopolitical uncertainty amplifying default risks. Liquidity risk arises from the illiquid nature

of private credit, which should be managed by insurers' broader liquidity management frameworks. Valuation uncertainty is another challenge, as private credit often lacks observable market prices, relying on model-based valuations that may delay the recognition of losses during market stress. Complexity risk is heightened by bespoke structures and limited transparency, while hidden leverage in fund structures and securitisations poses moderate concerns.

- While private credit remains a small portion of insurers' portfolios on aggregate, its growing role in financing the real economy and potential systemic risks during market stress highlight the importance of sound governance, transparency and prudent risk management. Supervisors aim to ensure that insurers are actively managing risks associated with private credit investments by strengthening oversight, governance and resilience. These measures aim to balance the opportunities offered by private credit with the need to retain financial stability.

Insurers' adoption and governance of AI

- To understand AI developments in the insurance sector, supervisors rely on various sources. However, the GME findings also indicate that supervisors currently lack detailed information on AI use cases. The adoption of generative AI (GenAI) is still considered to be in its early stages. Although current use cases are reported to be limited, the adoption of GenAI is expected to accelerate, driven by its analytical capabilities and potential cost-saving benefits.

- Insurers are leveraging existing governance and risk frameworks to address emerging AI risks, consistent with the IAIS Application Paper published on the same topic. As AI adoption expands, supervisors are focusing on key risks, including algorithmic bias and unlawful discrimination, cybersecurity and data privacy concerns, model risk and lack of explainability, third-party dependencies and operational and governance challenges. Additionally, the growing use of AI across various industries could expose insurers to new AI-related liabilities in their underwriting. However, GME responses suggest that most supervisors have found limited or no evidence of insurers integrating AI risks into underwriting decisions as yet.

- Monitoring the impact of growing cyber risks continues to be an area of focus for insurance supervisors, highlighting the importance of insurers having robust operational risk frameworks in place. Growing adoption of AI and digital innovation in the insurance sector heightens exposure to cyber threats. As insurers integrate advanced technologies to enhance operations and manage risks, they could face increasing vulnerabilities to cyber attacks, data breaches and system disruptions. Insurers are also exposed to cyber risk in their underwriting activities, both for those offering affirmative cover and those still exposed to non-affirmative cover.

Section 4 outlines aggregate results from the 2025 IIM. The Insurer Pool's systemic risk score decreased by 1.2% at the end of 2024 compared with the previous year. A decline in the minimum guarantees on variable products indicator was partially offset by an increase in the intra-financial assets indicator. On a cross-sectoral basis, the Insurer Pool systemic risk score remains significantly below the banking pool score, indicating that the insurance sector has a lower systemic risk footprint. In 2025, the IAIS conducted the regular triennial review of the IIM assessment methodology, which will be applicable to the 2026–2028 GME.

Section 5 examines climate-related risks within the insurance sector, noting that the sector's investment exposure to these risks has remained relatively stable compared to previous years. Approximately 22% to 46% of insurers' general account assets are exposed to climate-related risks, with regional differences still largely explained by variations in data availability.

Non-life insurers offer valuable insights into the significance of NatCat risks, highlighting the potential impact of extreme events on insurers' solvency, the role of reinsurance in managing these exposures, and the evolving patterns in NatCat risk coverage and reinsurance levels over time. The IAIS recently published a GIMAR special topic edition on the financial stability implications of NatCat protection gaps.

Supervisors are making notable strides in incorporating climate-related risks into their regulatory frameworks and supervisory practices, with a focus on initiatives such as scenario analysis and capital requirements for NatCat risks. Insurers are also increasingly implementing climate scenario analysis and transition plans. However, reliable inputs and effective methodologies to evaluate climate-related impacts remain a challenge.

Finally, **Section 6** focuses on the global reinsurance market, drawing on comprehensive data submitted by supervisors from key reinsurance jurisdictions worldwide. The global reinsurance market is expanding, with reported gross reinsurance premiums reaching $1.75 trillion by the end of 2024. Reinsurance usage decreased slightly, evidenced by a marginal rise in retention ratios in the global insurance market. Reinsurers maintained strong solvency positions at the end of 2024. On an aggregate level, reinsurers predominantly invest in corporate debt and equities, and to a lesser extent in sovereign debt, loans, mortgages and real estate. In terms of profitability, the non-life reinsurance market's combined ratio was stable at 95% in 2024, recovering from a sharp increase in 2022, which had marked its highest value since 2005.

Introduction

This report is based on the outcome of the 2025 GME, which is the International Association of Insurance Supervisors' (IAIS') framework for monitoring key risks and trends in the insurance sector and assessing the build-up of any potential systemic risk in the global insurance sector.

1.1 DATA COLLECTION

The 2025 GME consists of two confidential data collections covering the period to year-end 2024:

- **Individual insurer monitoring** (IIM) applies to insurance groups meeting the Insurer Pool criteria,[1] consisting of 57 of the largest international insurance groups from 18 jurisdictions; and
- **Sector-wide monitoring** (SWM) covers aggregate insurance market data collected from IAIS members. Data submissions were received from 26 jurisdictions that meet the criteria[2] outlined in the GME document, estimated to comprise more than 90% of global gross written premiums (GWP). In addition, 32 jurisdictions not meeting the criteria volunteered to participate in the SWM data collection. In total, 58 jurisdictions participated in at least one of the components of the SWM 2025 data collection.[3] They are highlighted in blue on Map 1.[4]

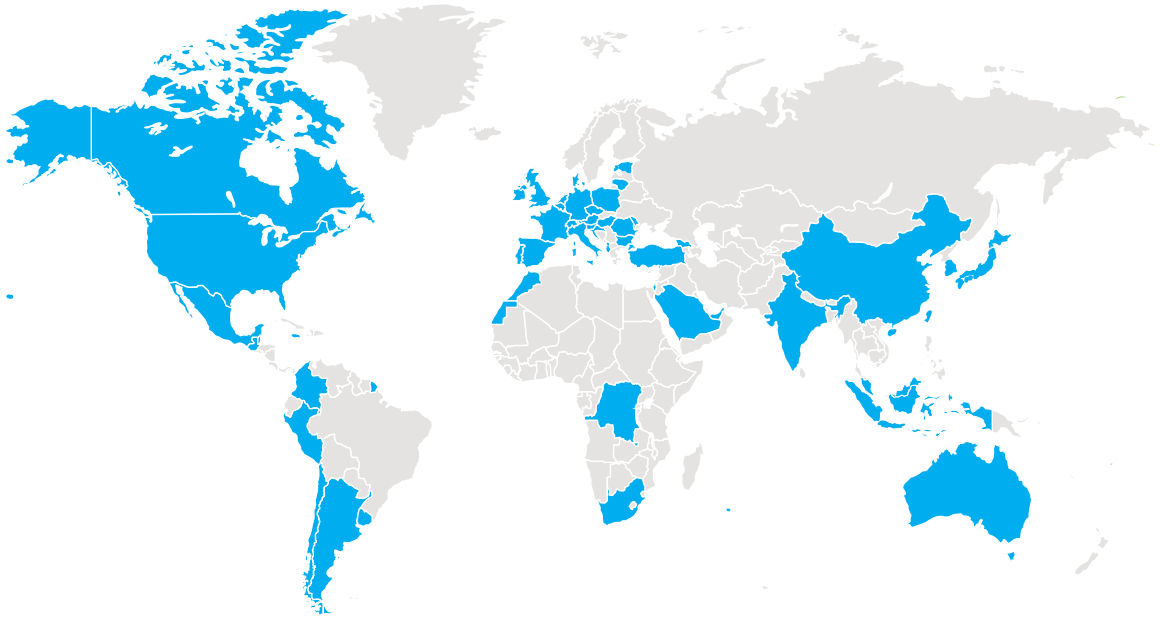
[1] The Insurer Pool criteria, as outlined in the June 2023 GME document are: Total assets of more than $65 billion and a ratio of premiums from jurisdictions outside the home jurisdiction to total premiums of 5% or more, or total assets of more than $215 billion and a ratio of premiums from jurisdictions outside the home jurisdiction to total premiums greater than 0%, or applying jurisdictional discretion.

[2] The following criteria allow for broad coverage in terms of global participation in the SWM: (1) the jurisdiction is a member of the Financial Stability Board; or (2) the jurisdiction is a home jurisdiction of at least one internationally active insurance group and/or of an Insurer Pool participating insurer.

[3] The SWM 2025 data collection consisted of qualitative, quantitative, climate and reinsurance components, and the Global Reinsurance Market Survey.

[4] SWM 2025 participating jurisdictions are: Albania; Argentina; Australia; Austria; Barbados; Belgium; Belize; Bermuda; Bulgaria; Canada; Cayman Islands; Chile; China; China, Hong Kong; Chinese Taipei; Colombia; Croatia; Czech Republic; Democratic Republic of the Congo; Denmark; Estonia; France; Georgia; Germany; Guatemala; Hungary; India; Indonesia; Ireland; Israel; Italy; Jamaica; Japan; Korea; Lithuania; Luxembourg; Malaysia; Malta; Mauritius; Mexico; Moldova; Morocco; Netherlands; Peru; Poland; Portugal; Romania; Saudi Arabia; Singapore; Slovenia; South Africa; Spain; Switzerland; Türkiye; United Arab Emirates; United Kingdom; United States; and Uruguay.

MAP 1: JURISDICTIONS THAT PARTICIPATED IN THE SWM 2025 DATA COLLECTION (IN BLUE)



Source: IAIS SWM 2025

The 2025 GME consists of two confidential data collections covering more than

90%

of global gross written premiums.

Global insurance market developments

This section outlines global macro-financial developments and key global insurance market trends, covering assets and liabilities, solvency, liquidity and profitability.

Highlights:

- The global economy is navigating increasing challenges, including policy uncertainty, protectionism, and fiscal pressures, which are weighing on growth. While financial markets face risks from rising borrowing costs and geopolitical tensions, opportunities through trade reforms, structural adjustments and advancements in technology still exist.
- Total assets of insurers grew by 3%, reaching $42 trillion by the end of 2024. This growth was primarily driven by favourable financial market conditions. Total liabilities increased by 4.4% to $37 trillion, reflecting heightened business activity and inflationary pressures.
- Insurers maintained stable solvency and profitability in 2024, supported by strong underwriting performance and robust investment income.
- Liquidity positions improved slightly in 2024, with primary liquidity sources including liquid investments and premium income. Key liquidity needs were driven by surrender values, claims, operational expenses and funding needs related to repos and securities lending.

2.1 GLOBAL MACRO-FINANCIAL DEVELOPMENTS

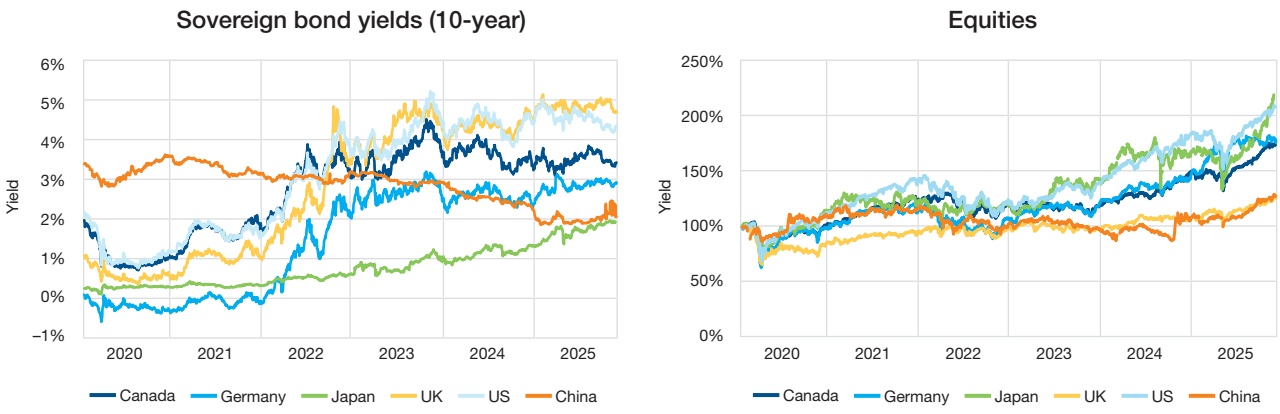
The global economy is contending with heightened uncertainty driven by shifting policies, increased protectionism and fiscal vulnerabilities. According to the October 2025 World Economic Outlook,[5] the International Monetary Fund (IMF) estimated that global gross domestic product (GDP) growth slowed from 3.3% in 2024, to 3.2% in 2025 and it will slow further to 3.1% in 2026. Advanced economies (AEs) are projected to grow at 1.5% and emerging market and developing economies (EMDEs) at just above 4.0%. Inflation is forecast to decline globally to 4.2% in 2025 and 3.7% in 2026.

The slowdown in growth reflects rising uncertainty, protectionist policies, labour market challenges and the diminishing effects of temporary economic boosts such as accelerated trade and investment activity. Financial markets face ongoing uncertainties, with potential risks stemming from fiscal and financial vulnerabilities, including rising borrowing costs, geopolitical tensions and the possibility of abrupt repricing in sectors such as technology. Key opportunities lie in trade negotiations, structural reforms and productivity gains driven by advancements in technology.

Stable macro-financial conditions are particularly critical for insurers, as they rely on economic stability to manage long-term risks, align investments with liabilities and maintain financial resilience. The normalisation of bond yield curves in some regions has provided additional support, benefiting insurers through improved investment returns, product pricing, ALM and capital positions.

Financial market disruptions and persistent economic uncertainty could pose challenges, straining asset valuations, reducing investment income and complicating liability management, especially for long-term products affected by volatile inflation expectations and bond yields. Despite these risks, insurers' generally well-diversified, high-quality investment portfolios help mitigate concentration risks, enhance liquidity and safeguard solvency.

FIGURE 1



Source: Bloomberg

[5] International Monetary Fund, World Economic Outlook, October 2025.

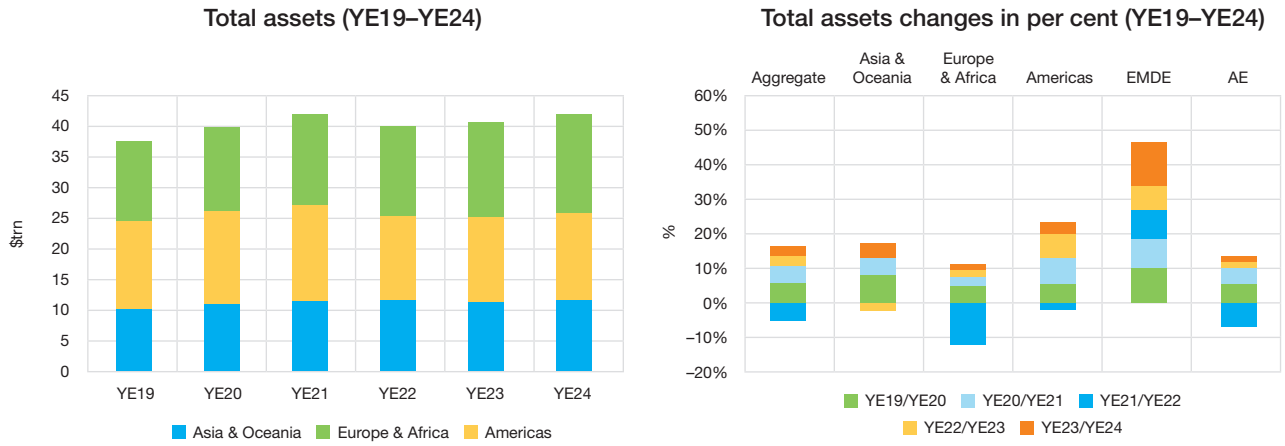
2.2 ASSETS AND LIABILITIES

Figure 2 shows that total assets reported in the SWM increased by 3.0% to $42 trillion at the end of 2024. The allocation of these assets among the Asia and Oceania, Europe and Africa and Americas regions remained consistent with previous years, with most of the increase attributed to Asia and Oceania. Similarly, the allocation of these assets between EMDEs and AEs showed consistency with previous years, with most of the increase in 2024 attributed to EMDEs.

Overall, the increase in assets was driven by strong premium growth, favourable financial market conditions (higher bond and equity prices that increased investment portfolio values) and reinvestment in higher-yielding instruments.

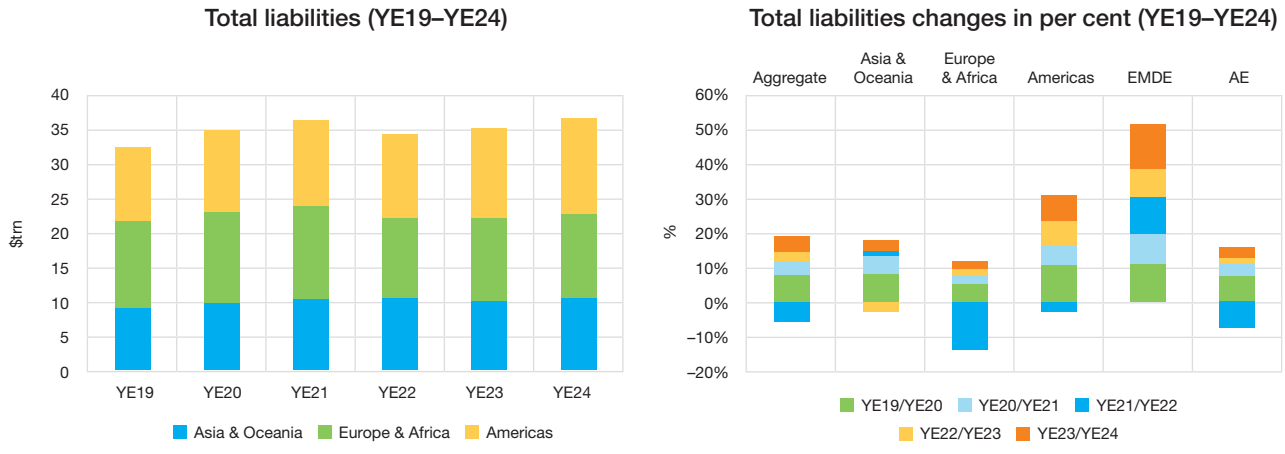
Total liabilities increased by 4.4% to reach $37 trillion at the end of 2024 (Figure 3), driven primarily by business expansion, inflation and the adoption of more market-consistent valuation methods in certain jurisdictions. This growth was particularly pronounced in the EMDE and Americas regions.

FIGURE 2



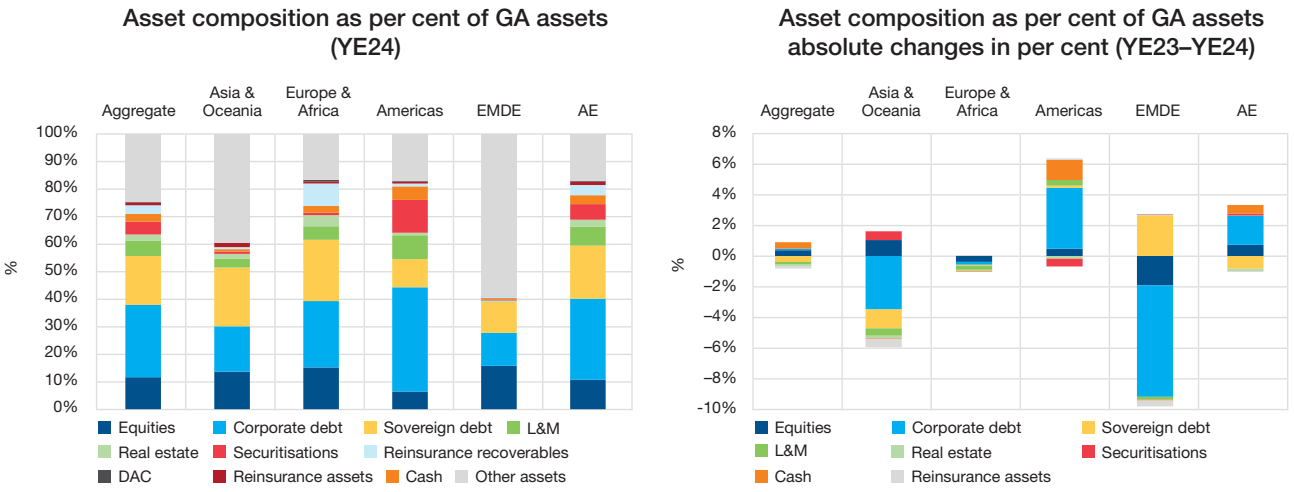
Source: IAIS SWM 2025

FIGURE 3



Source: IAIS SWM 2025

FIGURE 4[6]



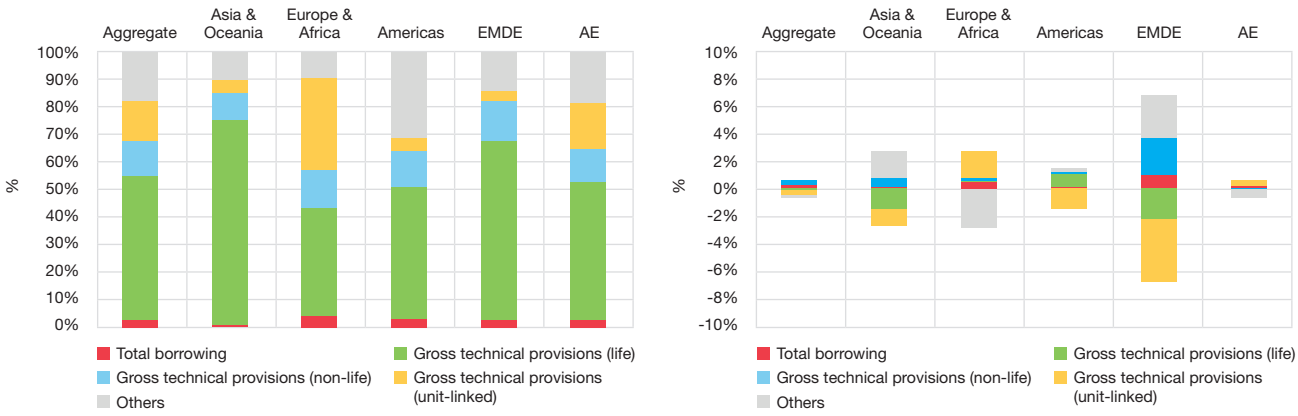
Source: IAIS SWM 2025

Figure 4 shows that fixed-income investments, which include corporate debt, sovereign debt, and loans and mortgages, remain the dominant asset class within the Insurer Pool's portfolio. These investments account for 41%, 51% and 57% of total investments in the Asia and Oceania, Europe and Africa, and Americas regions, respectively. In comparison, fixed-income investments comprise 23% of total investments in EMDEs, significantly lower than the 56% reported for AEs. Equities represent the second-largest asset class, making up 12% of total investments across all three regions.

Between 2023 and 2024, there were mixed trends across regions. Most notably, there were decreases in corporate debt in EMDEs and the Asia and Oceanic regions and increases in corporate debt in the Americas and in AEs generally. Additionally, sovereign debt exposures increased sharply in EMDEs.

Looking at the composition of liabilities, Figure 5 shows that on aggregate, gross technical provisions for life insurance dominates the Insurer Pool, constituting 70%, 39% and 48% of total liabilities for the Asia and Oceania, Europe and Africa, and the Americas regions respectively.

FIGURE 5



Source: IAIS SWM 2025

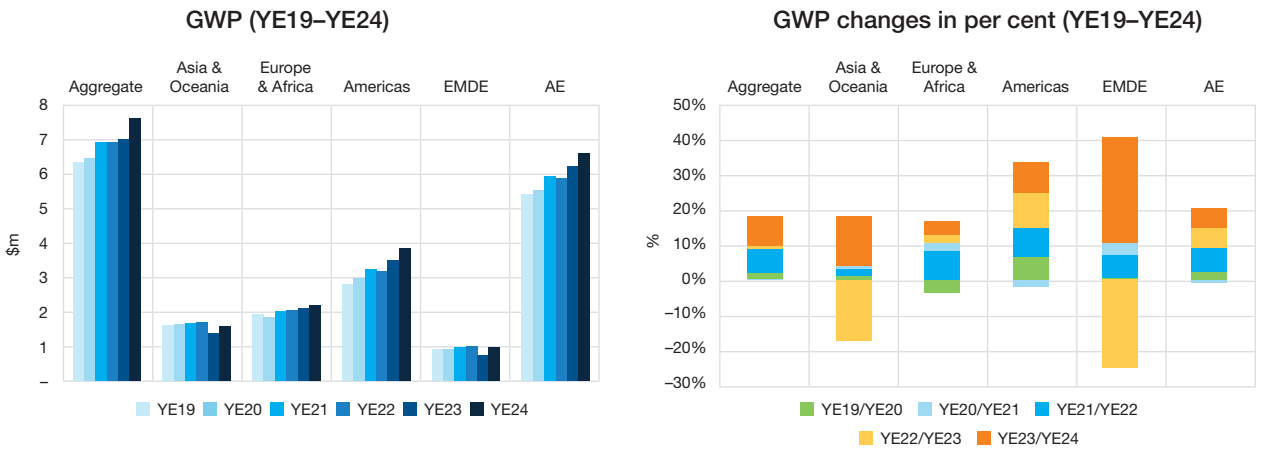
[6] "Other assets" represents the difference between the reported amount for total assets and the reported amounts for the main asset classes displayed in Figure 4.

Unit-linked gross technical provisions for Europe and Africa were equally significant at 33%, while non-life gross technical provisions averaged 12% for all regions. The remaining liabilities relate to borrowings and "other liabilities".

The chart also shows changes from 2023 to 2024, which indicate that gross technical provisions (unit-linked) within the EMDE region recorded the largest reduction, offset by a corresponding increase in other liabilities in the same region.

On aggregate, total GWP[7] has grown steadily over the past five years, reflecting consistent global expansion in the insurance sector (Figure 6). AEs maintained a stable upward trajectory in GWP, while EMDEs experienced a sharp surge in growth during the period. The Americas led with the most significant growth, whereas Asia and Oceania saw relatively modest increases, and Europe and Africa recorded steady but moderate gains. These patterns underscore distinct regional variations in insurance market dynamics.

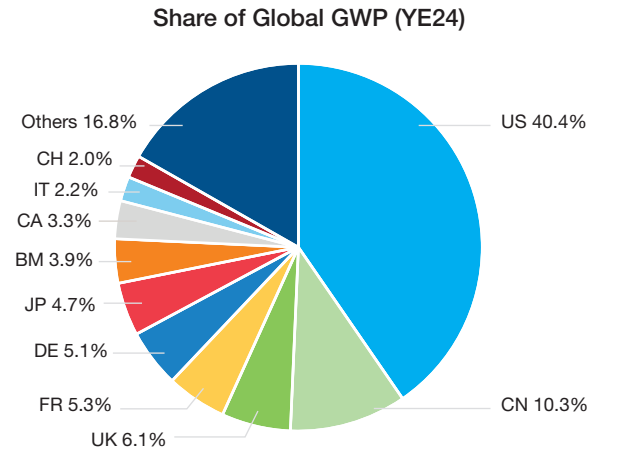
FIGURE 6



Source: IAIS SWM 2025

Figure 7 illustrates the global distribution of GWP in 2024, based on IAIS SWM data. The United States (US) accounts for 40.4%, followed by China at 10.3% and the United Kingdom (UK) at 6.1%. Germany, Japan and France each contribute approximately 5%. The remaining countries collectively make up 28.1%.

FIGURE 7



Source: IAIS SWM 2025

[7] Note: IAIS members acknowledge the impact of IFRS 17 on the reporting and interpretation of premiums.

2.3 SOLVENCY

2.3.1 Developments

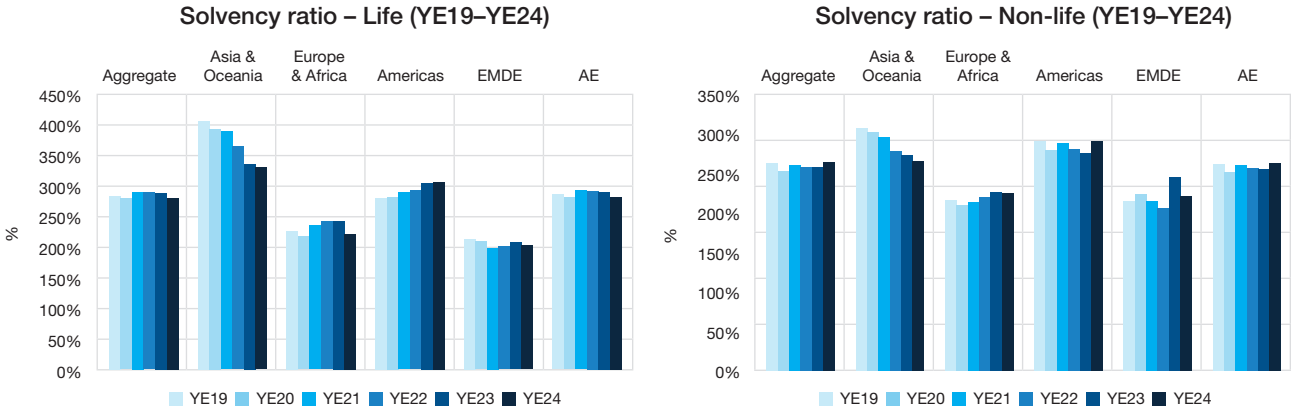
On aggregate, the solvency ratios of life insurers have remained relatively stable, although there was a slight decline in 2024 (Figure 8). By region,[8] the Americas continued to show increasing ratios. Asia and Oceania, while maintaining relatively high solvency ratios, showed a clear and consistent downward trend over the same period. Europe and Africa's solvency ratios remain broadly stable, with minor fluctuations across the years. EMDEs and AEs have also maintained overall stability, though aggregate solvency ratios in EMDEs remain consistently lower than those of AEs.

Solvency ratios for life insurers have benefited from adequate reserves and favourable global financial market conditions, which have strengthened asset valuations and capital positions. However, challenges persist, including the impact of interest rate fluctuations in certain regions, geopolitical tensions, longevity risks and complexities in ALM.

Solvency ratios for non-life insurers increased slightly, with notable regional differences. Europe and Africa showed modest improvements. Asia and Oceania continued to experience a gradual decline. After recording a strong recovery in the previous year, EMDEs experienced a decline.

Strong underwriting performance and robust investment income have positively influenced solvency ratios for non-life insurers. However, adverse claims in specific lines of business and significant NatCat events have posed challenges to solvency, with some indications of rising reinsurance premiums and limited coverage in certain areas.

FIGURE 8



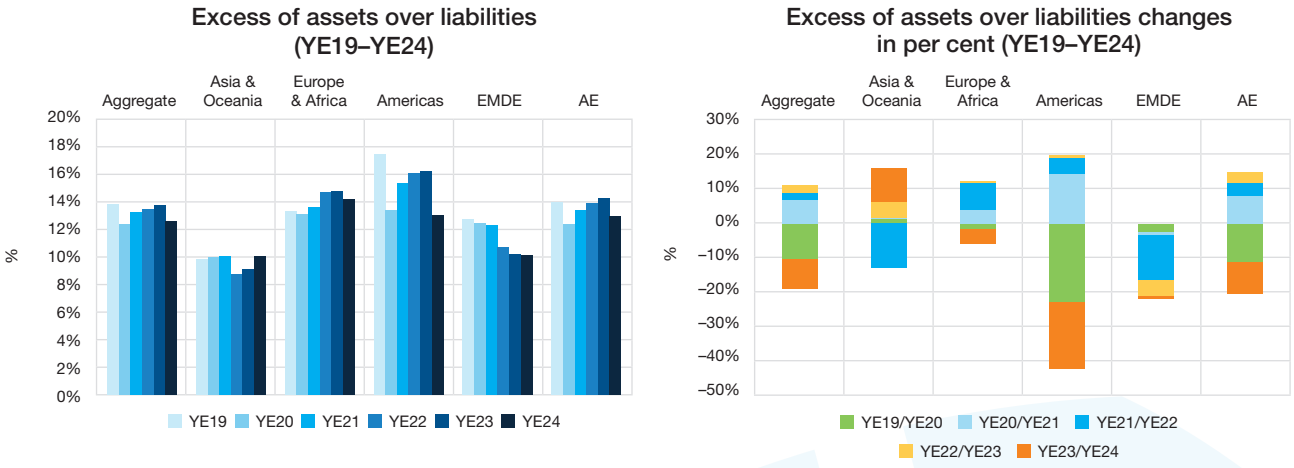
Source: IAIS SWM 2025

[8] Note that solvency ratios are jurisdiction-specific and cannot be directly compared across regions. Instead, the focus is on analysing trends over time within each jurisdiction.

In 2024, the excess of assets over liabilities declined slightly on aggregate, reflecting varied performance across regions (Figure 9). The Americas experienced a steep decline, marking the most significant drop among all regions after years of steady growth. Europe and Africa saw a moderate reduction, breaking their prior upward trend, while Asia and Oceania showed slight improvement. EMDEs remained relatively stable in 2024 after years of gradual decline, and AEs recorded a slight decline, closely aligning with the aggregate trend.

On a year-on-year basis, the Americas faced the sharpest decline among all regions, while Europe and Africa recorded a moderate reduction. In contrast, Asia and Oceania showed slight improvement, EMDEs demonstrated a modest recovery following prior declines and AEs experienced a slight decline. These outcomes underscore regional disparities, with some regions demonstrating resilience while others faced more challenges.

FIGURE 9



Source: IAIS SWM 2025

2.3.2 Measures taken by supervisors

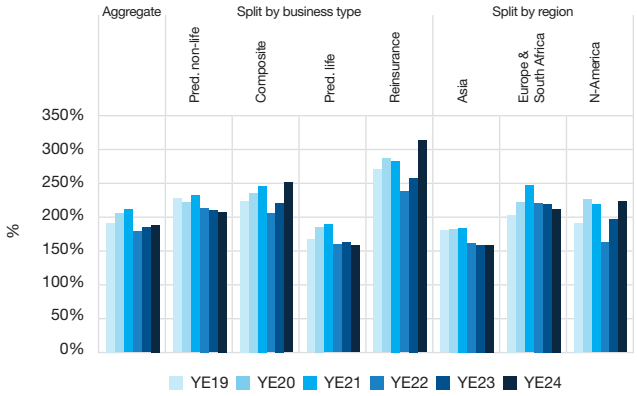
In 2024, supervisors focused on enhancing scenario analyses and stress testing to evaluate insurers' resilience under adverse conditions, with close attention to exposure to interest rate fluctuations and geopolitical risks. They also worked on strengthening liquidity reporting and solvency monitoring frameworks to ensure robust oversight, while encouraging insurers to align investments with risk appetite and improve ALM practices.

2.3.3 Outlook

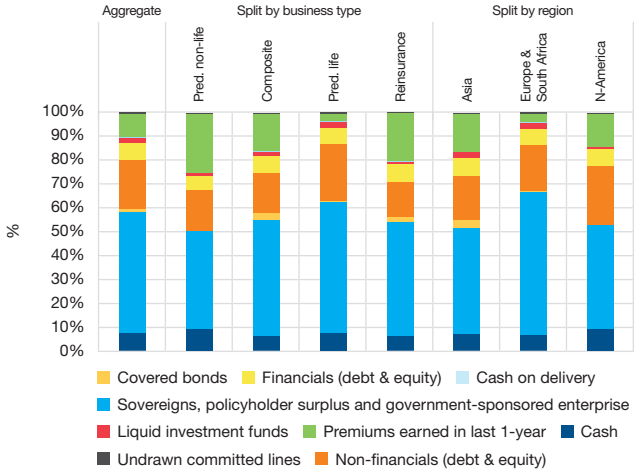
Life insurers are expected to remain well-capitalised in 2025–2026, supported by elevated interest rates in western markets, which are anticipated to enhance investment returns and bolster solvency ratios. Regulatory changes in Europe, such as refinements to Solvency II, may affect capital requirements, but the overall outlook for the sector remains stable. Non-life insurers continue to maintain strong capital positions, supported by a resilient reinsurance market.

FIGURE 10

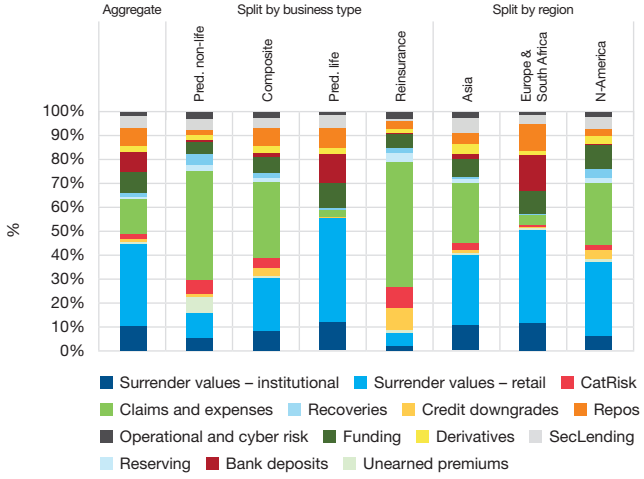
Insurance liquidity ratio 1Y (YE19–YE24) in per cent



Liquidity sources composition (YE24)



Liquidity needs composition (YE24)



Source: IAIS IIM 2025

2.4 LIQUIDITY

2.4.1 Developments

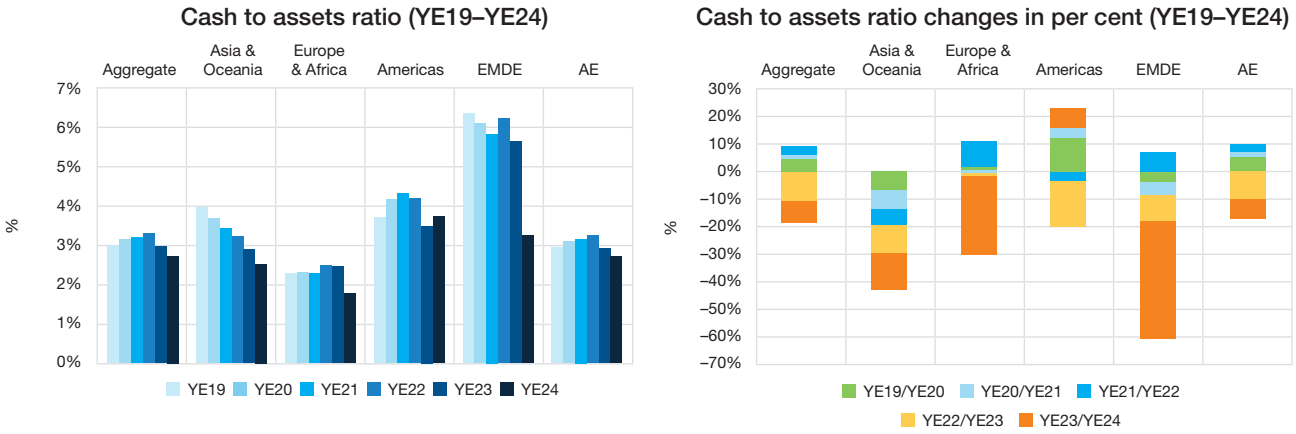
As shown in Figure 10, the one-year insurance liquidity ratio (ILR)[9] increased slightly from year-end 2023 to year-end 2024 across most regions and business models, remaining well above 100%. ILRs are projected to remain strong, with reinsurers exhibiting the highest ratios, exceeding 300%, while other business types maintain ratios well above 150%. The movement in ILRs varied across insurers, with some benefiting from factors such as higher dividend upstreams, the completion of asset sales, and improved alignment of liquidity sources to liquidity needs. Conversely, others experienced declines due to increased cash outflows or shifts in investment portfolio composition.

Primary liquidity sources include cash, sovereign debt and liquid investments such as non-financial corporate debt, which collectively account for the majority of available liquidity. Premium income and committed credit lines also contribute meaningfully to liquidity buffers. On the other hand, key liquidity needs are dominated by surrender values for both retail and institutional business, followed by claims, expenses, and funding requirements linked to repos and securities lending. Additionally, operational and cyber risks form part of the broader liquidity demands faced by insurers.

Liquidity positions improved slightly, supported by liquid investments and premium income to meet outflows.

[9] The ILR is the ratio of an insurer's liquidity sources divided by liquidity needs over a 1Y time-horizon. For more details, see https://www.iais.org/uploads/2022/11/Level-2-document-Liquidity-Metrics-as-an-ancillary-indicator.pdf

FIGURE 11



Source: IAIS SWM 2025

Figure 11 shows an overall decline in the cash-to-assets ratio across most regions in 2024, except in the Americas, which recorded a modest increase (0.4%). Europe and Africa experienced the steepest drop, followed by smaller declines in Asia and Oceania, EMDEs and AEs. This trend suggests a general reduction in cash holdings across most regions. A possible reason could be the decrease in short-term interest rates relative to longer term interest rates, reflecting a shift toward other (eg alternative) asset classes.

2.4.2 Measures taken by supervisors

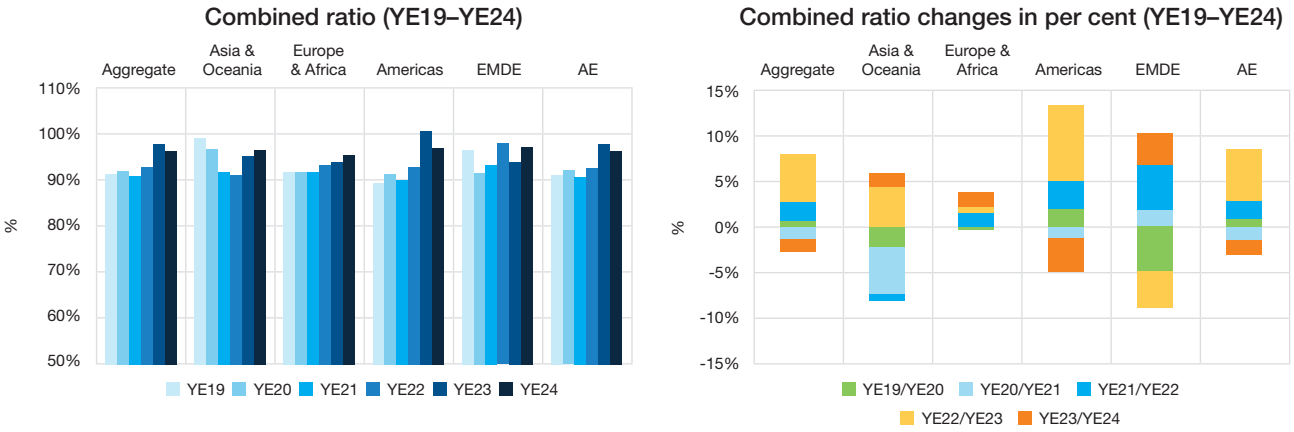
Supervisors have introduced key initiatives to strengthen the monitoring and management of insurance liquidity. These include regular assessments of liquidity positions, comprehensive stress testing to evaluate resilience under adverse conditions and new reporting requirements to promote greater transparency. Regulatory frameworks have been strengthened, liquidity metrics refined and essential factors such as surrender trends, collateral demands and ALM have been closely scrutinised. In some cases, restrictions on capital distributions and dividend payments were applied to safeguard solvency and ensure financial stability.

Further measures focus on encouraging investment in liquid assets, developing sophisticated tools for liquidity risk monitoring and establishing more detailed requirements for liquidity risk management plans. Supervisors have also addressed key risks, such as unexpected payouts and margin calls, through targeted reviews and ongoing stress testing.

2.4.3 Outlook

Insurers are expected to continue to benefit from stable cash flows, which provide opportunities to reinvest in higher-yielding bonds and strengthen their financial positions. However, they could face liquidity challenges, driven by derivative margining requirements and the potential for sudden cash demands arising from large claims or unexpected events. To address these risks and ensure financial resilience, insurers are expected to maintain substantial buffers in liquid assets, focusing on short-duration fixed-income portfolios that provide quick access to funds. Unlike higher-duration bonds, short-duration fixed-income assets are less affected by interest rate fluctuations and can be liquidated more easily with minimal impact on financial income.

FIGURE 12



Source: IAIS SWM 2025

2.5 PROFITABILITY

2.5.1 Developments

On aggregate, between 2023 and 2024 the non-life combined ratio[10] decreased, remaining just below 100%.[11] This decline was primarily driven by a decline in the Americas and AEs, reflecting improved operational performance or lower claims activity in this region and in AEs generally. In contrast, Asia and Oceania, Europe and Africa and EMDEs experienced increases in their combined ratios. Collectively, these trends suggest that the improved performance was driven by an increase in premium income, reduced inflationary pressures on claims costs, improved underwriting performance, and greater operational efficiency.

On aggregate, return on assets (ROA) increased to 1.2% in 2024, reflecting steady growth across most regions (Figure 13). Profitability improved for both non-life and life insurance sectors, driven by higher premiums and stable underwriting results. Other factors included favourable market conditions, disciplined pricing strategies and improved investment returns.

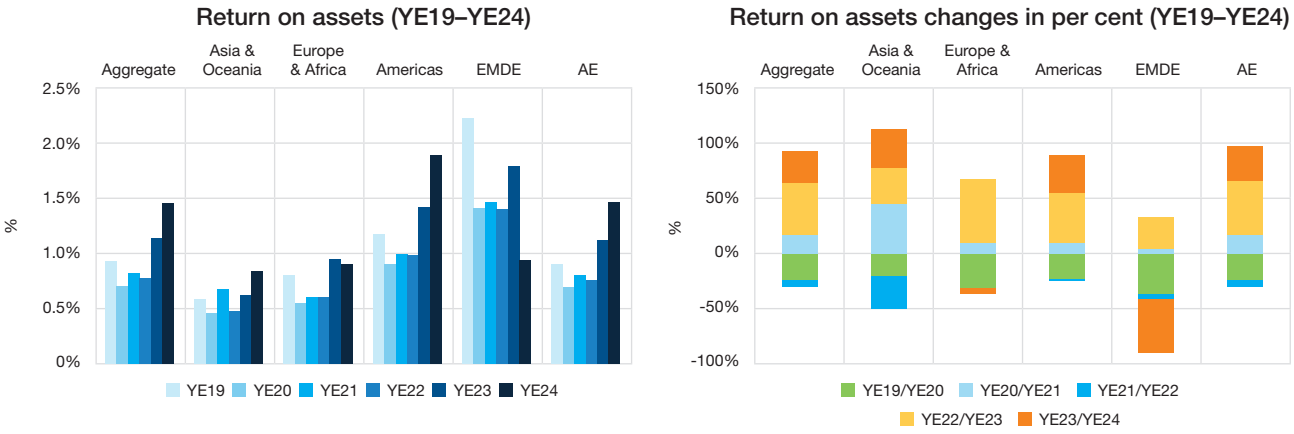
For non-life insurance, profitability was supported by effective risk selection and pricing adequacy, while life insurance benefited from increased sales and stable claims experience. However, some challenges persisted, including economic uncertainties, inflationary pressures and volatility in certain asset classes, which created headwinds for specific segments and insurers operating in more vulnerable markets.

Insurers' profitability positions improved, driven by higher premiums, stable underwriting and improved investment returns.

[10] The combined ratio is a financial metric used by insurers to assess profitability and operational performance. It is calculated by adding the loss ratio (losses incurred relative to premiums earned) and the expense ratio (underwriting expenses against earned premiums).

[11] A combined ratio below 100% indicates an underwriting profit. A ratio above 100% indicates an underwriting loss.

FIGURE 13



Source: IAIS SWM 2025

2.5.2 Measures taken by supervisors

Supervisory measures in 2024 with respect to insurer profitability included stress testing, risk analysis and monitoring the effects of prior regulatory changes. In some jurisdictions, phased adjustments to supervisory frameworks were implemented to align with evolving market conditions. While no major new measures were introduced in some jurisdictions, supervisors emphasised continued oversight of compliance, pricing practices and risk management strategies. Specific initiatives included deep analyses of market trends, post-implementation reviews of existing regulations and guidance for insurers on risk hedging and mitigation.

2.5.3 Outlook

Looking ahead, insurers expect to maintain overall profitability, driven by stable earnings, strategic reinvestment opportunities and the transformative potential of advancements in technology, particularly AI. While challenges such as increasing competition and slowing premium growth may provide challenges, insurers appear well-positioned to adapt through strong risk management strategies and digital innovation.

Sector-wide themes and other trends

The IAIS is focusing on three sector-wide themes, based on supervisory priorities identified through the annual GME: (1) Impact of geoeconomic fragmentation on insurers' management of assets and liabilities; (2) Insurers' increasing investments in private credit; and (3) Insurers' adoption and governance of AI.

Highlights:

- Geoeconomic fragmentation potentially impacts insurers through key transmission channels, including financial market volatility, inflationary pressures and supply chain disruptions. These factors could adversely impact asset valuations, solvency positions, and claims inflation, particularly within non-life insurance lines. Key areas of attention for insurers and supervisors include understanding the transmission channels and risks relating to financial markets and underwriting practices.
- Private credit is emerging as a fast-growing asset class, potentially offering diversification, illiquidity risk premiums and improved asset-liability matching. This is particularly appealing to life insurers seeking long-term cash flows. While private credit offers potential benefits, it also poses risks. These include credit risk, liquidity challenges, valuation uncertainty, complexity and hidden leverage – all of which require robust governance and risk management.
- The adoption of AI is expected to significantly influence the insurance sector. Supervisors aim to deepen their understanding of AI use cases, the governance frameworks implemented by insurers and how insurers are addressing emerging AI-related liability risks.
- Cyber risks remain a key area of focus for supervisors, particularly regarding the operational vulnerabilities faced by insurers. This section also examines trends in cyber underwriting.

3.1 IMPACT OF GEOECONOMIC FRAGMENTATION ON INSURERS' MANAGEMENT OF ASSETS AND LIABILITIES

The global economy is increasingly contending with the complexities of geoeconomic fragmentation, driven by escalating geopolitical tensions and the growing shift of economic activities into regional or national blocs. This trend presents significant challenges to global growth and financial stability. The IMF[12] has cautioned that such fragmentation could dampen economic prospects and weaken international cooperation, thereby undermining global resilience.

These disruptions have the potential to spill over into macroeconomic and financial risks, including heightened credit, market and liquidity risks, as well as increased inflation and greater exposure to FX volatility. For insurers, such risks may require a strategic reallocation of asset and liability portfolios to address emerging vulnerabilities.

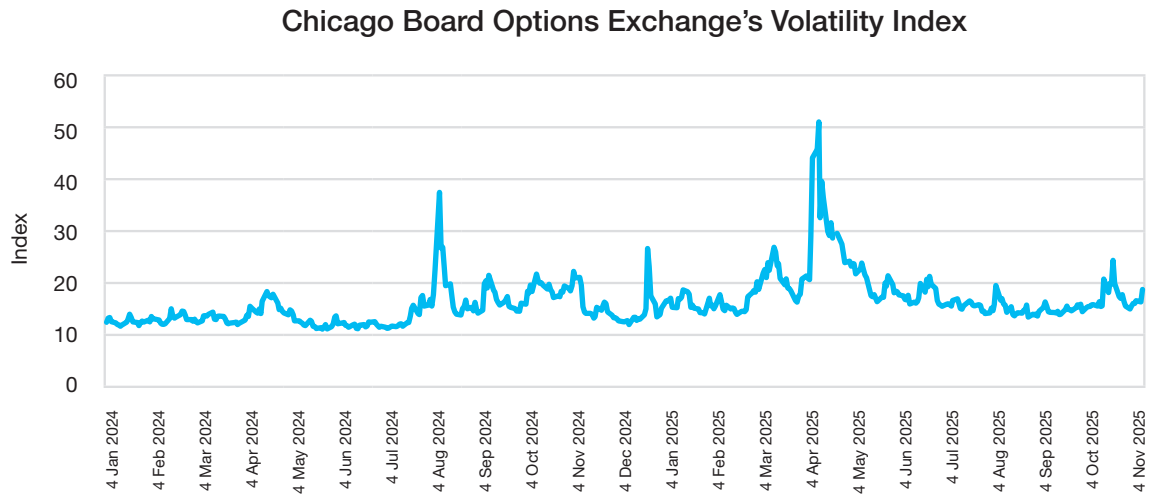
Thus far, markets have demonstrated resilience, with volatility returning to relatively low levels in Q4 2025, as illustrated in Figure 14. However, the uncertainty surrounding geoeconomic fragmentation has been a recurring theme, underscoring the importance of adopting a forward-looking approach to identify potential vulnerabilities early and mitigate risks effectively.

3.1.1 Transmission channels

Geoeconomic fragmentation potentially impacts insurers through key transmission channels, including financial market volatility, inflationary pressures and supply chain disruptions. These factors could adversely impact asset valuations, solvency positions and claims inflation, particularly within non-life insurance lines.

Regulatory divergence further increases operational complexity, while slower economic growth and recessionary pressures could reduce demand for insurance products. Additionally, currency mismatches and rising credit risks contribute to financial vulnerabilities, posing additional challenges to insurers' profitability and overall resilience.

FIGURE 14



Source: Bloomberg

[12] International Monetary Fund, Global Financial Stability Report. 2025

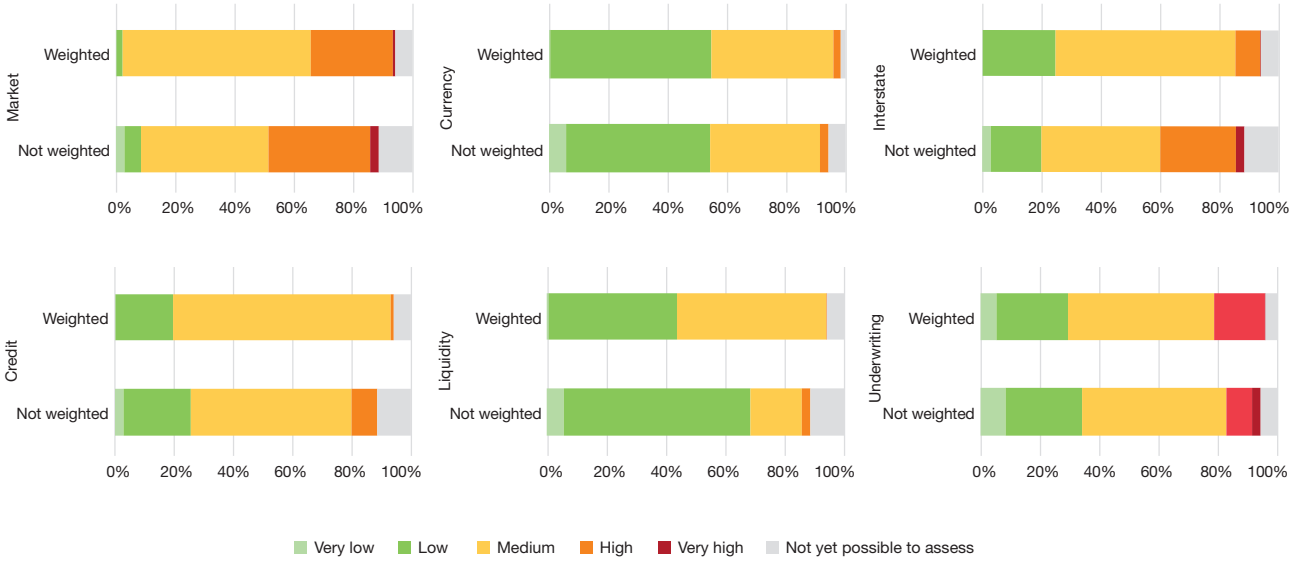
3.1.2 Key risks arising from geoeconomic fragmentation

Geoeconomic fragmentation poses a variety of risks to financial markets, insurers and supervisory frameworks. These risks could span across asset classes, interest rate exposures, currency mismatches and underwriting practices, with varying degrees of impact. While insurers have taken steps to mitigate some vulnerabilities, the evolving nature of these risks requires continued adaptation and resilience.

Geoeconomic fragmentation introduces financial market risks, affecting insurers' assets and adding complexity to diversification efforts.

FIGURE 15

Geoeconomic fragmentation: perception of risk (n=35)



Source: IAIS SWM 2025

Financial market risks

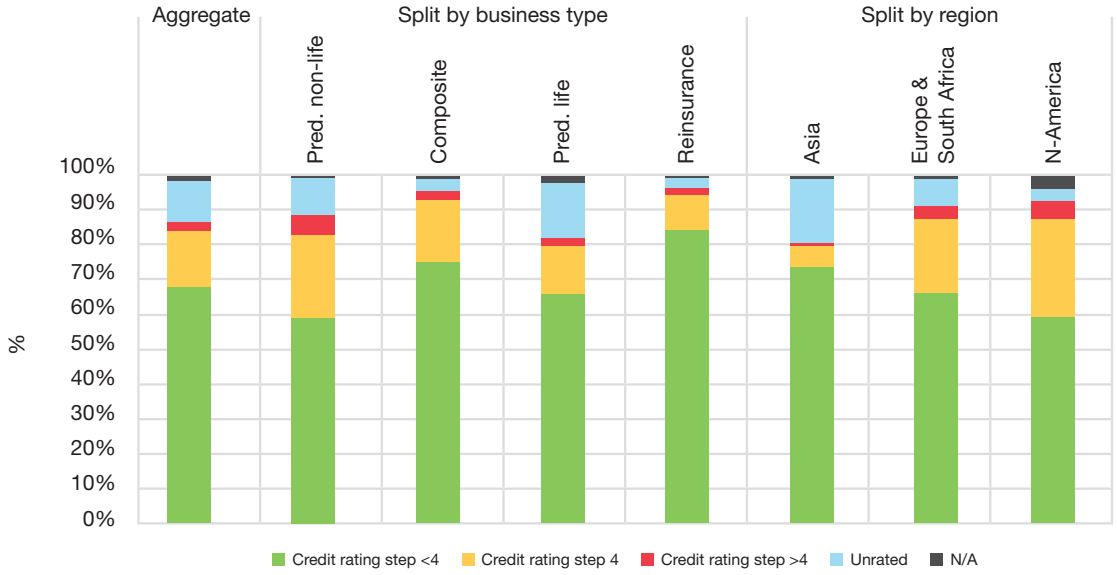
The potential impact of geoeconomic fragmentation on financial markets is generally perceived to be in the medium-to-high range, while most individual risks are viewed as having a medium-to-low impact (Figure 15). Notably, geoeconomic fragmentation is expected to affect all asset classes, posing challenges to achieving effective diversification across them. However, insurers' investments are predominantly concentrated in high-quality assets, which are expected to provide a buffer against potential market downturns (Figure 16).

Interest rate risk

Exposure to interest rates across different jurisdictions represents a potential source of risk, as diverging monetary policies may cause interest rates to move in opposite directions. This risk becomes more pronounced when duration gaps[13] are significant, as changes in asset values may not be adequately offset by corresponding changes in liabilities, adding pressure to balance sheets. Nonetheless, insurers have made substantial progress in recent years by significantly reducing their duration gaps, thereby lowering their vulnerability to this type of risk (Figures 17, 18 and 19).

FIGURE 16

Credit quality composition (YE24) in per cent



Source: IAIS IIM 2025

[13] A duration gap is a measure of the difference between the duration of a financial institution's assets and the duration of its liabilities. It is used to assess the sensitivity of the institution's net worth to changes in interest rates. A positive duration gap indicates that liabilities are more sensitive to interest rate changes than assets, potentially decreasing the net worth if interest rates fall. Conversely, a negative duration gap suggests that assets are more sensitive, potentially decreasing the net worth if interest rates rise.

FIGURE 17

Duration gap (YE19–YE24) in per cent

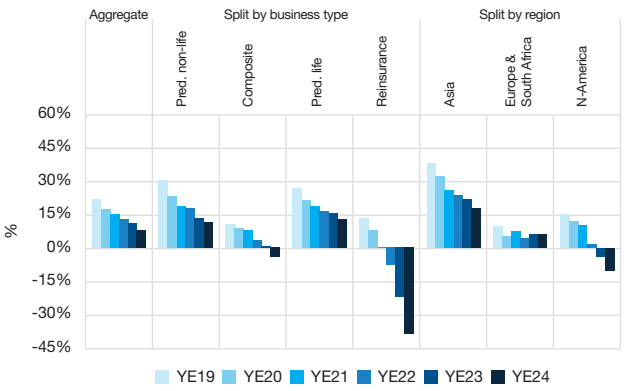


FIGURE 18

Duration of assets (YE19–YE24)

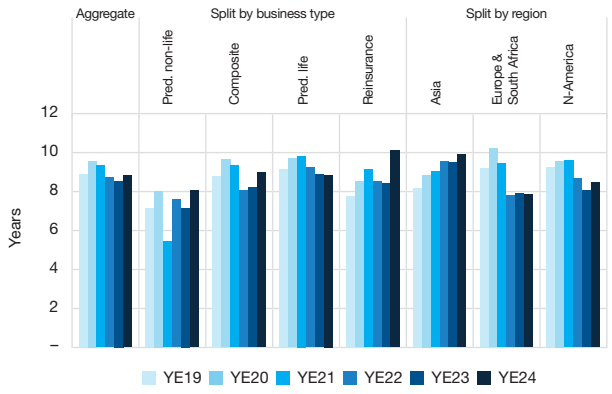
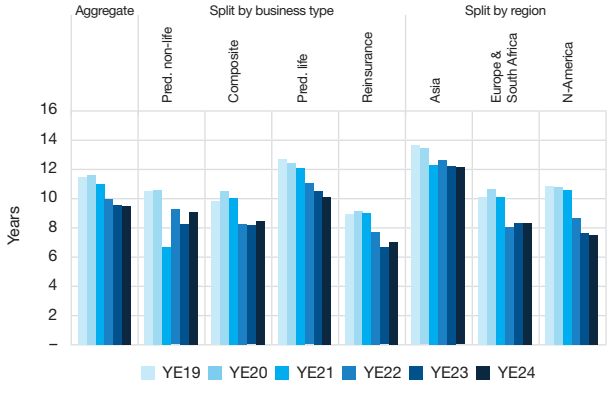


FIGURE 19

Duration of liabilities (YE19–YE24)



Source: IAIS IIM 2025

Currency risk

Geoeconomic fragmentation is noted to have an impact on currency exchange rates, including significant currencies such as the US$. Insurers are generally well-aligned in terms of currency exposures, often deploying derivatives to hedge their positions. However, heightened volatility in FX markets is expected to raise hedging costs, which, in turn, could place downward pressure on insurers' profitability.

Geoeconomic fragmentation also poses medium-to-high risks to financial markets, affecting diversification and increasing currency and interest rate risks. Insurers mitigate these through high-quality assets, reduced duration gaps, and hedging, though rising hedging costs may pressure profitability.

Box: Insurers' foreign currency exposures and mismatches

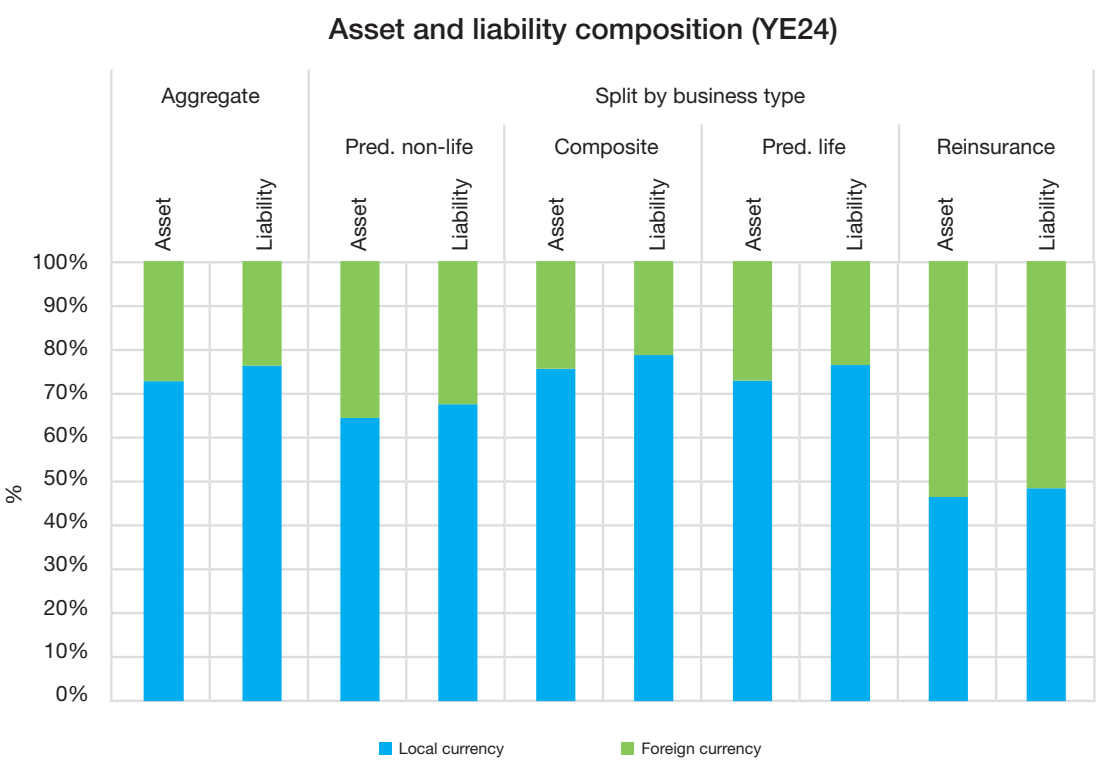
This box provides an overview of large, internationally active insurers' foreign currency exposures and asset-liability mismatches.[14] The insurance groups are assigned to regions based on the location of their headquarters, and a currency is classified as "foreign" if it is not the domestic currency in that country.

At the aggregate level, assets and liabilities in the insurance sector are mostly held in domestic currencies (Figure 20). A more equal split between domestic and foreign currencies among reinsurers reflects their global oriented business models.

The split of assets and liabilities by foreign and domestic currency indicates that foreign liabilities are generally backed by foreign currency assets across all business models.

The US$ plays a predominant role as a foreign currency both on the asset and the liability sides of insurers' balance sheets (Figure 21). This is the case across all regions and business types.

FIGURE 20



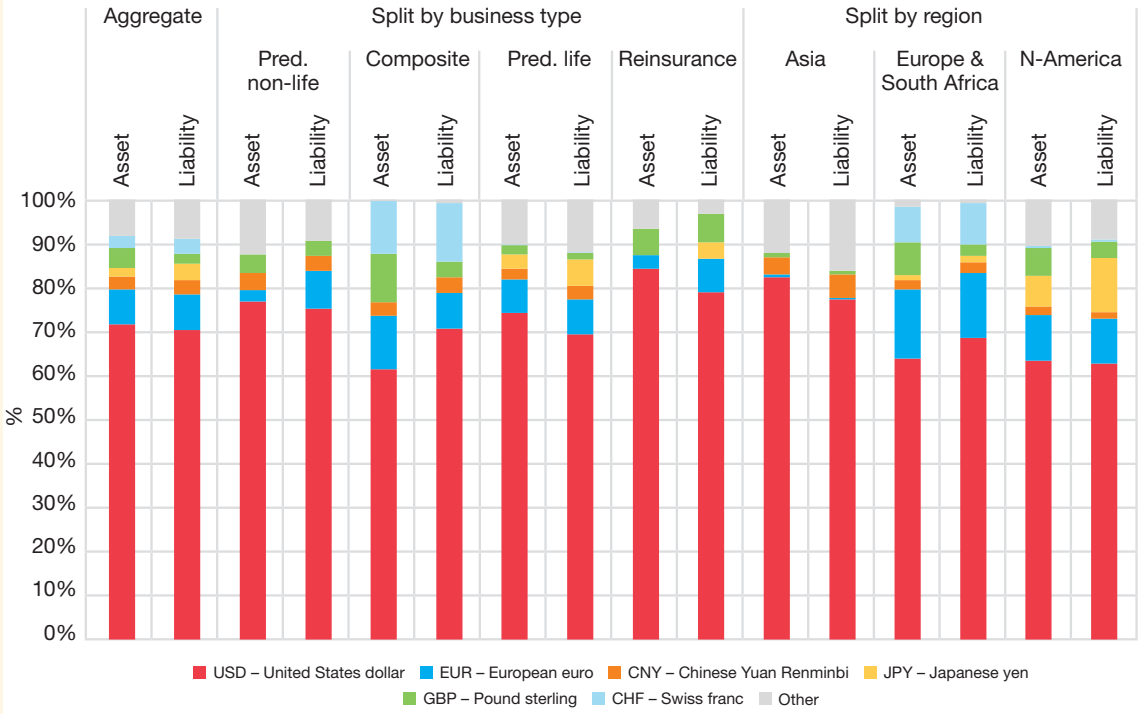
Source: IAIS IIM 2025

[14] Importantly, these large insurance groups offer liabilities in multiple currencies in different jurisdictions. This explains the non-negligible amount of "foreign" currency exposures shown in the remainder of this annex.

Box: Insurers' foreign currency exposures and mismatches (continued)

FIGURE 21

Composition of assets and liabilities in foreign currency (YE24)



Note: Split "by region" refers to the region in which the insurance group's headquarters is located.
Source: IAIS IIM 2025

Assets in a particular foreign currency may not correspond to instruments in the same currency. While such asset-side mismatches constitute a small share of the total balance sheets, they are mostly denominated in US$ (Figure 22, positive bars). There are regional differences, with Asia having a higher concentration of US$ mismatches than Europe or North America.

From a funding perspective, the majority of foreign-currency liabilities are matched with assets in the same currency (Figure 22, negative bars). In the case of foreign-currency mismatches, which amount to less than 2% of total liabilities, the US$, EUR and JPY play rather similar roles in the aggregate. In addition, foreign-currency mismatches are primarily concentrated in specific insurers involved in cross-border operations, reflecting the diversity of business models and funding strategies.

When interpreting Figure 22, it is important to note the following: First, taken together, the asset- and liability-side findings suggest that insurance groups use their domestic currency to fund a small portion of their foreign-currency assets. Second, for most insurers, asset-liability currency mismatches are smaller than the total gross notional amount (GNA) of FX derivatives, indicating that much of on-balance sheet FX risk may be hedged.[15]

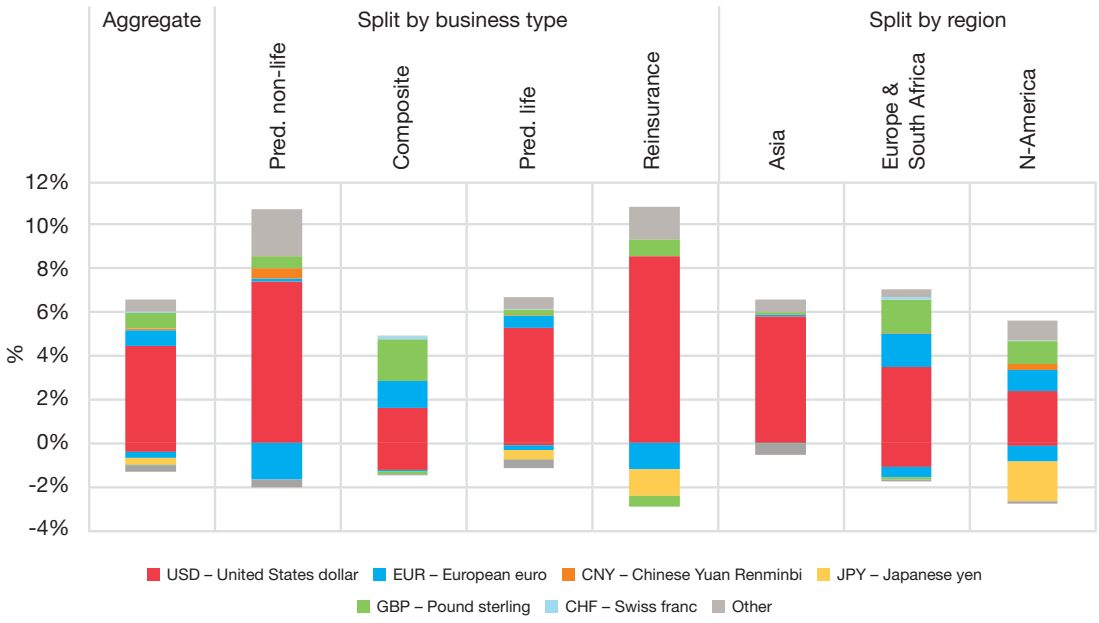
[15] The data collection does not distinguish between GNA of FX derivatives by currency; therefore, it is not possible to compare the GNA of FX derivatives in each single currency.

Box: Insurers' foreign currency exposures and mismatches (continued)

Overall, currency mismatches remain minor for insurers.[16] Those that exist are addressed by insurers using derivatives and through the proper application of ALM. These practices are closely monitored by supervisory authorities and operate within a strong regulatory framework. This includes stress tests and risk-based capital requirements that ensure insurers hold sufficient capital for currency risks and encourage proper matching of assets and liabilities in the same currency. It also includes monitoring of cross-border funding dependencies. Moreover, in most markets, domestic investment restrictions or dissuasive capital charges for currency risk aim to reduce FX risk by limiting exposure to foreign currencies.

FIGURE 22

Foreign currency asset mismatch (in per cent of total assets) and funding gap (in per cent of total liabilities), YE24



Source: IAIS IIM 2025.Note: Split "by region" refers to the region where the insurance groups' headquarters are located. The positive part of each bar shows insurers that hold more assets than liabilities in a specific foreign currency (asset mismatch). The amount is shown relative to total assets. The negative part of each bar shows insurers that hold more liabilities than assets in a specific foreign currency (funding gap in foreign currency). The amount is shown relative to total liabilities. Each calculation is initially carried out at the level of individual insurer groups and subsequently aggregated.

[16] In the life insurance sector and participating business, where currency mismatches are larger, it should be noted that even if the liabilities are labelled in a given currency, the profit-sharing mechanisms induce an implicit currency matching if a share of the underlying assets is invested in foreign currencies.

Underwriting risks

Underwriting risk is perceived to fall within the low-to-medium impact range. This is mostly driven by the expectation that insurers can adapt their business models to changing market conditions, such as periods of heightened inflation. However, trade credit insurance stands out as an exception. In the context of increasing geoeconomic fragmentation, trade credit insurance faces heightened risks, as sudden policy changes, such as the imposition of trade barriers, sanctions or export restrictions, can disrupt global supply chains. These developments can lead to unexpected defaults by counterparties, amplifying the challenges for insurers in this segment. As global economic interdependencies weaken, the ability to accurately assess and price trade credit risk becomes increasingly complex.

Additionally, geopolitical tensions have contributed to a rise in cybercrime, further increasing insurers' exposure to operational risks, as well as liability risks as businesses seek coverage for cyber incidents and data breaches.[17]

Measures by supervisors and insurers

Insurers are employing various strategies to mitigate risks arising from geopolitical and economic challenges. Investment strategies increasingly focus on high-quality securities, with a preference for domestic or regional fixed-income assets, which reduces exposure to high-risk regions and minimises FX risk. However, techniques such as increasing the home bias are not without controversy, as they can heighten concentration risk. ALM practices, such as matching the duration and currency of assets and liabilities, are widely implemented, supported by derivatives and scenario-based stress testing. Supervisors monitor granular asset-level data and conduct stress tests to identify vulnerabilities and ensure resilience.

To adapt to evolving risks, insurers are revising underwriting criteria, adjusting policy terms, and diversifying across markets and product lines to address challenges such as supply chain disruptions. Governance frameworks and risk management practices are under constant review, with some insurers reorganising legal entities or operational hubs to reduce exposure to high-risk jurisdictions. Restrictions on cross-border business and investments have led some insurers to refocus on regional markets. Supervisors are actively working to enhance the alignment of their regulatory frameworks with the IAIS' Insurance Core Principles (ICPs), with the aim of ensuring greater consistency, effectiveness, and harmonisation in their supervisory efforts across jurisdictions. They are also intensifying international collaboration to share best practices and experiences, fostering a more coordinated response to emerging risks.

Underwriting risks are perceived to be low-to-medium, but trade credit insurance faces higher risks from geoeconomic shifts and cybercrime.

[17] World Economic Forum. Global Cybersecurity Outlook 2025.

Overview of measures regarding geoeconomic fragmentation

Key measures by supervisors:

- Analysis of granular asset-level data, conducting stress tests and ensuring insurers adhere to solvency and risk management regulations to detect vulnerabilities early on.
- International supervisory cooperation, including information sharing and further harmonisation of supervisory standards to avoid fragmentation.

Key measures by insurers:

- Revising underwriting criteria, adjusting policy terms, diversifying product offerings and exploring new markets to address challenges like supply chain disruptions and shifts in demand.
- Asset (re)allocation to ensure investments in high quality assets.
- Continuous review of governance frameworks, reorganising legal entities or operational hubs to reduce exposure to high-risk jurisdictions and monitoring socioeconomic conditions for proactive risk adaptation.

3.2 INSURERS' INCREASING INVESTMENTS IN PRIVATE CREDIT

In November 2025, the IAIS published its final Issues Paper on structural shifts in the life insurance sector. The paper emphasises the sector's increasing allocation to "alternative assets," including the growing exposure to private credit.

Private credit has witnessed significant growth in recent years. As of 2023, global private credit assets, including undeployed capital, reached approximately $2.1 trillion, primarily driven by growth in North America and Europe.[18] IMF analysis indicates that in North America, private credit accounts for 7% of credit to non-financial corporations, comparable to leveraged loans and high-yield corporate bonds. Between 2018 and 2023, annual growth rates averaged 20% in North America and 17% in Europe, with Asia also experiencing rapid growth in high-yield and distressed segments.

While private credit is emerging as a key component of insurer's investment strategies,[19] its true measure is difficult to quantify due to the lack of a clear definition. Some market participants consider private credit to be direct lending, where lenders provide loans directly to companies, primarily middle markets without bank intermediaries. On the other hand, increasing investment allocation to private credit, particularly by insurers, has largely been attributed to more complex non-bank investment-grade private placements to larger borrowers and privately structured asset-based finance securitisations. Some metrics may also include mortgage lending, both commercial and residential, in quantifications.

Although data challenges remain, preliminary analyses highlight that private credit exposures remain relatively low on aggregate, despite its growing prominence. IAIS data indicates that insurers' exposures to private credit differs across regions. However, this data varies based on different definitions of private credit.

[18] IMF GFSR 2024.
[19] IMF GFSR 2024.

With the objective of gathering more complete data, the IAIS is refining both the definition it uses to measure private credit and its data requests from supervisors. Supervisors were asked to provide their qualitative assessment of private credit and a quantification estimate. For most jurisdictions, the estimates were below 5% of insurance sector total assets. Jurisdictions indicated in their SWM feedback that the allocations they reported are likely to increase in the coming years.

There have been several external efforts to quantify insurers' exposures to private credit, which can vary widely depending on the definition. For example, the inclusion of mortgage loans, a key insurer allocation, can increase the measurement significantly.[20]

3.2.1 Key characteristics and exposures of private credit

As noted above, private credit is difficult to define, but can largely be thought of as non-bank, non-public lending. It encompasses a variety of instruments such as direct loans, securitised products and infrastructure debt (Table 1). Its bespoke nature, illiquidity and potential transparency issues distinguish it from traditional public credit markets, particularly when lending occurs through non-bank financial institutions without disclosure or reporting requirements.

Even among financial institutions with disclosure requirements, such as insurers, the level of disclosure can vary significantly across jurisdictions and often lacks the detail stakeholders need to fully understand or compare aggregate exposures. Furthermore, the inherently opaque nature of individual investments, particularly in private assets, makes it difficult for insurers and supervisors to assess the terms and characteristics of specific holdings. This is especially true for complex structures involving multiple layers of investment, such as securitisations. Such information is often neither standardised nor easily accessible for broader market analysis. The lack of consistent definitions across IAIS member jurisdictions further complicates efforts to monitor and assess private credit exposures globally. In some cases, private credit is intertwined with other forms of lending, such as public or bank lending, making it more difficult to distinguish between private credit and traditional bank-originated loans. For instance, corporate loans may include both bank-originated private placements and non-bank middle-market direct lending. The IAIS, in its Issues Paper on structural shifts in the life insurance sector, proposes a principles-based definition of alternative assets – namely, those assets characterised by high levels of valuation uncertainty, illiquidity, complexity or a combination of these factors. The paper also highlights the importance of considering local regulatory frameworks and market conditions when applying this definition. To support the measurement of private credit exposures, the table below provides examples of potential private credit categories.

Private credit offers life insurers diversification, illiquidity risk premiums and improved asset-liability matching, but also has potential risks that requires robust governance and risk management.

[20] IMF GFSR 2025.

TABLE 1: EXAMPLES OF POTENTIAL PRIVATE CREDIT CATEGORIES

Direct lending	Infrastructure debt	Real estate and mortgage-related investments	Securitised or structured products	Other debt instruments	Private credit funds and vehicles
• Corporate loans • Commercial loans • Mortgage loans • Policyholder loans	• Infrastructure loans	• Commercial real estate loans • Equity release mortgages • Real estate lending	• Asset-backed securities (ABS) • Collateralised loan obbligations (CLOs) • Securitisations of credit portfolios • Structured notes	• Mezzanine financing • Distressed debt • Synthetic risk transfer (SRT)	

Source: IAIS 2025

Private credit, as a distinct subset of alternative assets, offers insurers several potential benefits. These include portfolio diversification, the ability to mitigate risk through protections such as covenants and security, access to illiquidity premiums, and the provision of stable, long-term cash flows, making it particularly appealing to life insurers aiming to match long-duration liabilities. However, these benefits are accompanied by notable challenges, including credit risk, liquidity constraints, valuation uncertainty, and the presence of hidden leverage, all of which necessitate strong risk management practices and effective supervisory oversight.

3.2.2 Key benefits associated with private credit investments for insurers

Improved asset-liability matching has been highlighted as a key benefit to insurers for private credit, with the ability to structure cash flows to be more closely aligned with liability outflows. Life insurers, in particular, note that private credit offers additional returns in the form of illiquidity risk premium, while still matching well with certain illiquid life insurance liabilities.

Diversification benefits from a private credit allocation could drive better portfolio results. Insurers are able to access a wider range of issuers as well as a variety of market sectors through asset-backed financing arrangements.

The nature of certain private credit products (eg lending to infrastructure projects) benefits the real economy by providing long-term capital that aligns with life insurance liabilities.

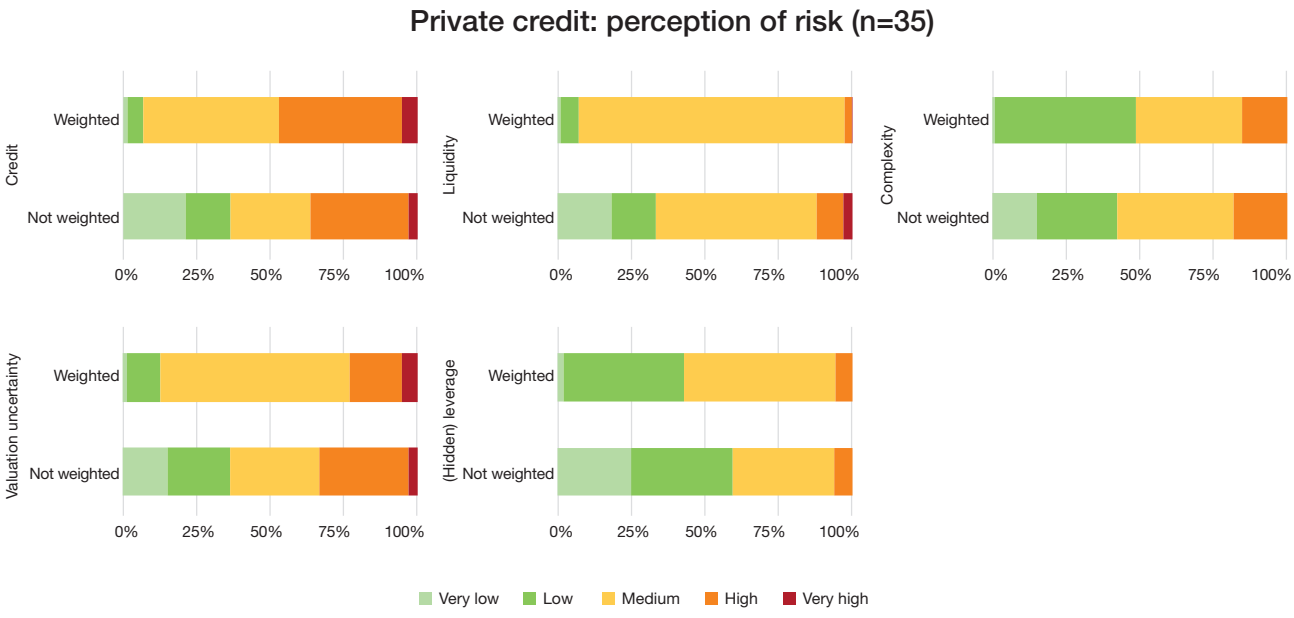
Given the potential for increased illiquidity risk premiums, insurers could benefit from higher yields in their private credit allocations, often while also being able to negotiate lender-friendly covenants and other protective features. A private credit allocation can be advantageous in a rising rate environment, as many are structured as floating rate assets. In some cases, investors can also benefit from call protection (additional fees on early repayment) and equity kickers (optional equity stakes or warrants that allow lenders to participate in equity upside). Payment-in-kind (PIK) features, which enable the borrowers to capitalise interest in lieu of a cash payment, can help them withstand temporary cash flow pressures without triggering a payment default.

3.2.3 Key risks associated with private credit investments

Credit risk has been highlighted as the most significant concern for private credit investments, particularly in regions with higher exposure levels. Elevated interest rates, geopolitical instability and economic slowdowns exacerbate default risks, especially among smaller or highly leveraged borrowers. The use of PIK features, while offering temporary relief during periods of financial stress, can also obscure deteriorating credit quality and increase the likelihood of covenant breaches or outright defaults. In some cases, lenders may agree to restructure loan terms, such as introducing PIK features to accommodate missed interest payments, which can further complicate risk assessment. Credit ratings from agencies, though sometimes private, are often used for supervisory purposes, including in internal risk models. Greater public disclosure of private ratings and related information, such as the identity of the rating provider, could improve transparency and facilitate more informed decision-making regarding credit risk exposure. In response to these challenges, supervisory authorities in affected regions are prioritising enhanced supervisory reporting and public disclosure, stress testing and stricter capital requirements. At the same time, insurers are bolstering credit risk models, diversifying their portfolios and conducting thorough due diligence.

Given the potential lack of active secondary tradeable markets in some regions, private credit is typically seen as illiquid in nature. *Liquidity risk* significance for private credit has been assessed as low to medium by supervisory authorities that responded to the SWM. This assessment of *liquidity risk* has been interpreted in the context of liquidity positioning and its potential impact on the overall investment portfolio. Monitoring private credit liquidity risk should be viewed in the context of the overall liquidity risk monitoring framework. Insurers are enhancing such liquidity monitoring frameworks, conducting scenario analyses and aligning investments with their overall risk appetite. Supervisors are focusing on stress testing exposure monitoring and improving liquidity reporting standards.

FIGURE 23



Source: IAIS IIM 2025

The bespoke nature of some private credit structures, combined with varying regulatory frameworks across jurisdictions and limited transparency, can give rise to complexity risk. For instance, while private credit exposures are commonly held in fund structures in some regions, insurers in others may utilise fund financing through feeder structures, where they hold notes issued by private credit funds, to achieve similar outcomes. Investment structures with multiple layers can further increase complexity and opacity. To address these challenges, supervisors are conducting targeted reviews and introducing enhanced disclosure requirements. In response, insurers are proactively managing *complexity risk* by establishing specialised teams, performing rigorous due diligence and drawing on external expertise.

Valuation uncertainty may arise from increased liquidity risks and the opaque nature of private credit, where information is not assimilated outside the investor base and market prices are often not observable. During periods of market stress, reliance on model-based valuations can lead to delayed recognition of losses. Insurers are adopting robust valuation methodologies, conducting independent appraisals and integrating valuation risks into broader risk management strategies. Supervisors are requiring detailed disclosures and regular reviews of valuation models.

Hidden leverage is viewed by supervisors as a moderate concern, particularly in complex fund structures and securitisations. While leverage can amplify risks during downturns, conservative investment frameworks and due diligence help mitigate this exposure. Supervisors are emphasising transparency, requiring detailed reporting and promoting look-through approaches to identify embedded leverage.

3.2.4 Financial stability implications and systemic risk impact

Private credit investments currently account for a relatively small share of insurers' overall portfolios, limiting their potential impact on financial stability. However, it is important to consider not only direct exposures to private credit but also any off-balance sheet exposures arising from asset-intensive reinsurance agreements, in instances where these have not already been aggregated. While the principles of complexity, illiquidity and valuation uncertainty are inherent to several types of private credit, these risks have also been identified in other parts of insurers' asset portfolios, as highlighted in the Issues Paper on Structural Shifts in the Life Insurance Sector. This paper also notes the potential risk of asset recapture by a cedent in asset-intensive reinsurance arrangements.

Nevertheless, the ongoing growth of private credit could pose risks to financial stability, particularly if insurers' allocations to this asset class become a significant portion of their portfolios. During periods of market stress, concentrated exposures, hidden leverage and procyclical behaviour could amplify vulnerabilities, increasing the likelihood of contagion risks across the financial system due to the interconnectedness of financial sectors. Concerns around private credit often centre on the lack of transparency and the challenges of identifying potential systemic risks, especially as many market participants are not subject to disclosure or reporting requirements beyond their direct investor base. While insurers and their asset managers participate in private credit lending, existing investment disclosure requirements help mitigate the insurance sector's contribution to these broader concerns, although inconsistencies in disclosure remain. Furthermore, the bespoke nature of private credit instruments, combined with limited visibility into their characteristics and valuation uncertainties, adds to the challenges insurers and supervisors face in assessing these risks.

To address these issues, supervisors are strengthening both micro- and macro-level monitoring, implementing stress tests, including those that account for the risk of asset recapture, and developing enhanced reporting frameworks to better track interconnected exposures. Collaboration with international regulators and market participants is critical to tackling emerging risks and preventing regulatory arbitrage. By supporting sound governance, improving data transparency, and encouraging prudent risk management, the insurance sector can continue to harness the diversification and yield benefits of private credit while mitigating risks to financial stability. Measures being undertaken by supervisors to address these challenges are outlined in the box below.

Supervisors and insurers are strengthening oversight and risk management to address private credit risks and ensure financial stability.

Overview of measures regarding insurers' private credit investments

Key measures by supervisors:

- Conducting monitoring and reviews of private credit exposures at sectoral and individual levels
- Requiring enhanced reporting on valuation, leverage and concentration risks
- Implementing stress tests and scenario analyses to assess resilience, along with on-site inspections
- Enforcing capital requirements, governance frameworks and pre-approval for complex investments
- Setting concentration limits to avoid overexposure to specific sectors or asset classes
- Strengthening supervisory expertise and risk assessment tools, including potentially the use of external expertise
- Promoting international collaboration to address cross-border risks.

Key measures by insurers:

- Strengthening risk management frameworks and governance structures
- Conducting thorough due diligence on fund structures, covenants and risk profiles
- Adopting robust valuation practices with independent appraisals
- Performing stress tests and scenario analyses to assess portfolio resilience
- Diversifying portfolios to manage exposure and reduce concentration risks
- Building specialised teams and providing staff training for private credit management (or managing access to external expertise)
- Enhancing liquidity monitoring and conducting scenario testing for stressed conditions.

3.3 INSURERS' ADOPTION AND GOVERNANCE OF AI

The adoption of AI systems is accelerating globally and is expected to have an economy-wide impact. This section of the GIMAR explores how the trends in adoption and the ongoing evolution of AI may impact the insurance sector. For insurers, these developments offer commercial benefits across the insurance value chain, such as enhancing policyholder retention through personalised engagement, reducing costs via greater efficiency in policy administration and claims management, and leveraging AI capabilities to improve risk selection and pricing.[21] For consumers it could lead to faster underwriting decisions and more timely claims handling, thereby improving customer outcomes. However, with the adoption of AI comes risks that need to be effectively managed. These risks can be broadly divided into two categories:

- **Risks from insurers' own adoption of AI** include conduct risks, microprudential or even potential macroprudential risks – that may be created or increased – as insurers adopt AI across their business.
- **Balance sheet risks** arising from the broader economy's adoption of AI include:
  - **Underwriting**: insurers have started to provide insurance cover for AI liability risks. For instance, a professional liability policy could cover litigation costs arising from a corporate organisation's inappropriate use of AI. Given the growing use of AI in a wide range of activities, insurers may also be exposed to liabilities arising from non-affirmative cover.
  - **Investment**: given the economy-wide impacts of AI deployment, there may be an impact on insurers' investment returns.

The 2025 GME has considered both these dimensions through data provided in the SWM and the feedback loop and through several stakeholder engagements. Overall, initial SWM data suggested that supervisors do not have detailed information on AI use cases. In feedback loop responses, members stated that the predominant reason for not responding was a lack of data.

3.3.1 Insurers' adoption of AI

Risks of AI adoption

Supervisors reported that they are monitoring the following key risks as insurers adopt AI:

- **Algorithmic bias and unlawful discrimination**: AI models risk perpetuating biases in training data, leading to unfair outcomes in underwriting, pricing or claims handling. This has potential legal, regulatory and reputational consequences.
- **Cyber security and data privacy risks**: Increased reliance on AI may heighten exposure to cyber attacks, data breaches and misuse of sensitive information, necessitating robust data governance and security measures.
- **Model risk and lack of explainability**: Complex AI models can lack transparency, making it difficult to interpret AI-driven decisions, validate outputs and ensure compliance. This can erode consumer trust.
- **Third-party dependencies**: Reliance on external AI service providers may introduce risks related to limited transparency, concentration, data quality and operational control, which may need to be monitored.
- **Operational and governance risks**: Poor implementation, inadequate governance and over-reliance on AI without sufficient human oversight can lead to systemic errors, inefficiencies and reputational harm.

[21] Box 1 of the IAIS Application Paper on the supervision of AI outlines the significant benefits for insurers of AI adoption.

As part of the GME, supervisors were asked whether any risks from AI have already crystalised. Several members noted that they have observed some adverse societal outcomes, bias from AI use and third-party risk to a medium or limited extent. Similarly, they noted concerns about model risk explainability and intellectual property infringement. The biggest concern for supervisors relates to cyber security risks posed by increased use of AI.

Members generally expect a modest rise in risks over the next two years, with model risk and explainability expected to see the largest increase. Additional risk growth is also anticipated in areas such as cyber security and third-party risk.

Supervisors use various sources to understand the AI use cases insurers are adopting. These include surveys, supervisory knowledge, market intelligence and regular monitoring. However, several supervisors were unable to provide information on AI use cases. This may indicate: (i) limited supervisory capacity; (ii) early-stage digital transformation in a jurisdiction; and/or (iii) a lack of structured data collection for analysis of AI use cases.

GenAI adoption: risks and trends

While insurers have used forms of AI, such as supervised machine learning for a number of years, the adoption of GenAI[22] and eventually agentic AI is expected to increase risks due to the wider range of use cases it enables, as insurers seek to capitalise on its benefits. These risks could include increased complexity, hallucination risks (ie accuracy) and bias outcomes.[23] Insurers report that they face fierce competitive pressure to find AI use cases that have the potential to improve consumer outcomes, reduce costs and improve efficiency. However, in deploying new GenAI use cases, insurers need to mitigate risks by adapting their governance and risk management to its specific features to ensure their effectiveness.

Supervisors were asked to identify the GenAI adoption trends they observe across insurers' businesses. GenAI was the focus of inquiry given it is an emerging area and comes with the greatest risks. Members were asked to indicate whether they are seeing "limited" (ie perhaps in one insurer in their jurisdiction) or "widespread" (ie widespread adoption across their market) adoption. Members indicated that the adoption of GenAI is growing, but is "limited" (ie to a limited number of insurers) across a range of activities in most jurisdictions. However, supervisors expect a clear trend towards broader adoption across the insurance sector.

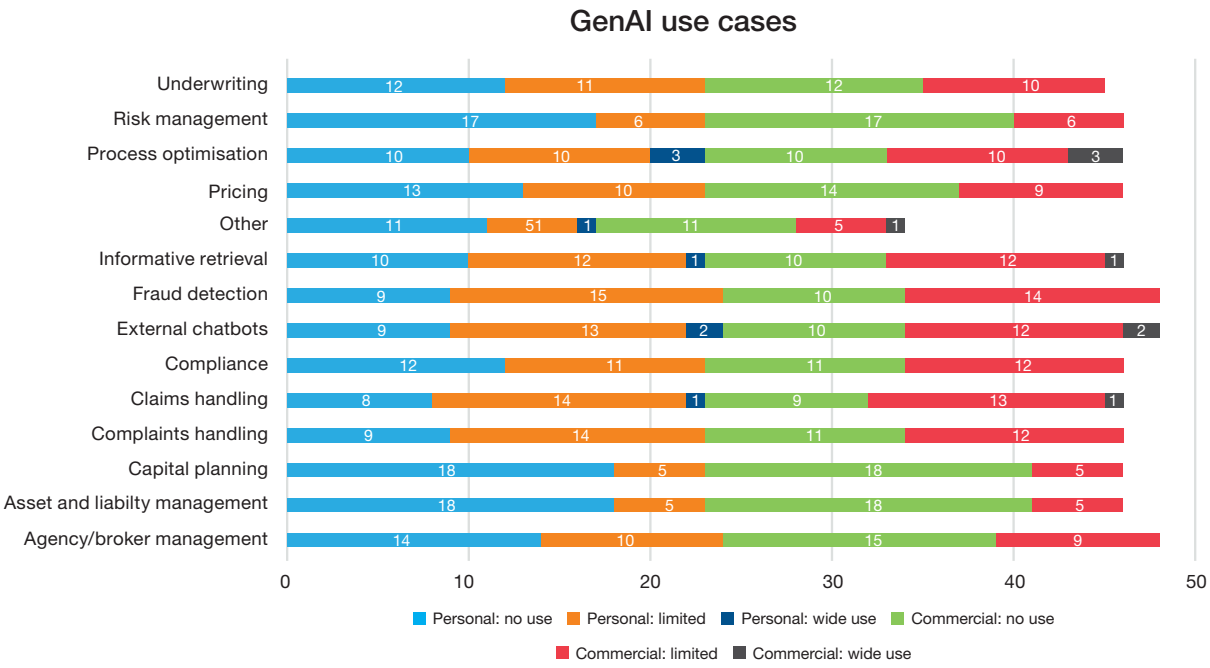
The leading use cases for GenAI adoption were for claims handling, external chatbots, fraud detection, process optimisation, complaints handling and information retrieval. Supervisors expect an expanded use of GenAI for these activities. Supervisors identified that analytical benefits and cost reduction were driving adoption of GenAI, with some indicating that consumer outcomes and competitive pressure were also drivers.

Supervisors are focusing on key risks of AI adoption, including algorithmic bias, cybersecurity data privacy, and model risk.

[22] A Generative AI (GenAI) system is an example of an AI system that combines the learning from two or more neural networks to understand and generate human-like text, graphics, sounds and videos, making these systems highly versatile for various tasks. An Agentic AI system is a GenAI system that is highly or fully autonomous.

[23] More information for supervision on how to manage AI risks is set out in the IAIS Application Paper on the supervision of artificial intelligence.

FIGURE 24



Source: IAIS SWM 2025
Note: Figure 24 reflects supervisory responses on how widespread AI uses cases are across personal and commercial lines.

GenAI is being used to a lesser extent in compliance, pricing and aspects of underwriting. While not as prevalent as the leading use cases, they are gaining traction across multiple business lines.

Supervisors indicated that they have observed a limited use of GenAI in ALM, capital planning and risk management (Figure 24). Adoption of self-learning autonomous AI in consumer-facing operations also remains low. Overall, the insurance sector seems to have adopted a cautious, controlled scaling approach to implementing autonomous AI systems in critical consumer touchpoints like pricing, underwriting and claims handling.

Potential third-party risk

Supervisors indicated that they are concerned about potential third-party risk arising from AI model providers. Concerns relate to the risks of vendor lock-in, concentration risk, operational dependency and limited competition. They also noted that outsourcing critical AI functions to third-party providers makes it difficult to ensure transparency, auditability and compliance with regulatory requirements, as providers do not commonly provide a comprehensive overview of the training and modelling techniques due to intellectual property constraints. Black-box models and limited oversight hinder accountability and effective risk management.[24] Similarly, supervisors noted concerns about the third-party risks associated with the use of cloud providers that support AI models. To mitigate

[24] To address this situation, some jurisdictions are passing legislation to ensure that providers of these tools comply with a number of requirements to ensure their responsible use. For example, in the European Union, the recently adopted AI Act requires providers of General-Purpose AI (GPAI) models to establish technical documentation, including training data summaries, implement a Union copyright law policy, and provide information to downstream users such as insurance undertakings.

such third-party risk, undertakings are implementing complementary governance measures, for instance, by including appropriate clauses in contracts and service level agreements, conducting external audits or performing due diligence testing and monitoring.

3.3.2 Governance and risk management responses

Supervisors report that insurers are increasingly integrating AI into their risk governance structures, although the level of maturity varies across different areas. Existing governance frameworks related to data privacy, cyber security and information technology risk also apply to AI use cases. Integrating it into existing regimes is proportionate and consistent with the approach set out in the IAIS' Application Paper on the supervision of artificial intelligence.

Supervisory actions

Supervisors' actions to respond to the growing use of AI in the insurance sector fall into three main categories:

- **Surveys and data collection**: Supervisory authorities have conducted, or are planning to conduct, structured surveys and questionnaires to understand AI adoption, including GenAI. These efforts look to identify use cases, challenges and emerging risks.
- **Supervisory frameworks**: Authorities are preparing guidance and governance frameworks to address AI-related risks, such as bias, transparency and data security, while aligning them with upcoming regulations. Efforts include industry consultations, thematic reviews and collaboration with other regulators.
- **Monitoring and dialogue**: Supervisors are engaging in bilateral meetings, industry roundtables, sandbox testing and supervisory reviews to assess AI deployment and governance. These activities aim to ensure responsible AI adoption, monitor emerging risks and refine supervisory approaches as technologies and practices evolve.

The IAIS supports its members in developing supervisory practices in several ways:

- In July 2025, the IAIS published an Application Paper on the supervision of AI. The paper reinforces the importance of the IAIS ICPs, outlining how existing expectations around governance and conduct remain essential considerations for supervisors and insurers related to the use of AI systems in insurance.
- Building on the paper, the IAIS is developing supervisory question banks[25] as a member-only resource to support supervisory engagement with insurers on AI use.

Supervisors are enhancing governance and risk management for AI adoption in insurance, focusing on data privacy, cybersecurity, and transparency.

[25] A question bank is sets of questions used by supervisors for engagement with insurers on specific topics. They provide supervisory teams with a consistent way of engaging with insurers and help supervisors to understand the level of knowledge across the sector on a particular issue.

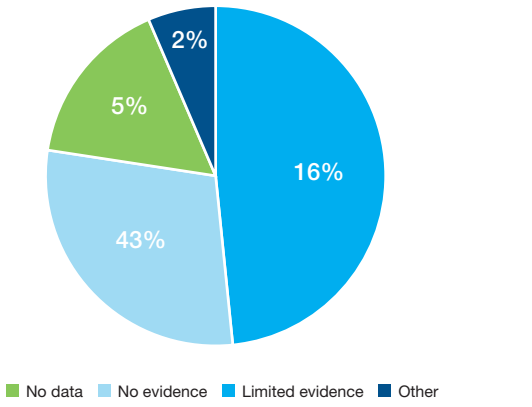
3.3.3 Balance sheet risk

In recent years the IAIS has focused on insurers' adoption of AI; however, with the 2025 GME, the IAIS has started to explore how insurers are addressing balance sheet risks associated with AI. Figure 25 explores the extent to which insurers monitor and report on AI-related underwriting risks.

Underwriting risks

FIGURE 25

Monitoring and reporting AI-related liability underwriting



Source: IAIS SWM 2025

While forms of machine learning have been used by corporations for many years, increased economy-wide adoption of AI and in particular GenAI across a range of business activities, will lead to a significant change in exposure for policyholders. It is not only AI vendors that will be impacted by these risks but also companies using AI software. Risks include increased litigation for bias or unlawful discrimination, intellectual property infringement, data breaches and increased complexity in attributing risks (for instance whether a driver or manufacturer is liable for an accident in an autonomous vehicle).

It is important for insurers and supervisors to understand how these risks may evolve. Stakeholder engagement as part of the GME process highlighted several considerations in relation to potential balance sheet risks:

- **Scope**: exposure is likely to change across all business lines but at this stage it is too early to understand the likely impact.
- **Modelling**: GenAI exposures for insurers could be more difficult to model – firstly, because there is no historical data and secondly, because results from GenAI models change as new information is fed into the models. AI risks could evolve even during the term of an insurance contract. It will be important for insurers to understand the mechanisms that policyholders have adopted to mitigate risks.
- **Single points of failure**: insurers will need to consider the extent to which concentrations in the market for AI models may also present underwriting risks. There is the potential for numerous claims related to decisions taken by a few widely deployed models across a wide range of corporate actors from different sectors of the economy.
- **Legal uncertainty**: while existing legislation continues to apply to insurers' use of AI, at this stage there is considerable legal uncertainty about how risks will evolve, how courts will interpret legislation, definitions related to AI, and how legislative frameworks will evolve. There is a small but growing body of case law in this area which includes significant settlement costs.

It is likely that insurers will be able to leverage insights from their own adoption of AI to understand the risks their policyholders face and the mitigants that can be applied.

The market for AI liability risks is evolving. Some underwriters are offering standalone cover, others are offering wrappers with AI cover on top of existing cover and some insurers are considering updating existing insurance products to take account of AI risks. Updates might include new exclusions, new limits or changes to policy wording, similar to what was introduced in recent years to address "silent" coverage of cyber risks. Responses to the GME suggest that insurers are beginning to consider these risks despite the quickly evolving landscape and risks to which policyholders are exposed.

The GME data shows that according to supervisors, insurers in a relatively small number of jurisdictions (15) are monitoring and reporting AI-related underwriting risks. Given these risks, it is important for insurers to continue engaging with policyholders to gain a good understanding of AI use cases and how this impacts their exposure. It is equally important for supervisors to understand how insurers are managing their AI liability underwriting risk, both from a prudential and conduct perspective. They also want to determine the extent to which risks from non-affirmative cover are being managed. While there may be some parallels to the development of the cyber market and the way risks were managed, not all the issues will be analogous, given the breadth of expected AI use cases.

Investment risk

It is expected that over time AI will have a material impact across a range of different economic sectors. As a result, it is likely to have an impact on the investment returns in insurers' assets, creating both opportunities and challenges. The GME data suggests that only a few insurers or supervisors are currently considering the extent to which these risks may change. The IAIS will continue to explore these risks and engage with stakeholders to understand how the sector may be impacted in the medium to long term.

As a member of the Financial Stability Board (FSB), the IAIS will continue to support the FSB's efforts to monitor any financial stability risks that could emerge with the use of AI.[26]

The market for AI liability risks is evolving, marked by the introduction of new products, policy updates, and a heightened focus on underwriting considerations.

[26] The FSB has recently published an update to its report to assess any financial stability risks associated with the use of AI.

3.4 OTHER AREAS OF FOCUS OF THE IAIS

Adapting to increasing digital innovation and cyber risks is one of the IAIS' other areas of focus. The IAIS is actively monitoring and assessing new and emerging trends in digital innovation and cyber risks and their impact on insurance markets.

3.4.1 Cyber risks in the global insurance market

Similar to AI, cyber risks also manifest across two dimensions for insurers:

- **Underwriting risk**, which includes:
  - Affirmative cyber coverage which may be through standalone policies or included in existing non-life policies with endorsements or other measures by insurers to limit liability; and
  - Non-affirmative coverage ("silent cyber")[27]: where policies may inadvertently cover cyber risks. Insurers generally manage non-affirmative exposure primarily through policy exclusions, affirmative endorsements for specific cyber risks and comprehensive risk identification processes.
- **Own risk**: where an insurers' operations are exposed to risks from cyber-attacks, similar to any other actor in the financial system and real economy. Here the IAIS' focus is on the operational resilience of insurers.

Cyber risks continue to be of high interest to supervisors, with cyber own risk ranked as the third most prioritised issue by supervisors (out of 50 surveyed risks) in the qualitative component of the SWM data collection.

There are several different inputs to the GME for the two dimensions:

- **Underwriting:** SWM quantitative data on cyber underwriting (eg GWP, claims and loss ratios) and SWM qualitative data (on trends, coverage and supervisory prioritisation of emerging risks). IIM data on affirmative cyber coverage and technical provisions for non-affirmative cover that can be attributed to embedded cyber risk exposure within non-cyber specific policies.
- **Own risk**: SWM qualitative data on supervisory prioritisation of emerging risks.

The 2025 GME examined developments across both dimensions, providing updated insights into market developments since the publication of the 2023 GIMAR special topic report on cyber, which was based on data collected as of year-end 2021. That report found that global cyber insurance premiums have continued to increase despite tighter terms and conditions and stricter risk selection. Supervisors are actively developing and implementing macroprudential supervision frameworks for cyber risks. These included incorporating cyber scenarios in stress tests, collecting data on common vulnerabilities and supporting international initiatives to enhance the resilience of the financial sector. Supervisors do not currently consider cyber underwriting activities of insurers as posing a threat to financial stability, due to the limited volumes of affirmative cyber insurance underwriting. However, significant data gaps remain in gauging the systemic risk posed by non-affirmative coverage.

[27] Non-affirmative cyber coverage, is also known as "silent cyber". It refers to situations where a cyber incident can trigger coverage in traditional insurance policies (like property or liability) even though those policies were not intentionally written or priced to cover cyber risks.

3.4.1.1 Cyber underwriting

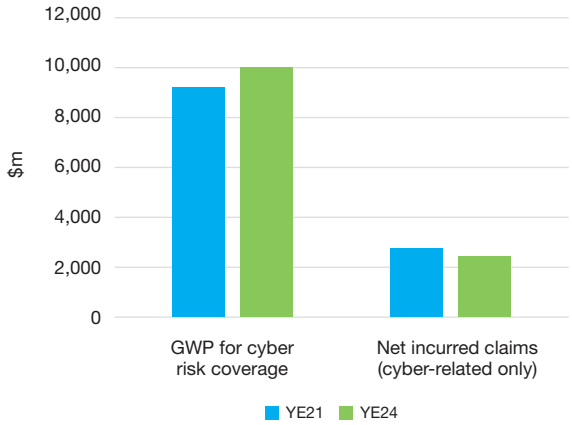
Market scale and regional shares

Estimates of the cyber insurance market vary. Some market participants and supervisors indicate that the market is softening. Munich Re[28] estimates that the market[29] reached $15.3 billion in 2024 and is projected to grow to $16.3 billion in 2025. Meanwhile, Swiss Re estimated the market at $14.7 billion in 2024, with projected growth to $15.6 billion in 2025.[30] Despite this growth, a significant protection gap remains, with Munich Re estimating that the economic loss for cyber risk ranges widely from $1 – 9.5 trillion annually. Therefore, only a small proportion of the potential economic loss resulting from cyber events is covered. It is more difficult to estimate the coverage available to policyholders that is included in policies that do not provide standalone coverage.

GME aggregate data[31] at the individual insurer group level indicates that more than 90% of the reported premiums for affirmative cyber underwriting included in the IIM data are written or assumed by groups with headquarters located either in Europe or North America. Figure 26 shows the evolution of GWP and net incurred claims for cyber risk coverage for a sample of 23 insurers that submitted data at year-end 2021 and year-end 2024. Growth in coverage appears muted, which is also reflected in data that covers the whole of the market.

FIGURE 26

Gross written premiums and net incurred claims for cyber risk coverage



Source: IAIS IIM 2025

Cyber insurance market monitoring

The GME sought to assess the extent to which insurers are able to identify state-sponsored cyber attacks, which are increasing and are normally excluded from coverage, although attribution of these actions are often difficult. The results show global variation, with equal numbers of jurisdictions reporting full, partial or no capability to identify such threats. Attribution of state-sponsored cyber attacks is an obstacle for insurers in some jurisdictions to enter into the cyber market. The cyber market is concentrated in a limited number of markets given information asymmetries between AEs with comprehensive capabilities and EMDEs with limited resources.

[28] https://www.munichre.com/en/insights/cyber/cyber-insurance-risks-and-trends-2025.html#379179748

[29] This estimate includes standalone cyber cover and affirmative cover in other policies.

[30] Swiss Re, Shifting cyber insurance growth into the next gear. 2025. https://www.swissre.com/risk-knowledge/advancing-societal-benefits-digitalisation/cyber-insurance-growth-shift.html

[31] The GME IIM Insurer Pool includes a number of predominantly life insurers, which are unlikely to underwrite cyber coverage, and a mix of composite and predominantly non-life insurers, which would underwrite this business. Overall, the IIM Pool covers approximately 60% of the size of the cyber insurance market estimated by Munich Re.

Market evolution and risk management

As the cyber insurance market continues to grow, insurers are also adopting different approaches to limit the risk they bear:

- Many insurers provide comprehensive risk management tools to help their policyholders become more cyber resilient. This may reflect a recognition that the practice of sharing threat intelligence to assist with timely remediation of vulnerabilities can lessen the prevalence of cyber security incidents and therefore claims.

- Insurers have started to transfer some risks to the capital markets with cyber insurance-linked securities (ILS).[32] For instance, in 2023 Bermuda-based ILS vehicles issued $670 million of aggregate insurance protection.[33] However, the global market remains a small proportion of cyber limits and a very small part of the total Cat bond market.[34]

- There is increasing standardisation around Lloyd's exclusion wording for state or state-backed operations.[35] However, questions remain about exclusion effectiveness, with some jurisdictions noting clauses have not been tested in court.

Despite these developments, cyber underwriting risks remain a challenge for insurers. Limited historical data for actuarial modelling, rapidly evolving threat landscapes and difficulties in pricing systemic cyber risks continue to create substantial underwriting challenges.

Addressing non-affirmative cyber risks

It is important that insurers understand the risks they are exposed to and reduce non-affirmative coverage. Insurers that participated in the IIM are addressing non-affirmative coverage in various ways, notably by excluding some cyber risks from all-risk property and casualty policies, affirmatively covering other cyber risks by endorsement (often for an additional premium) and/or offering standalone cyber insurance policies. However, newly introduced exclusionary language may not have been tested in courts.

Financial stability considerations

If the affirmative cyber insurance market remains relatively small and insurers continue to take appropriate steps to reduce non-affirmative coverage, then risks to financial stability will remain limited. The IAIS GIMAR special topic edition concluded in 2023 that from an insurance risk perspective, the cyber underwriting activities of insurers in the sample were not assessed as posing a threat to financial stability. Going forward, it will be important to maintain effective risk management. Other public policy questions remain about the cyber risk protection gap, any non-insurance financial stability implications, and how losses from large cyber attacks can be covered.

It is important that insurers understand their risks and minimise non-affirmative coverage.

[32] This provides an alternative form of risk transfer, or reinsurance capacity, to primary insurers, to cover their own risk and enables cyber insurance coverage for large-scale and systemic cyber events.

[33] Bermuda Monetary Authority, Bermuda Cyber Underwriting Report 2023 (2024)

[34] The Geneva Association estimated that cyber Cat bonds represent less than 1% of the total cat bond market.

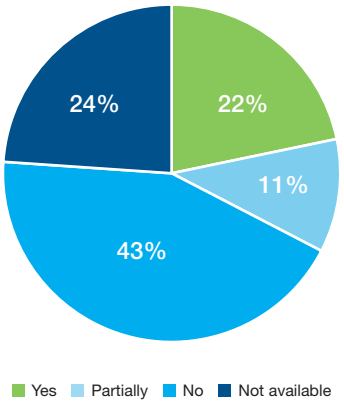
[35] Lloyds addressed these issues in a market bulletin (Y5433) published in May 2024 on state backed cyber attack wordings.

3.4.1.2 Cyber own risk: insurers' exposures to cyber attacks

Like any other market participant in the financial system and real economy, insurers are a target for cyber attacks. Insurers, like other sectors of the financial system, hold significant amounts of personal data, making them an attractive target for potential attackers to secure significant financial gains. Additionally, insurers face increasingly sophisticated cyber attacks.

FIGURE 27

Supervisory monitoring of trends in pricing and coverage of cyber underwriting risk



Source: IAIS SWM 2025

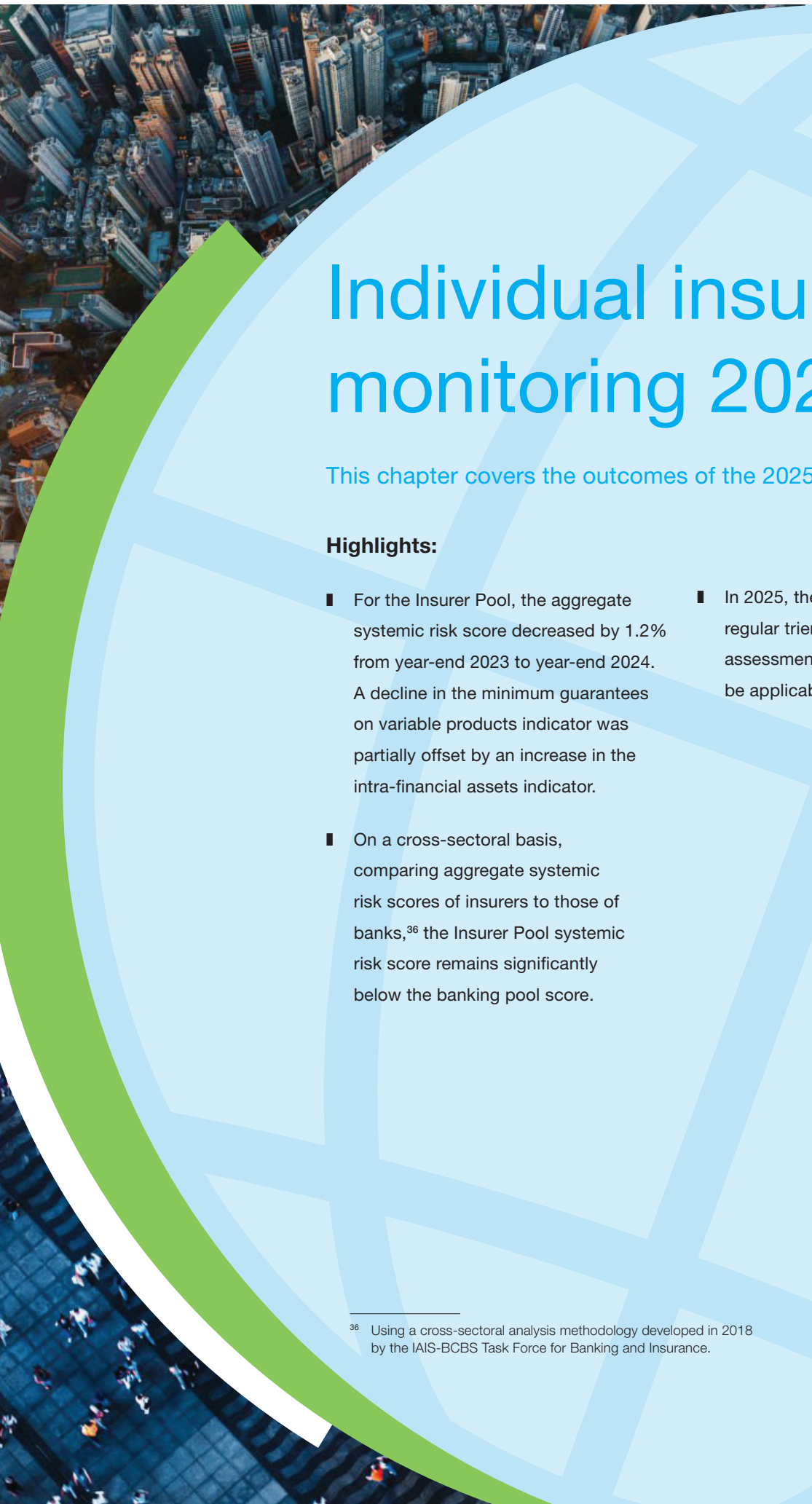
Insurers need to consider several risks, including malware attacks and AI-enhanced threats that could compromise cyber defences and be exacerbated over time by developments in quantum computing. Insurers' increased use of AI third-party vendors and cloud services add to the complexity of relationships.

3.4.1.3 Supervisory responses

The IAIS Operational Resilience Working Group monitors cyber security developments. In September 2025, IAIS completed a public consultation on a draft Application Paper. That paper sets out objectives for insurers to effectively manage cyber incidents and includes a toolkit of practices that could be used to achieve the objectives.

Supervisors have a limited amount of data on the development of the cyber market. This is likely due to the market being relatively small currently. Supervisors are taking a proportionate approach to data collection. The GME reveals that 20 jurisdictions (43% of participants) do not monitor cyber insurance pricing and coverage trends, which would allow them to also monitor protection gaps. Only 10 jurisdictions (22% of participants) fully monitor trends in cyber insurance markets, while five jurisdictions (11%) have partial monitoring capabilities. Eleven jurisdictions (24%) did not provide a response.

Given the international nature of cyber security risk, the IAIS will continue to monitor developments and support continued international cooperation. The IAIS will continue to provide a platform for supervisors to share emerging practices to reduce cyber risks for insurers.



Individual insurer monitoring 2025

This chapter covers the outcomes of the 2025 IIM.

Highlights:

- For the Insurer Pool, the aggregate systemic risk score decreased by 1.2% from year-end 2023 to year-end 2024. A decline in the minimum guarantees on variable products indicator was partially offset by an increase in the intra-financial assets indicator.
- On a cross-sectoral basis, comparing aggregate systemic risk scores of insurers to those of banks,[36] the Insurer Pool systemic risk score remains significantly below the banking pool score.
- In 2025, the IAIS conducted the regular triennial review of the IIM assessment methodology, which will be applicable to the 2026–2028 GME.

[36] Using a cross-sectoral analysis methodology developed in 2018 by the IAIS-BCBS Task Force for Banking and Insurance.

In addition to the monitoring of potential systemic risks arising from sector-wide trends related to specific activities and exposures, the GME includes an assessment of the possible concentration of systemic risks at an individual insurer level through the IIM.

The IIM is applicable to insurance groups meeting the Insurer Pool criteria, consisting of 57 of the largest international insurance groups from 18 jurisdictions.

4.1 INTRODUCTION

This chapter covers the outcomes of the 2025 IIM, as outlined in paragraphs 109–111 of the June 2023 GME document, with a focus on the analysis of aggregate trends in the Insurer Pool (Section 4.2).

The aggregate totals for each indicator, IIM technical details, data template and technical specifications can be found in the annexes to this report:

- **Annex 1**: Aggregate totals (denominators) for each IIM methodology indicator;
- **Annex 2:** Formulae used to calculate IIM indicator scores;
- **Annex 3:** The absolute reference values used for the indicators and monitoring them;
- **Annex 4:** IIM 2025 data template; and
- **Annex 5:** IIM 2025 technical specifications.

In 2025, the IAIS conducted the regular triennial review of the IIM assessment methodology of the GME. The outcome of the review is available in the updated November 2025 GME document. The revised methodology will be applicable to the 2026–2028 GME and the corresponding IIM aggregate results will be featured in the 2026 GIMAR.

The remainder of this chapter includes aggregate results from the 2023–2025 IIM methodology as described in the June 2023 GME document.

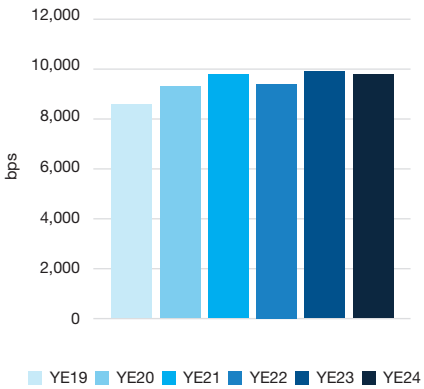
4.2 ANALYSIS OF AGGREGATE TRENDS IN THE INSURER POOL

As in previous years, the IAIS conducted a trend analysis of data from the Insurer Pool to assess the possible concentration and evolution of systemic risk at the individual insurer level.

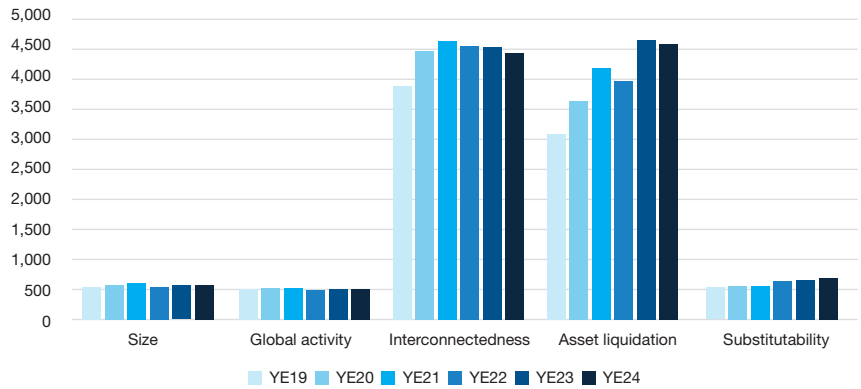
Figure 28 shows that the aggregate systemic risk score for the Insurer Pool decreased by 1.2% from year-end 2023 to year-end 2024. Sample controls are applied to ensure the sample remains stable over time. The primary drivers of this decrease were two systemic risk categories: interconnectedness (-2.1%) and asset liquidation (-1.3%). Conversely, size, global activity and substitutability increased by 1.3%, 1.7% and 5.5% year-on-year, respectively.

FIGURE 28

Total systemic risk score (YE19–YE24)



Systemic risk categories' scores in bps (YE19–YE24)



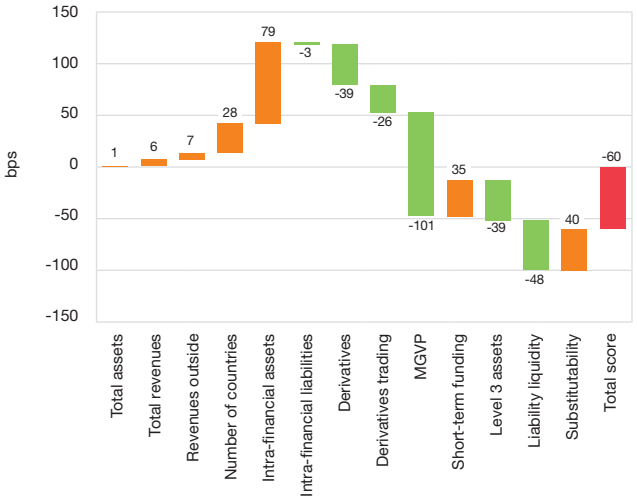
Source: IAIS IIM 2025

Figure 29 focuses on changes in systemic risk scores from year-end 2023 to year-end 2024. On aggregate, the total systemic risk score decreased by 60 basis points. The indicator that increased its systemic risk score the most was intra-financial assets (+79 basis points), while the minimum guarantees on variable products (MGVP) indicator experience the largest decline (-101 basis points).

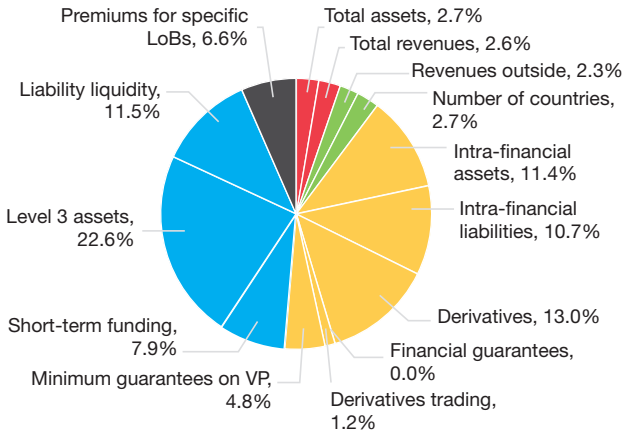
On aggregate, the most material contributors to systemic risk remain the level 3 assets indicator, representing 22.6% of the total risk score,[37] followed by the derivatives indicator at 13.0%. The liability liquidity indicator accounts for 11.5% of the score. The intra-financial liabilities indicator and the intra-financial assets indicator account for 11.4% and 10.7%, respectively.

FIGURE 29

Decomposition of change in total score (IIM25,YE24)



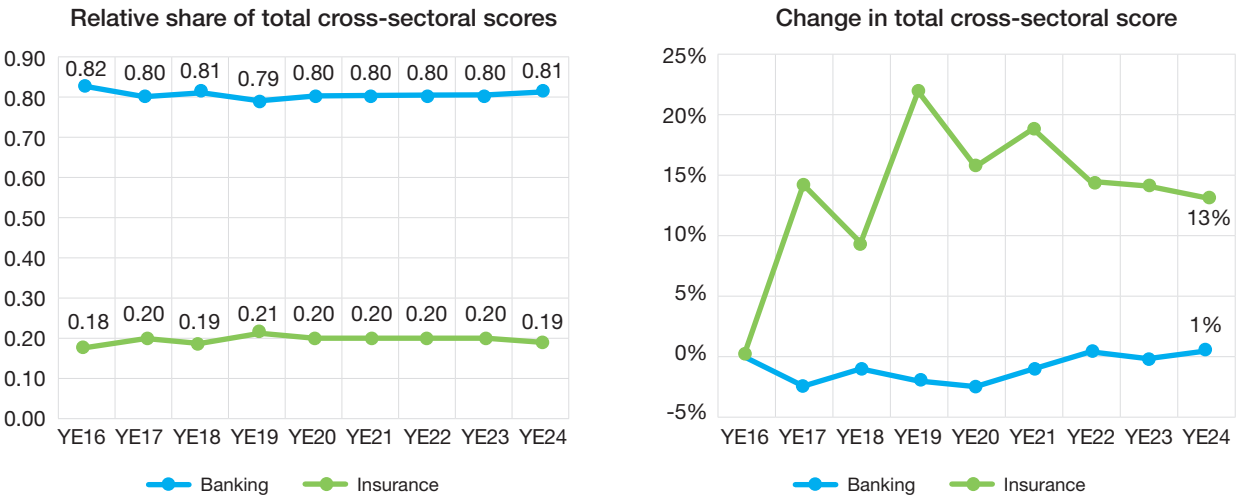
Systemic risk score composition (YE24)



Source: IAIS IIM 2025

[37] Going forward, as a result of the 2025 triennial review of the IIM methodology, the contribution of the level 3 assets indicator is expected to decrease.

FIGURE 30



Source: IAIS IIM 2025, BCBS 2025

4.2.1 Cross-sectoral analysis

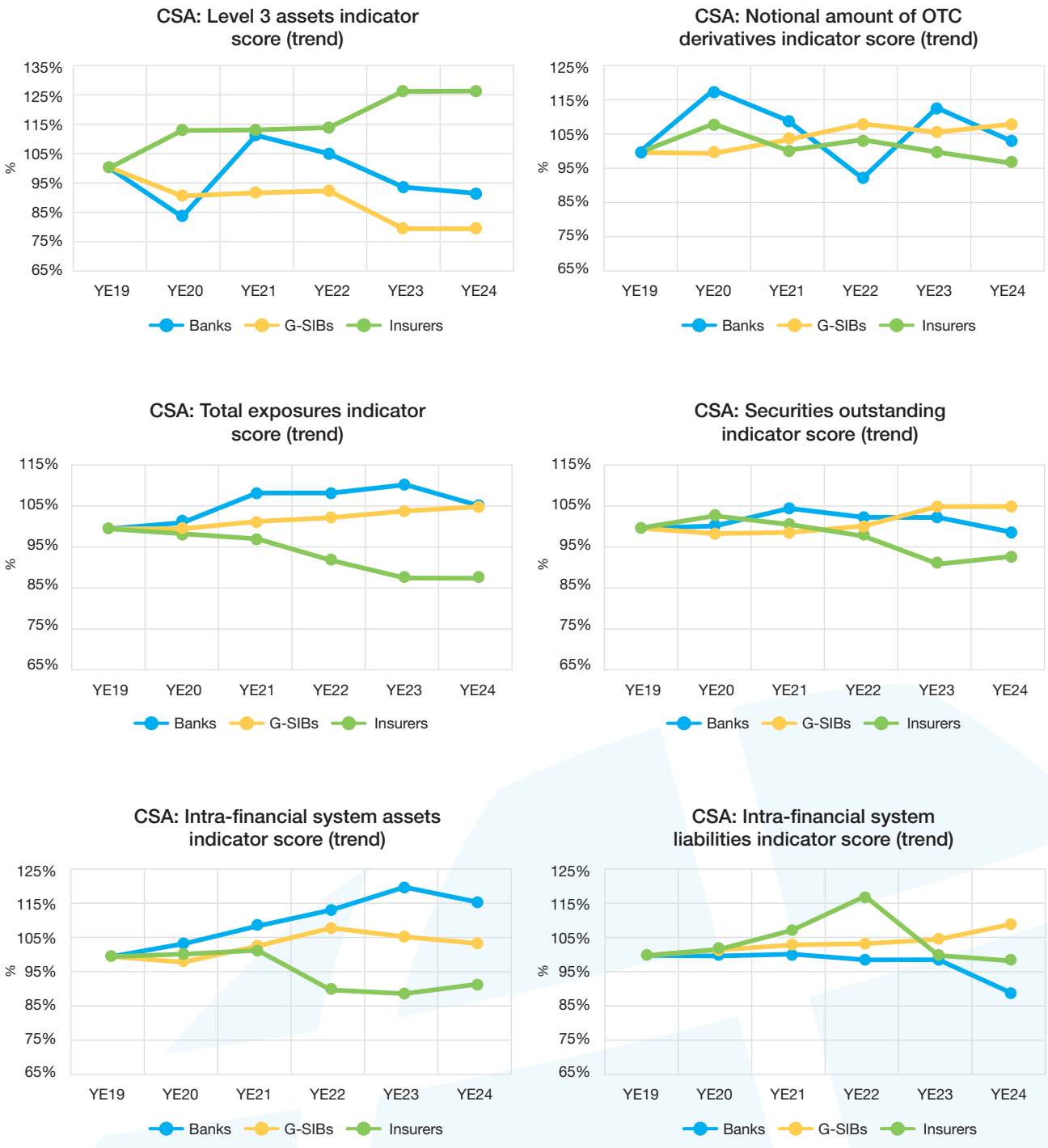
The cross-sectoral analysis (CSA) compares the systemic footprint of insurers and banks using a risk scoring methodology that incorporates indicators common to both the Basel Committee on Banking Supervision's (BCBS') Global Systemically Important Bank framework and the IAIS' IIM. This cross-sectoral methodology was developed by the joint IAIS-BCBS Task Force on Banks and Insurers in 2018.

The results in Figure 30 demonstrate that when keeping the pool of banks and insurers stable over time, the total cross-sectoral scores for banks remain substantially higher than those for insurers, highlighting the lower systemic footprint of the insurance sector.

As shown in Figure 31, at the end of 2024, two CSA indicators, namely, the notional amount of over-the-counter (OTC) derivatives and intra-financial system liabilities, declined for insurers compared to the previous year. Conversely, the indicators for total exposure, securities outstanding, and intra-financial system assets recorded an increase. The level 3 assets indicator, which had risen in 2023 due to accounting changes specific to insurers, remained stable in 2024.

On a cross-sectoral basis, the insurer pool's systemic risk score remains significantly below the banking pool score, indicating the insurance sector has a lower systemic risk footprint.

FIGURE 31



Source: IAIS IIM 2025, BCBS 2025

Climate-related risks in the insurance sector

Climate change remains an overarching global threat and a source of financial risk. Climate data elements are now a regular feature of the GME, providing a global baseline of climate risk data for the insurance sector.

Highlights:

- The insurance sector's investment exposure to climate-related risks has remained broadly stable compared to previous years: Around 22%–46% of insurers' general account assets are exposed to the risks from climate change, with differences between regions largely driven by data availability.
- Data collected from non-life (re)insurers also allows analysis into the materiality of NatCat risks, capturing the potential impact of extreme events on insurers' solvency, the role of reinsurance in mitigating these exposures, and the trends in NatCat risk coverage and reinsurance levels over time.
- Supervisors are advancing efforts to integrate climate-related risks into their practices, including scenario analysis and capital requirements for NatCat risks.
- Insurers are increasingly adopting climate scenario analysis and transition plans, though challenges persist related to data availability and the development of methodologies to assess climate-related impacts.

5.1 INTRODUCTION

Carbon dioxide (CO2) levels in the atmosphere soared by a record amount to new highs in 2024, committing the planet to more long-term temperature increase, according to the World Meteorological Organization (WMO).[38] Growth rates of CO2 have tripled since the 1960s and the 2024 growth was the largest one-year increase since modern measurements started in 1957. Given that, the likelihood of a delayed and divergent transition and/or global warming well beyond the current target has increased since last year. Consequently, the insurance sector is likely to face increasing physical risk in particular.

Given the increasing risks, the IAIS and its members continue to invest in strengthening the understanding of the type and magnitude of climate-related risks and exposures of the insurance sector. The IAIS contributes to enhancing this understanding through an annual data collection exercise and analysis. The outcomes of this work are presented in this chapter. Other related publications from the IAIS include:

- The Application Paper on the supervision of climate-related risks in the insurance sector to support supervisors in effectively integrating climate-related risks into their supervisory practices; and
- The special topic edition of the GIMAR on the potential financial stability impact of NatCat insurance protection gaps.

5.2 DATA COLLECTION

The IAIS collected quantitative and qualitative information from jurisdictions as part of the regular GME process in the SWM 2025 data collection and included data collected from insurers in the IIM 2025 Insurer Pool. The data is based on year-end 2024.[39] As in previous years, analysis of insurers' investments (Section 5.3) focuses on the insurance sector's investments in the general account (GA).

A total of 43 jurisdictions, representing about 90% of the global insurance market, provided climate data in the SWM 2025. Of these, 36 also shared detailed asset splits for equities, corporate bonds, and loans and mortgages. Participation in the data collection is broadly in line with last year. Of the 57 insurers who participated in the IIM 2025, 75% provided data on climate-related risks. Individual insurers provided sectoral splits for equities, corporate debt instruments and premiums, NatCat losses, a qualitative assessment of the climate-related risks (eg transition, physical and legal/liability risks) and the initiatives taken to address these risks.

5.3 CLIMATE-RELATED RISKS TO INSURERS' INVESTMENTS

5.3.1 Investment-related exposures

This section provides an update on the proportions of different types of climate-related assets held by the insurance sector.[40] The exposures presented in this section are based on SWM 2025 data, complemented when necessary, by other data or assumptions, in line with the approach and methodologies applied in previous GIMARs to ensure consistency.[41]

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38 https://wmo.int/publication-series/wmo-greenhouse-gas-bulletin-no-21.

39 With the exception of Japan, which provided data to end-March 2025.

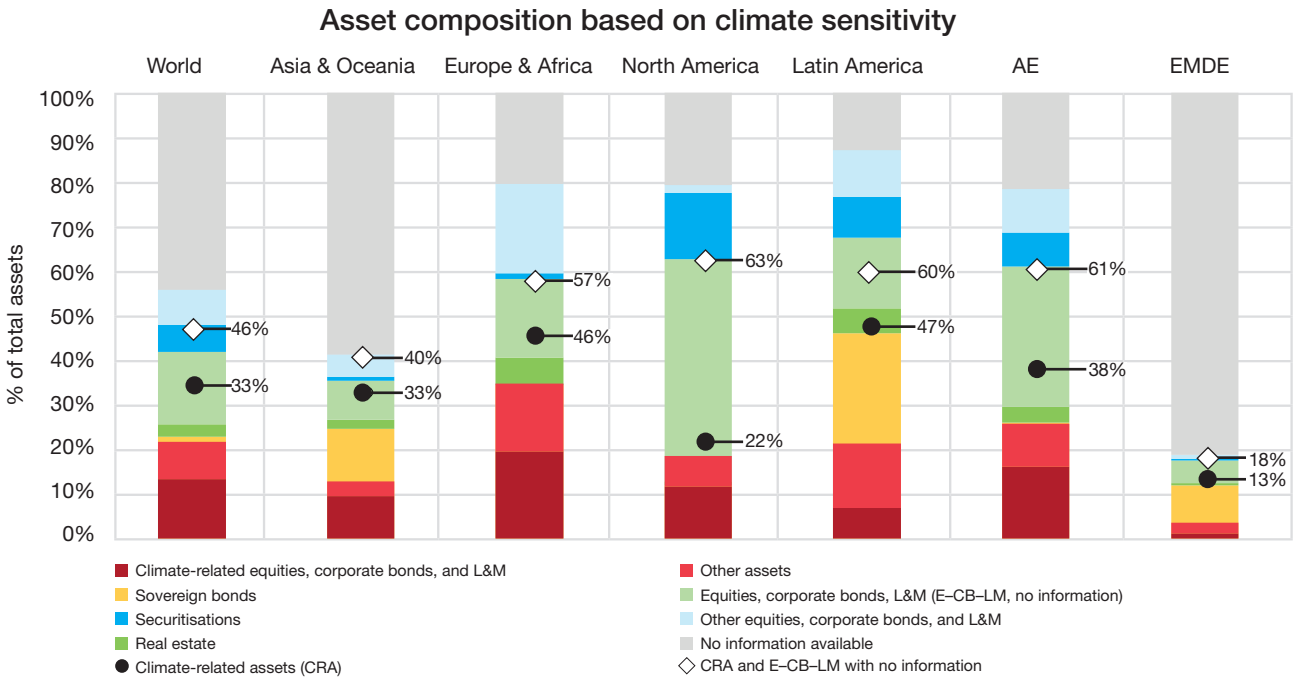
40 Climate-related assets (or sectors) are those assets (or economic sectors) that are exposed to the risks from climate change.

41 See https://www.iais.org/activities-topics/financial-stability/gimar/.

Figure 32 presents the asset mix of climate-related and climate-unrelated assets for the jurisdictions that provided at least some quantitative climate risk information to the IAIS.[42] The overall mix by asset class is complemented by a split of equity, corporate bonds, and loans and mortgages in climate-related sectors, providing a comprehensive overview of the asset mix that can be affected by climate change, by region. The assets in Figure 33 can be divided into three broad categories:

- Climate-related assets, including sovereign debt instruments, real estate[43] and equities, corporate debt instruments, and loans and mortgages belonging to six climate-related sectors: agriculture, energy-intensive, fossil fuels, housing, transport and utilities (shaded in variants of red).
- Other assets, including reinsurance recoverables, reinsurance assets, cash and cash equivalents, deferred acquisition costs, equities, corporate debt instruments, and loans and mortgages not belonging to six climate-related sectors (shaded in variants of blue).
- Assets without information regarding their allocation or sectoral split. This category includes equities, corporate debt instruments, and loans and mortgages without any information about their sector, securitisations and assets without information about their asset class (shaded in variants of grey). It is important to note that these assets may still contain climate-related assets.

FIGURE 32[44]



Source: IAIS SWM 2025

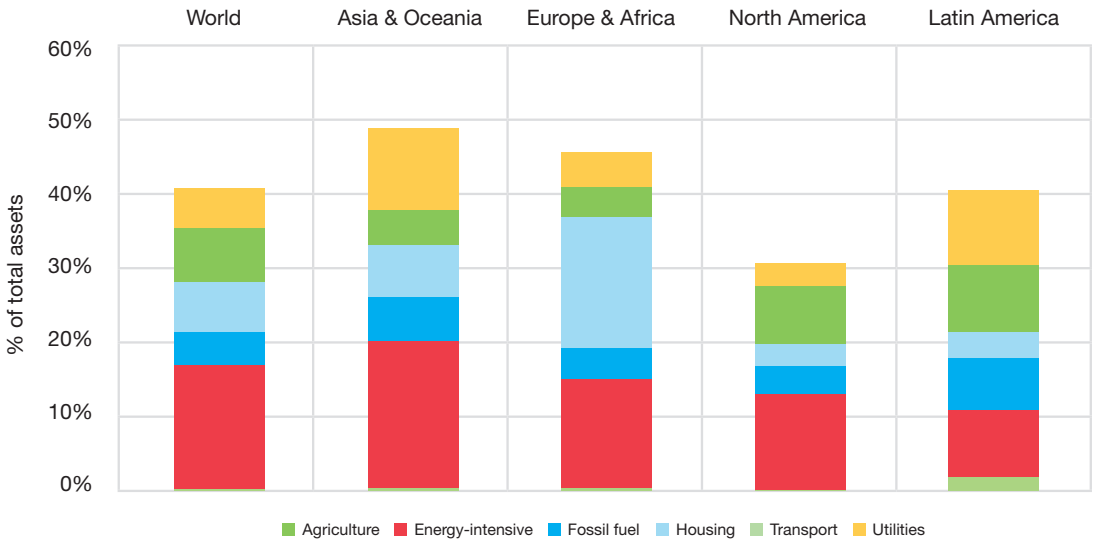
[42] This is the case even if these jurisdictions did not provide any sectoral splits for equities, corporate debt, and loans and mortgages.

[43] Sovereign debt instruments and real estate are classified as climate-related assets, in line with the 2021 Climate GIMAR. However, they represent heterogenous asset classes with various levels of climate sensitivity (eg countries are exposed to different levels of physical and transition risks).

[44] L&M – loans & mortgages; CRA – climate-related assets; E-CB-LM – equities, corporate bonds, loans & mortgages

FIGURE 33

Share of equity, corporate bonds and L&M in climate-relevant sectors: breakdown by region



Source: IAIS SWM 2025

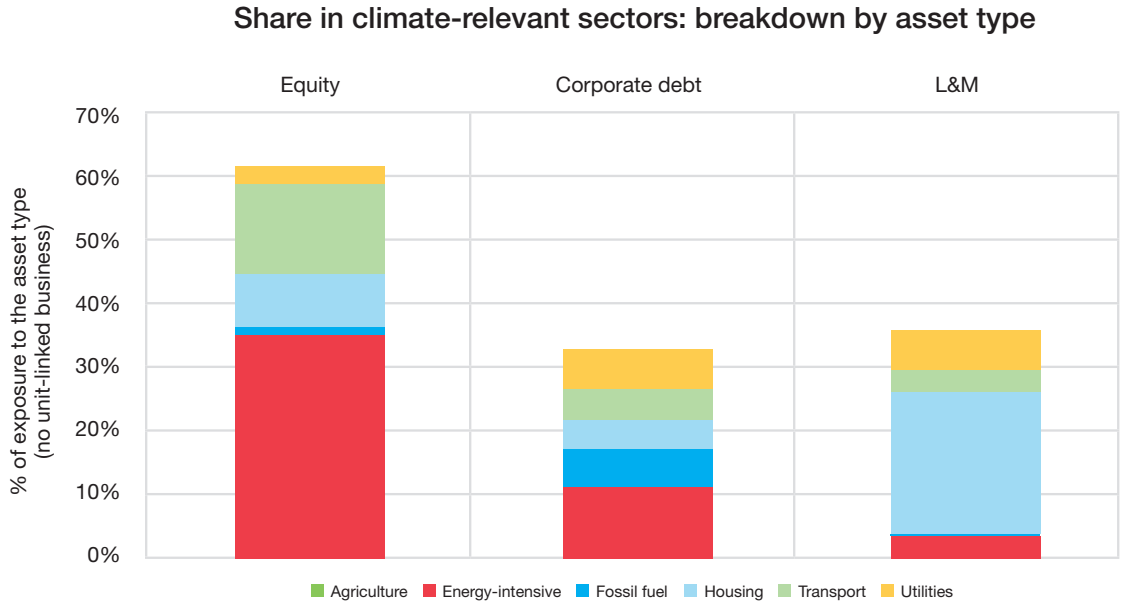
The shares of climate-related assets (about 22% to 46% of all general accounts total assets) differ across regions. However, these differences are also influenced by the availability of data on sectoral splits. The combined shares of climate-related assets and that of equities, corporate bonds, and loans and mortgages with no sectoral information are comparable across all regions, ranging from approximately 40% to 63% of total GA assets. However, there is a significant difference between AEs, which stand at 61%, and EMDEs, which are at 18%. Limited data availability is particularly an issue in EMDEs, Asia and Oceania and North America. More than half of the assets for EMDEs and Asia and Oceania have no information on the allocation that is reported to the IAIS. In North America, reported lower holdings of climate-related assets (about 22%) are accompanied by higher shares of assets without sectoral information (about 41%) and a further 17% of assets without information about their asset class allocation. The lack of asset class allocation is also evident in other regions, with data availability remaining a key challenge in the monitoring of transition risk.

Figure 33 presents, for each region, the share of equity, corporate bonds, and loans and mortgages in the six climate-relevant sectors.[45] The remaining portions either pertain to assets unrelated to climate or lack available information.

Depending on the region, climate-related sectors represent between 30% (North America) and 49% (Asia and Oceania) of these asset classes. Changes compared to last year's results can be attributed to differences in data coverage of the IAIS climate data collections.

[45] The figure only includes asset classes for which jurisdictions provided sectoral splits.

FIGURE 34



Source: IAIS SWM 2025

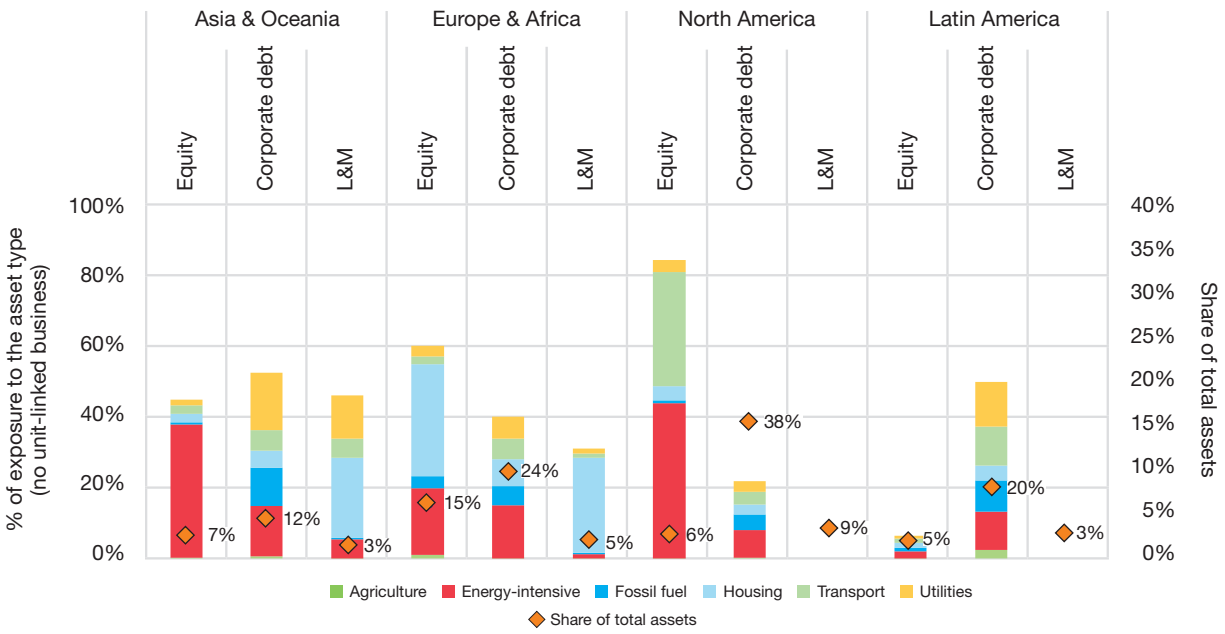
Figure 34 presents the shares of the six climate-related sectors for each of the three monitored asset classes: equity, corporate bonds, and loans and mortgages. About 62% of insurers' equity holdings are invested in the six climate-related sectors. This represents an increase by 13 percentage points compared to last year, driven by the energy-intensive sector. The total share for corporate debt and loans and mortgages remained broadly stable at 33% and 36%, respectively.

Similar to last year's analysis, the energy-intensive sector, which is quite broad and encompasses most of the manufacturing industry, remains globally dominant among climate-related equities, while the picture is more balanced for corporate bonds. Climate-related loans and mortgages are primarily associated with the housing sector.

Around 62% of insurers' equity holdings are in six climate-related sectors, up 13 percentage points from last year, driven by energy-intensive industries.

FIGURE 35

Share in climate-relevant sectors: breakdown by region and asset type



Sources: IAIS SWM 2025

Figure 35 shows a breakdown by region and by type of asset class. Compared to last year, the share of equity investments in the energy-intensive sector has increased in Asia and Oceania. The figure also provides information about the percentage shares of the three monitored asset classes to total assets (red diamond, right axis). Data availability remains a challenge, with a large share of data gaps for the climate-related split across all regions.

5.3.2 NatCat exposures of individual insurers

The IIM data helps with understanding the materiality of NatCat risks on some of the largest (re) insurers writing predominantly non-life business. This data also provides a basis to assess the potential materiality of the climate change impact on the magnitude of NatCat risks.[46]

IIM data collected included expected and "1 in 200-year" (or 99.5% Value at Risk (VaR)) loss estimates for key perils and regions. The figures collected were both net and gross of reinsurance from 18 insurers[47] writing predominantly non-life business, representing two thirds of such insurers in the Insurer Pool. Table 2 shows selected metrics for NatCat exposures.

TABLE 2

Description	Metric	Average	Min	Max
Materiality of tail NatCat risks (after and before reinsurance)	Solvency impact of **net** 99.5% NatCat VaR	34pp	4pp	70pp
	Solvency impact of **gross** 99.5% NatCat VaR	64pp	11pp	113pp
Share of NatCat which is related to earthquake	Earthquake VaR as % of **total** NatCat VaR	35%	12%	85%
Reliance on reinsurance for managing required capital for NatCat (low ratio indicates high reliance)	Net NatCat VaR as % of **gross** NatCat VaR	53%	27%	73%
Reliance on reinsurance for managing earnings impact of NatCat	Net Mean NatCat **losses as % of gross mean** NatCat losses	70%	40%	88%

Source: IAIS IIM 2025

The analysis shows that NatCat is a material risk for non-life insurers and reinsurers in the Insurer Pool. For example: an extreme NatCat loss commensurate with a 1-in-200 year event, will reduce these insurers' capital adequacy ratios by 34 pp on average (from an average capital adequacy of 239% to 205%). This impact varies substantially among the (re)insurers in the pool depending on their exposure to NatCat events. Reinsurance is a significant mitigation factor: on average the Net NatCat VAR is 53% of the gross figures, ranging from 27% to 73% across the sample of (re)insurers. Without reinsurance the impact of a 1-in-200 year NatCat event on insurers' capital adequacy ratios would have been substantially higher: on average 64 percentage points but up to 113 percentage points for the insurers with the highest reliance on reinsurance. This demonstrates the importance of a functional global reinsurance market for effective risk and capital management of NatCat exposure.

[46] A significant part of NatCat exposure, [35%] on average (including insurers and reinsurers), is related to earthquake. While climate change is not expected to have a material impact on the frequency and severity of earthquakes, sea level rise could increase the damages caused by them if they trigger tsunamis.

[47] This includes reinsurers.

There may be concerns that (re)insurers may withdraw capacity following major NatCat events or in anticipation of increased costs of future events, for example due to increasing frequency and/or severity of extreme weather events. Our analysis of the changes of insurers' aggregate exposure to different NatCat perils (as measured by gross 1-in-200 VaR) over the period 2019–2024 shows that 77% of the year-on-year changes are within 10%. Moreover, only 12% of the year-to-year changes are more than a 20% decline in NatCat exposure. These figures indicate that in recent years the insurers coverage of NatCat risk in aggregate is generally stable, however, such changes may be more pronounced in the highest risk areas as (re)insurers respond to the changing risk landscape. Similarly, we observe stable reinsurance levels, with 91% of the year-on-year changes over the same period falling within 10%.

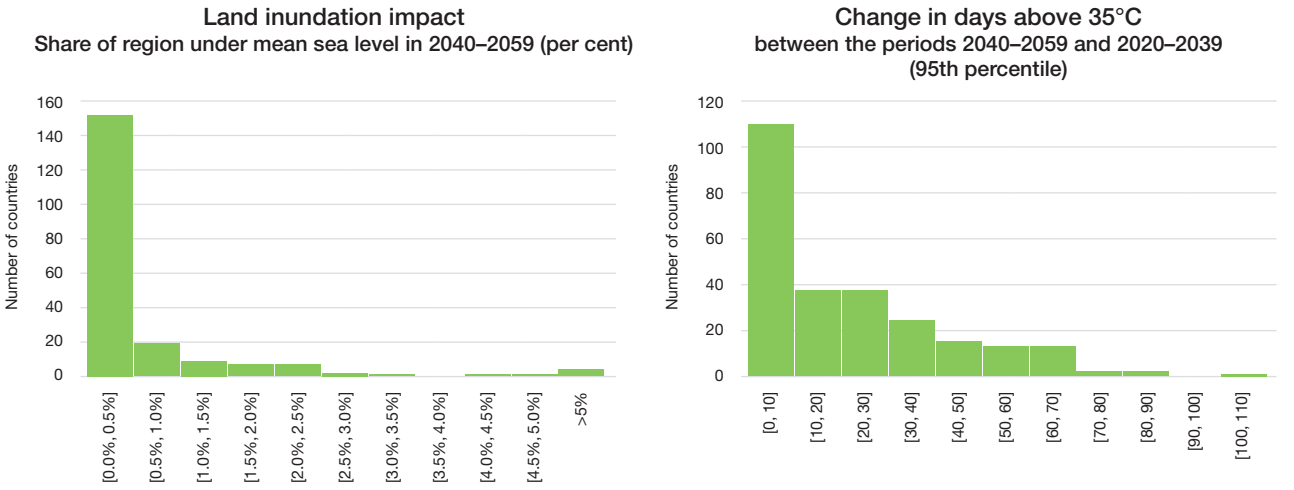
5.3.3 Importance of analysing impact from other physical risk climate drivers other than natural catastrophes

While it is widely recognised that one of the main effects of climate change on insurers is through the expected increase in NatCat-related claims, there are many other physical risk drivers (eg sea level rise, drought and heat stress) which may also cause material direct or indirect impact on insurers over time. In particular, these drivers may impact the overall economic and financial performance as some drivers (eg water stress) constrain future developments or increase costs, eg remediation of pollution and sea level rise.

Also, environmental factors, in particular pollution, could have a material effect on mortality and health in some cases. So, the impact on the insurers may not only be through non-life underwriting losses but also by negatively impacting the asset and life liabilities of insurers balance sheets. As in most cases these drivers affect insurers indirectly, it is harder to assess their impact on the insurance sector compared to traditional insurance loss drivers. Also, the magnitude of the impact of these drivers are likely to vary significantly between individual insurers, depending on their insurance and geographical exposures. While climate change is a global phenomenon, its actual risk manifestation will vary significantly by country, as illustrated in Figure 36. It is therefore important for supervisors to understand which specific physical risk drivers may be material/relevant for the insurers they supervise. This includes both exposures within their own jurisdiction, and beyond, in the case of international insurers. While full balance sheet assessment may not be achievable at this stage, as a first step, supervisors can identify the types of physical risk drivers that could potentially have a material impact on insurers and establish a process to monitor their development and actual impact.

Beyond natural catastrophes, physical climate risk drivers like sea level rise and drought could significantly impact insurers' balance sheets globally.

FIGURE 36



Source: UNDP Human Climate Horizons, projections based on RCP8.5[48]

5.4 INITIATIVES TO ADDRESS CLIMATE-RELATED RISKS

In addition to the quantitative data collected through the SWM and IIM data collection process, the IAIS collects qualitative information from insurers and supervisors on various aspects of climate-related risks. As this qualitative information represents distinct views of both supervisors and insurers on a voluntary basis, the total responses received on different questions may vary.

5.4.1 Climate risk data collection

To effectively assess and monitor climate-related risks, supervisors would need to leverage sufficiently detailed and accurate data sources, which may be a combination of data collected from supervised institutions and other external sources. These data sources may contain exposure data (eg geolocations of assets or liabilities), sector data, climate-specific data (eg flooding locations/patterns) or any other relevant data that may inform supervisory activities. When asked whether these types of data are currently collected by IAIS members, 23 members (compared to 15 in the previous year) collect at least one of these types of climate-related data. The data collected is mostly in relation to exposure data (17 out of 23) and sector data (11 out of 23), while very few (4 out of 23) collect climate-specific data. Although there is an indication that supervisors' climate-related data collections have slightly improved compared to the previous year, it is still apparent from the responses that more work needs to be done by supervisors to identify, design and implement appropriate and relevant data collections that can support climate-related risk assessments. To aid supervisors in these efforts, the IAIS published its Application Paper on the Supervision of Climate-related risks[49] in April 2025 that contains some guidance on supervisory reporting and disclosure considerations. To further this work, the IAIS also embarked on an initiative to explore the development and use of climate-related metrics for physical and transition risks which will be underpinned by these types of data collections.

[48] https://www.ipcc.ch/site/assets/uploads/2018/02/WG1AR5_SPM_FINAL.pdf
[49] https://www.iais.org/uploads/2025/04/Application-Paper-on-the-supervision-of-climate-related-risks-in-theinsurance-sector.pdf

5.4.2 Climate risk assessment and management considerations

Assessing, managing and mitigating climate-related risks may involve various types of activities such as undertaking scenario analysis, enhancing risk assessment processes (which may include the analysis of climate risk indicators), developing regulatory or supervisory instruments and guidelines, and collaborating with key stakeholders. Responses on questions about these activities undertaken by supervisors and insurers are provided below.

5.4.3 Supervisors

IAIS members were asked to provide their assessment of the probability and impact of physical, transition and legal/liability risks in their jurisdiction over three time horizons (current, within 10 years and after 10 years). In terms of transition risks, respondents indicated a low to medium impact in the short term but expects medium to high impacts over the longer time horizons. For physical risks, many respondents already expect medium to high impacts in the short term with mostly high impacts expected after 10 years. It seems that for legal/liability risks, respondents mostly expect low impacts in the short term and low to medium impacts over longer time horizons. There was far greater uncertainty around legal/liability risk assessments as many respondents indicated that they could not provide such an assessment, especially for longer time horizons.

Twenty-eight IAIS members of the 56 jurisdictions that submitted data for the SWM (compared to 20 out of 50 submitting jurisdictions in the previous year) indicated that they have taken supervisory measures to address climate-related risks. Examples of such initiatives include the issuance of directives or guidance outlining supervisory expectations around enhancing insurers' approaches to managing the financial risks from climate change. Twenty-seven members of the 56 SWM reporting jurisdictions (compared to 22 in the previous year) indicated that they currently have capital requirements for NatCat risk and two more members plan to have such requirements in the near future. Most of these respondents reported that capital requirements for NatCat are included in their jurisdictional capital requirement methodologies (ie. risk-based capital requirements), or internal models if allowed. The responses indicated that more SWM reporting IAIS members (15 compared to 11 in the previous year) have incorporated climate-related risks within their supervisory risk assessments (ie to inform supervisory risk ratings). A further seven members indicated plans to do so in the near future. Some respondents stated that climate-related risks are not explicitly part of their risk assessment framework due to limited data and timeframe mismatch.

Scenario analysis remains a key tool to assess climate change-related risks. Twenty-seven members (compared to 19 in the previous year) indicated that they either have conducted or have plans to conduct such analysis. Members responded with varying approaches including using a standardised climate scenario exercise, using regulatory stress testing, or using an "exploratory exercise". Some members commented that scenario analysis performed by their insurers is either part of supervisory expectations, part of their Own risk and solvency assessment (ORSA) or part of an industry-wide effort.

Supervisors and insurers tend to address climate risks through scenario analysis, enhanced assessments and guidelines.

Apart from the supervisory measures taken, 23 members (compared to 19 in the previous year) indicated that the public sector in their jurisdictions has taken non-supervisory measures to mitigate or manage climate-related risks. Examples of such measures included the following:

- Other governmental authorities (eg, national) have issued varying forms of directives aimed at raising the public's awareness of climate risks and adopting policies aimed at addressing these.
- Measures to reduce greenhouse gas emissions which include efforts to improve energy market efficiencies and infrastructure.

Public-private partnerships could also play a role in mitigating and managing climate-related risks. Fourteen members indicated that these types of solutions have been developed in their jurisdictions while a further five members indicated that they are currently in development. Most of these solutions are aimed at addressing NatCat risk while some are developed to promote sustainable finance initiatives. In managing NatCat risk, these solutions include mandatory insurance for specific weather-related perils that is partly subsidised by the national government as well as NatCat reinsurance schemes backed by state guarantees.

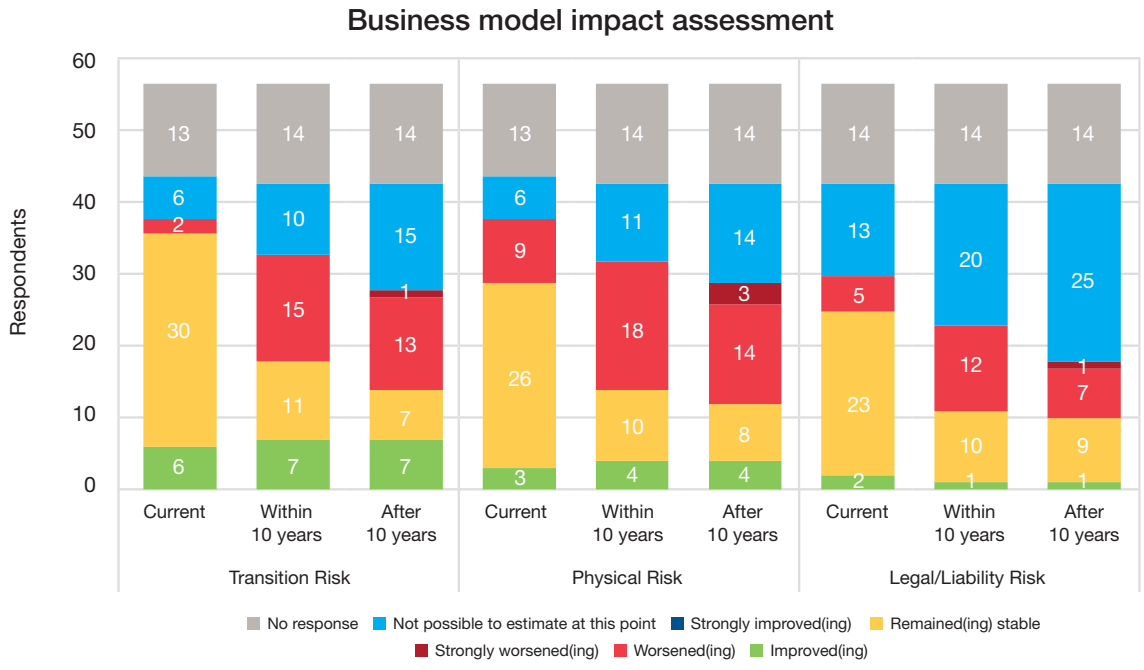
5.4.4 Insurers

Insurers that were part of the IIM 2025 data collection exercise were asked about their assessment of the impact of different types of climate-related risks on their business model. The graph below shows their indications of the impact across the three climate-related risk types and across three different time horizons.

The following can be noted from the graph below:

- There is still much uncertainty about these impact assessments, especially for longer time horizons.
- Most respondents that were able to provide an assessment expect impacts to remain

FIGURE 37



Sources: IAIS IIM 2025

stable over the short term (however, this is highly dependent on the business model).

- Many respondents expect a worsening impact for longer time horizons across risk types.

- It seems respondents are slightly more concerned about physical risks than transition risks, with some indicating a worsening impact from physical risks even in the short term.

The majority of respondents (75%), compared to 68% in the previous year, indicated that they use climate scenario analysis to inform their strategy. Respondents are using qualitative and quantitative methods to assess the potential impact of climate risks on their portfolios, strategies and operations, covering both physical and transition risk perspectives. They indicated that these scenarios cover multiple time horizons such as short-, medium- and long-term (2050 and beyond) horizons. In addition to informing strategy, these analyses are used to assess the impact on share prices, corporate bond values, corporate credit ratings and the insurer's business model and financial position (considering underwriting and investment portfolios).

Insurers were also asked whether they currently use or track any climate-related indicators.

The vast majority (86%) indicated that they currently use such indicators. Some insurers established targets for emissions reduction, intermediate targets for investment portfolio decarbonisation and specific monetary targets for green investments.

Insurers were asked whether their climate risk assessments include both the impact of climate-related risks on their risk profile and financial position as well as the impact their organisation has on climate change through its operations, investments and other business activities. Sixty-eight per cent of respondents assess the impacts from both of these perspectives. Many of these respondents are conducting such assessments to comply with the Corporate Sustainability Reporting Directive (CSRD) framework in the European Union (EU) and other frameworks. Some respondents provide detailed disclosures in annual reports or Task Force on Climate-related Financial Disclosures (TCFD) reports, which are accessible to all stakeholders.

5.4.5 Transition plans and sustainability frameworks

The IAIS also collected information about insurers' and supervisors' initiatives in support of the transition to net-zero. Responses indicate a steady increase in the number of initiatives, for instance:

- Seventeen members indicated that they have a green finance taxonomy in place, and a further seven members are busy developing one.

- Six members (compared to four last year) indicated that they have a jurisdictional methodology on sustainable investments and a further two members indicated that they plan to have one in the near future.[50]

[50] In some cases, sustainable investments include both social benefit investment projects and green investment projects (such as green bonds). A few members refer to the jurisdictional taxonomy that contains criteria for determining if an economic activity is recognised as being environmentally sustainable. The criteria address climate change mitigation and adaptation, and certain environmental objectives (water/marine resources, pollution prevention and control, and restoration of biodiversity).

- Supervisors were asked whether insurers in their jurisdictions have any specific transition strategies for the various climate-sensitive sectors. Sixteen members indicated that insurers in their jurisdictions have transition strategies in place while a further eight members indicated that they were aware of such developments in the near future. Some members indicated that insurers have integrated environmental, social and governance (ESG) factors in their investment policies.

- In terms of developing official, board-approved, transition plans, a large subset of insurers (58%) indicated that they have such a plan in place or in development, while a further 7% indicated an intention to develop such plans in the near future. In general, insurers indicated that transition plans have mostly been updated to reflect net-zero targets with medium- and long-term goals. Insurers noted challenges relating to data availability and regulatory uncertainties when it comes to the development of these plans.

5.4.6 Most significant challenges highlighted by insurers

Similar to last year, insurers indicated that data availability, granularity and reliability remain a challenge, especially in the case of third parties. They also highlighted the challenge in keeping pace with evolving methodologies and tools, recognising the distinct differences across businesses and regions. There is also a lack of skills and resources to deal with the complexities of climate-related risk assessments, including the assessment of interplays between different climate-related impacts. Insurers also mentioned challenges around regulatory uncertainties and alignment in terms of industry-wide standards and guidelines. In addition, polarised sentiments on climate change, along with the unpredictability of societal responses and actions across jurisdictions, pose challenges for managing and mitigating strategy and legal risks. Insurers also mentioned that stakeholder expertise and understanding remains a key challenge, especially when interpreting climate-related disclosures.

Insurers face challenges with data reliability, evolving methodologies, regulatory uncertainties, skill gaps, societal responses, and stakeholder understanding, complicating climate risk assessments and alignment with industry standards and guidelines.

Global reinsurance market

This chapter provides an overview of the global reinsurance market, using sector-wide reinsurance data (consisting of the SWM reinsurance component and the GRMS) that supervisors from the major reinsurance market jurisdictions worldwide reported to the IAIS.

Highlights:

- The reported size of the global reinsurance market reached $1.75 trillion gross reinsurance premiums at year-end 2024, with the Americas remaining the region with the largest reinsurance market.
- At the aggregate level, reinsurers invest mainly in corporate debt (40%), equities (12%) and to a lesser extent, in sovereign debt, loans, mortgages and real estate.
- The solvency positions of reinsurers remained strong at year-end 2024.
- The non-life reinsurance market's combined ratio was stable at 95% in 2024, following a sharp increase in 2022 to reach its highest value since 2005.

6.1 IAIS REINSURANCE DATA COLLECTION

The IAIS gathers reinsurance data from two data collections submitted by supervisors in major reinsurance market jurisdictions worldwide: the SWM reinsurance component and the Global Reinsurance Market Survey (GRMS).[51] The SWM reinsurance component provides data on the total reinsurance business in a jurisdiction (total reinsurance premiums) conducted by both reinsurers and insurers, while the GRMS aggregates data from a pool of reinsurers that meet the following criteria:

- Gross unaffiliated reinsurance premiums assumed of at least $800 million ($20 million for monolines)[52]; or
- Gross unaffiliated technical reserves of at least $2 billion (not applied to monolines); or
- Aggregate gross notional amount in (re)insurance-related derivatives of at least $500 million (eg in longevity or mortality swaps).

The reinsurance business captured through the GRMS data collection is designed to be a subset of the scope of reinsurance business captured through the SWM reinsurance component. Both data collections encompass life and non-life reinsurance data. For jurisdictions that participate in the GRMS but not the SWM, the jurisdiction's GRMS data is used as a substitute for that jurisdiction's SWM data.

In the 2025 GRMS, data was collected from 27 jurisdictions in the following regions:[53]

- **Americas**: Bermuda, Canada, Cayman Islands, Colombia, Mexico, Uruguay and US.
- **Asia and Oceania**: China; China, Hong Kong; India; Japan; Korea; Singapore and United Arab Emirates.
- **Europe and Africa**: Albania, Austria, Belgium, Bulgaria, Czech Republic, France, Germany, Ireland, Luxembourg, Netherlands, Slovenia, Spain and Switzerland.

This represents a net decrease by two jurisdictions from the 2024 GRMS.[54]

In the 2025 SWM reinsurance component, data was collected from 36 jurisdictions in the following regions:

- **Americas**: Argentina, Barbados, Bermuda, Canada, Cayman Islands, Colombia, Mexico, Uruguay and US.
- **Asia and Oceania**: Australia; China; China, Hong Kong; Chinese Taipei; India; Japan; Malaysia; Singapore and United Arab Emirates.
- **Europe and Africa**: Albania, Austria, Belgium, Bulgaria, Czech Republic, Denmark, France, Germany, Ireland, Luxembourg, Moldova, Morocco, Netherlands, Portugal, Slovenia, Spain, Switzerland and UK.

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51 In 2023, the IAIS revived the GRMS, which collects aggregate information from individual reinsurers to supplement the SWM reinsurance data collection, which began in 2020. The GRMS was previously conducted annually from 2003 to 2019. The GRMS previously covered about 50 reinsurers based in nine jurisdictions: Bermuda, France, Germany, Japan, Luxembourg, Spain, Switzerland, the UK and the US. The GRMS collected data from reinsurers with gross unaffiliated reinsurance premiums of more than $800 million or unaffiliated gross technical provisions of more than $2 billion. The pool of participating reinsurers remained largely the same throughout this period. The GRMS was discontinued with the adoption of the Holistic Framework in 2019, including the launch of the GME. Reinsurance data was then collected as part of the SWM (as the SWM reinsurance component). This has the benefit of improving both the regional balance and the completeness of reinsurance data collection. One downside of collecting this data through the SWM is that it reduced the granularity of data, as it was based on reinsurance data already collected in the supervisory frameworks. As a result, in 2023, the IAIS decided to revive the GRMS as a more granular complement to the SWM reinsurance component.

52 Monolines are reinsurers that specialise in providing reinsurance for a single type of insurance risk.

53 This represents an increase of 17 jurisdictions compared to the 2019 GRMS. Of the nine original GRMS participants, all except the UK provided data in the 2025 GRMS. The UK instead provided the SWM reinsurance component.

54 This is a result of 5 new or returning participating jurisdictions (Uruguay, China, India, Korea, United Arab Emirates) and 7 jurisdictions that no longer reported data (Barbados, Brazil, Croatia, Denmark, Malta, Poland, Sweden).

The number of jurisdictions participating in the SWM reinsurance component is unchanged from 2024.[55]

The reinsurance data in this chapter consists of a combination of sector-wide reinsurance data reported through the SWM reinsurance component by some jurisdictions and a sample of reinsurers' data reported through the GRMS by other jurisdictions. Hence, the data should not be interpreted as representing the entire reinsurance market in each of the reporting jurisdictions.

The two reinsurance data collections provide useful information that helps describe different elements of the global reinsurance market. Analysis focusing on premiums and retention ratios benefits from the wider SWM coverage. Specifically, the SWM reinsurance component provides greater insight into the significant amount of reinsurance premiums assumed by composite insurers that also underwrite direct (primary) insurance. On the other hand, more in-depth exploration of, for example, the profitability and capital resources of reinsurers relied on the more granular GRMS data collection.

The US reported data for the full scope of the SWM reinsurance component for the first time in 2025, therefore, trends should be interpreted with caution when compared with prior years. Additionally, sample controls were applied to trends – in other words, time series analyses used data from only those jurisdictions that provided consistent data across all years.

The nine jurisdictions that originally participated in the GRMS and the original scope of insurers in these jurisdictions are labelled in this chapter as "original GRMS scope".[56]

6.2 SIZE OF THE REINSURANCE MARKET

This section provides an overview of the reported size of the reinsurance market by focusing on gross and net reinsurance premiums. Gross reinsurance premiums refer to the premiums assumed (both ceded and retroceded premiums from other insurers). Net reinsurance premiums are the gross reinsurance premiums minus the premiums ceded to other reinsurers. Essentially, gross premiums provide a measure of the total volume of reinsurance business assumed, while net premiums provide a measure of the actual risk retained.

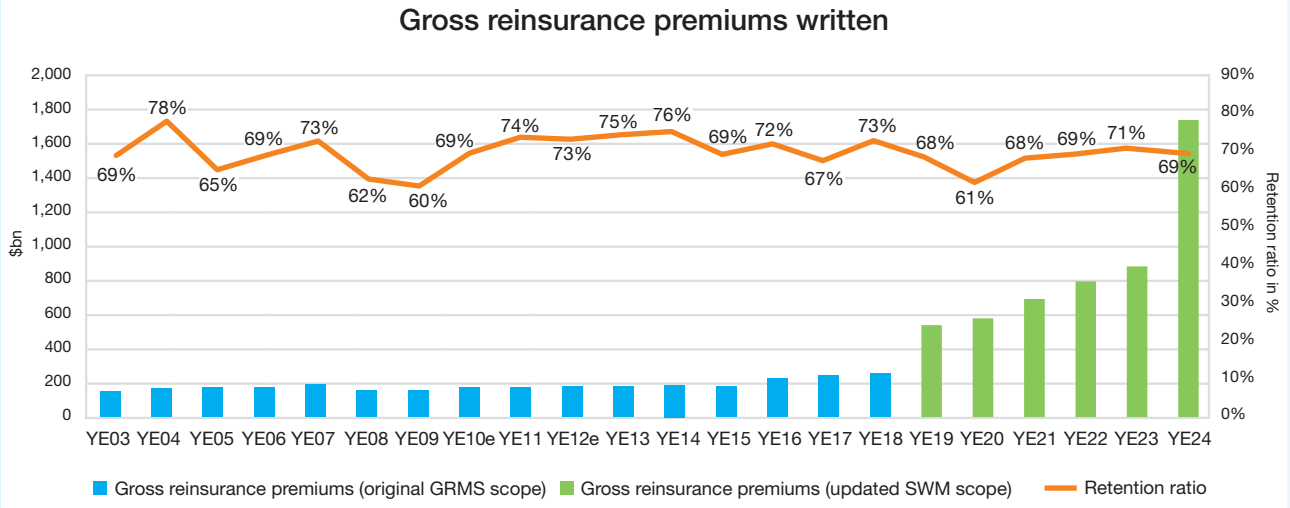
Figure 38 displays the evolution of gross reinsurance premiums from 2003 to 2024, showing data for the original reduced GRMS scope up to 2018 (in blue), and SWM reinsurance component data from 2019 onwards (in green, with the latest GRMS scope as a backup).[57] The large increase in premiums between 2018 and 2019 is therefore explained by the expanded sample covered by the SWM reinsurance component, rather than a large increase in premiums of the reinsurers in the original GRMS scope. The large increase in premiums between 2023 and 2024 is due to the US reporting the SWM reinsurance component for the first time in 2025. For 2024, reported gross reinsurance premiums reached almost $1.75 trillion (which represents approximately 23% of total global gross premiums written). In terms of net premiums, the reinsurance market covered by the sample reached over $1.2 trillion.

[55] This is a result of 6 new or returning participating jurisdictions (Uruguay, India, United Arab Emirates, Denmark, Moldova, Morocco) and 6 jurisdictions that no longer reported data (Brazil, Israel, Croatia, Malta, Poland, Sweden).

[56] With simulated results for the scope of reinsurers in the GRMS for the UK from 2019 to 2024.

[57] GRMS data were used for jurisdictions that did not report the SWM reinsurance component.

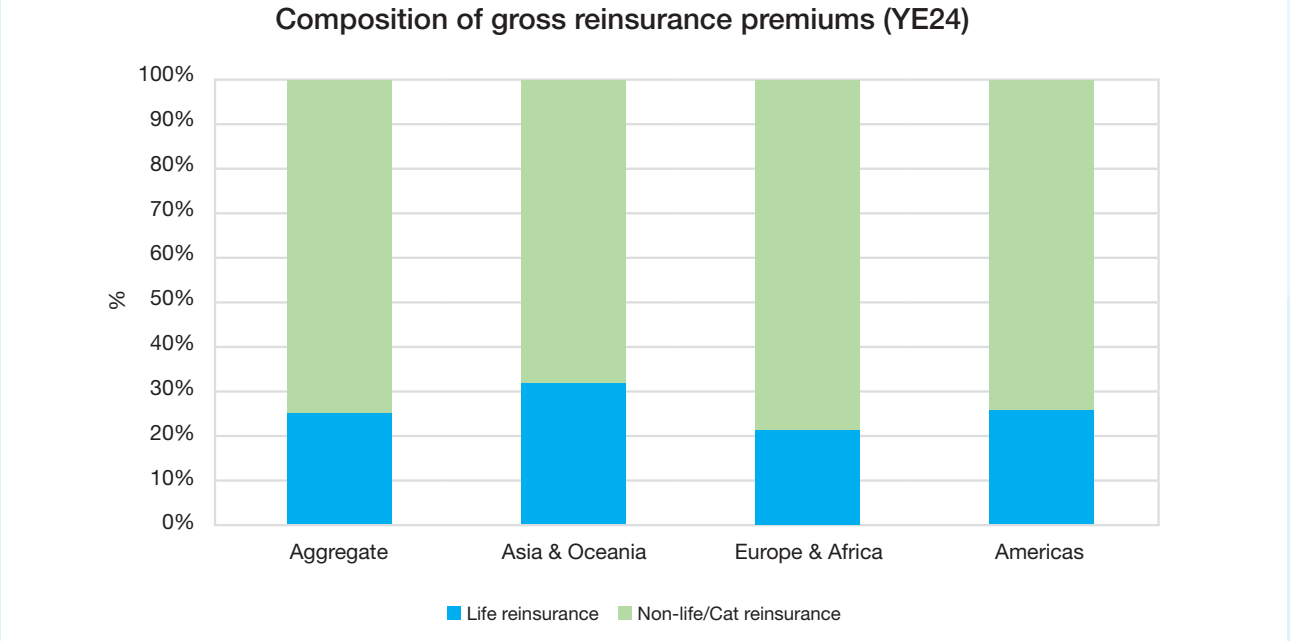
FIGURE 38



Source: IAIS SWM 2025 (reinsurance component and GRMS)

Figure 39 shows the regional composition of reported gross reinsurance premiums, split by life and non-life reinsurance. On aggregate, around 25% of reinsurance premiums comprise life business, while the remaining 75% refers to the non-life/Cat reinsurance business.

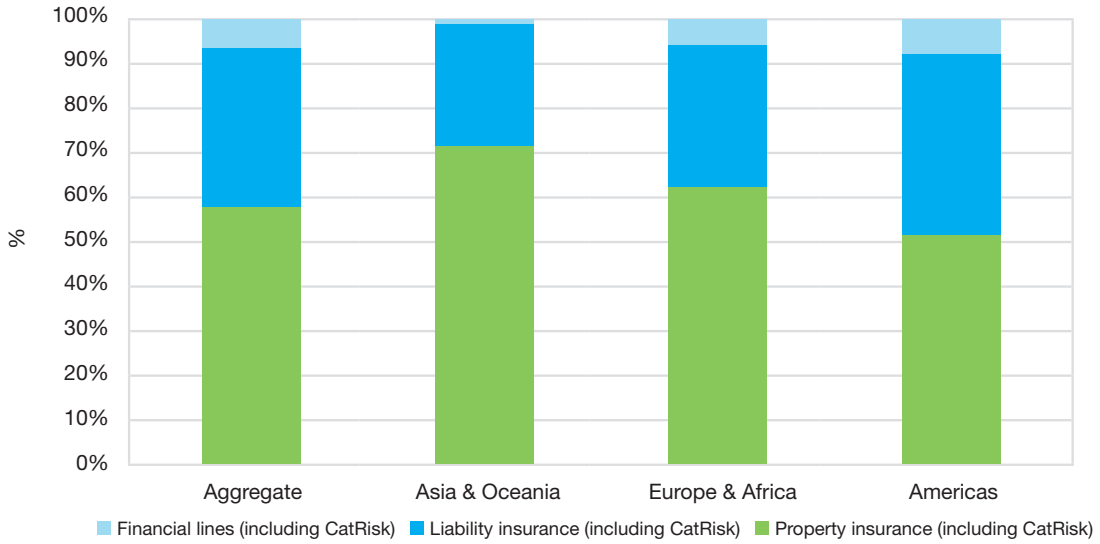
FIGURE 39



Source: IAIS SWM 2025 (reinsurance component and GRMS)

FIGURE 40

Composition of non-life (incl. CatRisk) gross reinsurance premiums assumed (YE24)

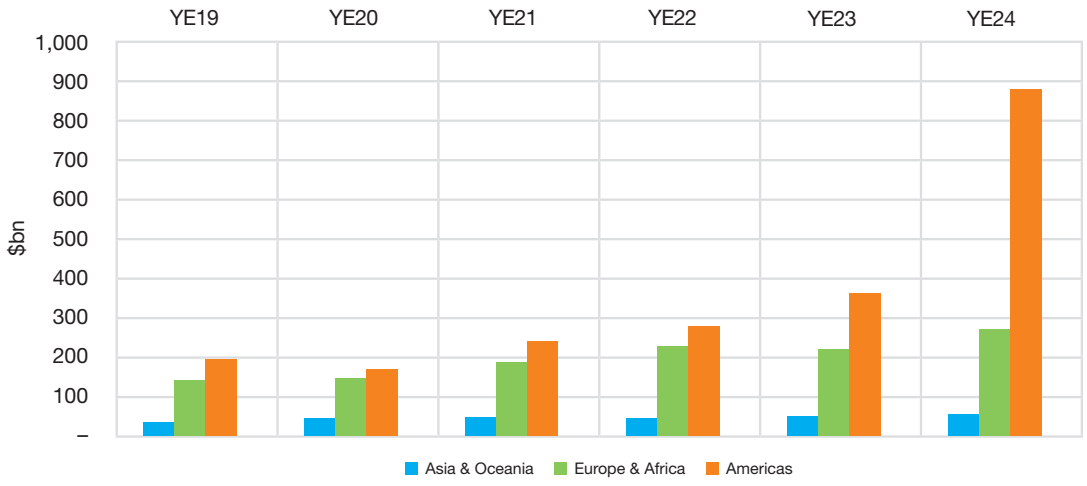


Source right hand chart: IAIS SWM 2025 (GRMS)

The GRMS data collection allows for a closer examination of the composition of non-life (including CatRisk) gross reinsurance premiums assumed, split by property insurance, liability insurance and financial lines (Figure 40). Figure 41 reflects regional developments in net reinsurance premiums. The large increase in net reinsurance premiums between 2023 and 2024 was driven by the Americas (The US began reporting full scope of SWM reinsurance component data in 2025). Additionally, Europe and Africa experienced an increase in net reinsurance premiums by approximately $50 billion.

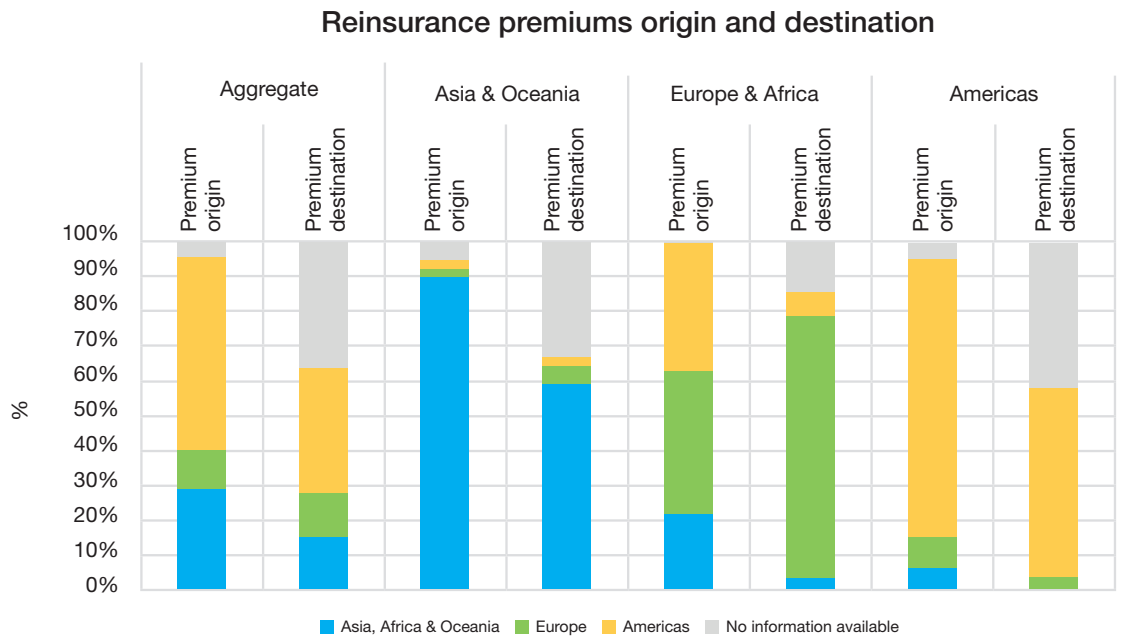
FIGURE 41

Regional view on net reinsurance premiums (YE19–YE24)



Source: IAIS SWM 2025 (reinsurance component and GRMS)

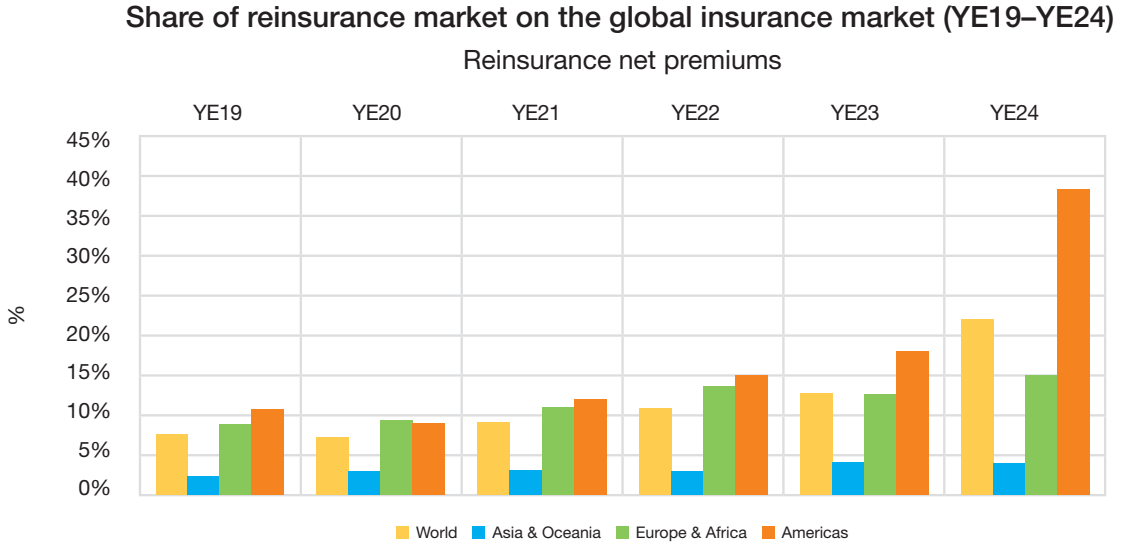
FIGURE 42



Source: IAIS SWM 2025 (GRMS)

The bottom chart of Figure 42 displays reinsurance premiums origin and destination using year-end 2024 GRMS data. The IAIS monitors the size of the global insurance and reinsurance market, in particular the share of reinsurance in the global insurance market. The global insurance market estimate covers both direct insurance and reinsurance premiums, whereas the reinsurance market estimate covers reinsurance premiums only. Figure 43 displays aggregate

FIGURE 43



Source: IAIS SWM 2025 (reinsurance component, GRMS, quantitative component)

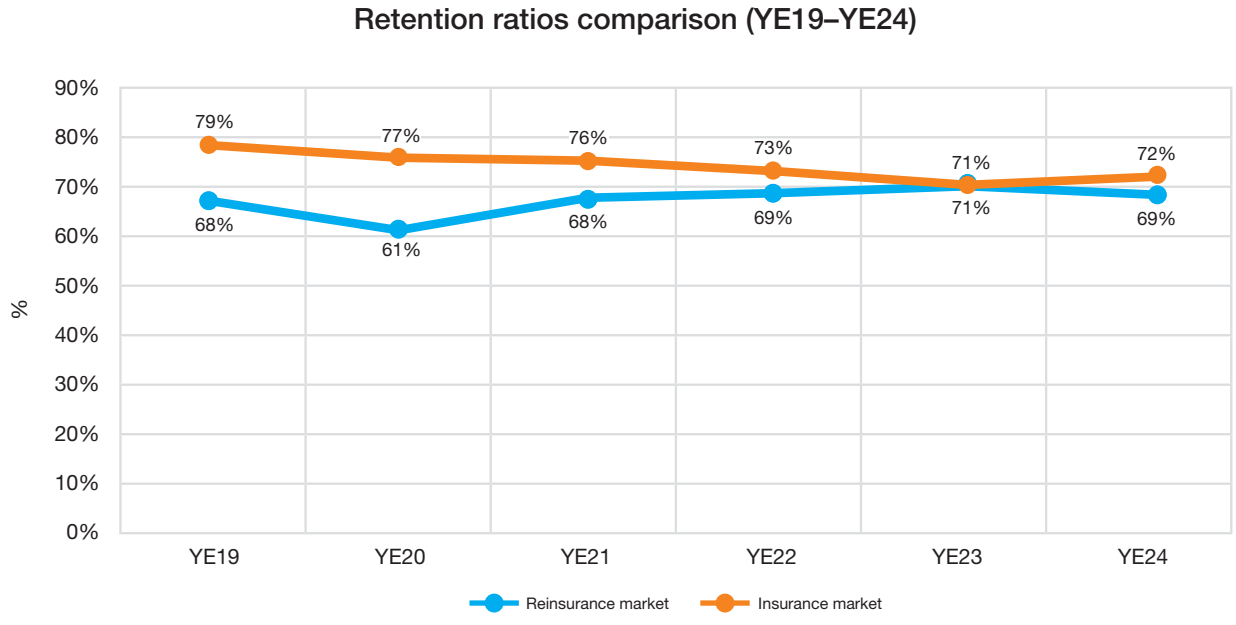
and regional shares of the reinsurance market in terms of net premiums. The global net insurance market covered by the SWM was approximately $5.5 trillion in 2024. The size of the global net reinsurance market covered by the SWM was approximately $1.2 trillion. In total, reinsurance accounted for about 22% of all global net insurance premiums covered by the SWM at year-end 2024, with the US reporting full scope SWM reinsurance component data in 2025, which was a major driver for the increase both of the Americas region and the global reported premiums. The usage of reinsurance differs across regions, with the lowest levels reported in Asia and Oceania (3.9% of net insurance premiums in 2024) and the highest levels reported in the Americas (38.5% of net insurance premiums in 2024).

6.3 RETROCESSION AND RETENTION

The IAIS also monitors the amount of retrocession in the global reinsurance market. Retrocession is a contract between a retrocession provider (the reinsurer) and an original reinsurer (the reinsured) that assumed premiums in a contract with a primary insurer (the insured). Retrocession is placed to provide additional capacity to the original reinsurer or to reduce the original reinsurer's risk of loss. There are material differences in the use of retrocession across regions, with the Americas driving the increase in the aggregate measure due to the US that began reporting full scope of SWM reinsurance component data in 2025.

The retention ratio indicates the percentage of gross premiums that are not reinsured or retroceded, and it is calculated as the ratio of net premiums to gross premiums. Reinsurance retention ratios indicate the extent to which reinsurers retain risks rather than buying insurance. In 2024, for the SWM sample, retention ratios slightly diverged for the reinsurance market and the overall insurance market which includes primary insurance business conducted by insurers and reinsurers (72% for the insurance market, 69% for the reinsurance market).

FIGURE 44



Source: IAIS SWM 2025 (blue line: reinsurance component and GRMS; orange line: quantitative component)

Figure 44 shows that the retention ratios for the overall insurance market are decreasing, while the reinsurance market remained broadly stable at around 70% in recent years, except for 2020.

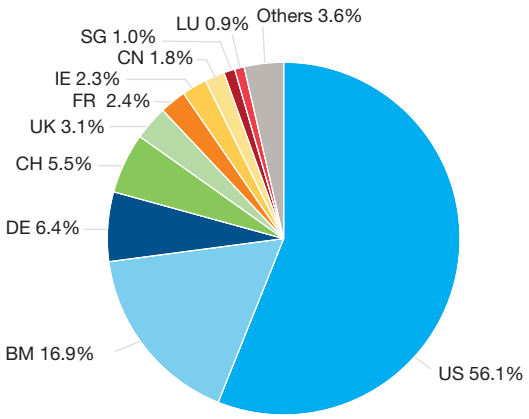
6.4 REGIONAL DISTRIBUTION OF THE REINSURANCE MARKET

Figure 45 illustrates the regional distribution of gross and net reinsurance premiums in 2024. Based on the data received, the five largest reinsurance markets are the US, Bermuda, Germany, Switzerland and the UK. However, these results may be influenced by different reporting scopes applied across jurisdictions, with some jurisdictions not reporting all reinsurance market activities to the IAIS. The top 10 jurisdictions ranked by reported net reinsurance premiums are largely similar to those ranked by gross reinsurance premiums. The US and Bermuda account for almost 75% of all reported global reinsurance premiums, according to the data received.

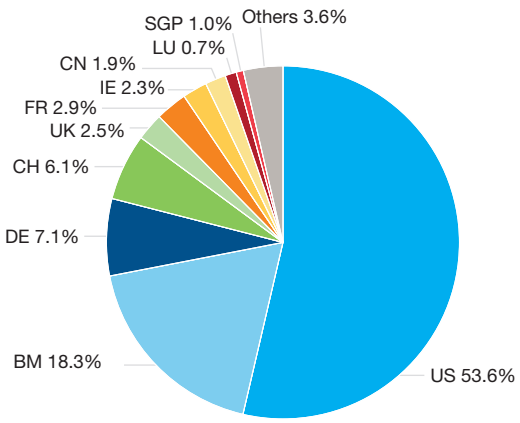
The US and Bermuda lead the reinsurance market, representing 75% of global premiums. However, these figures are influenced by reporting differences.

FIGURE 45

Share of reinsurance gross premiums by jurisdiction in per cent (YE24)

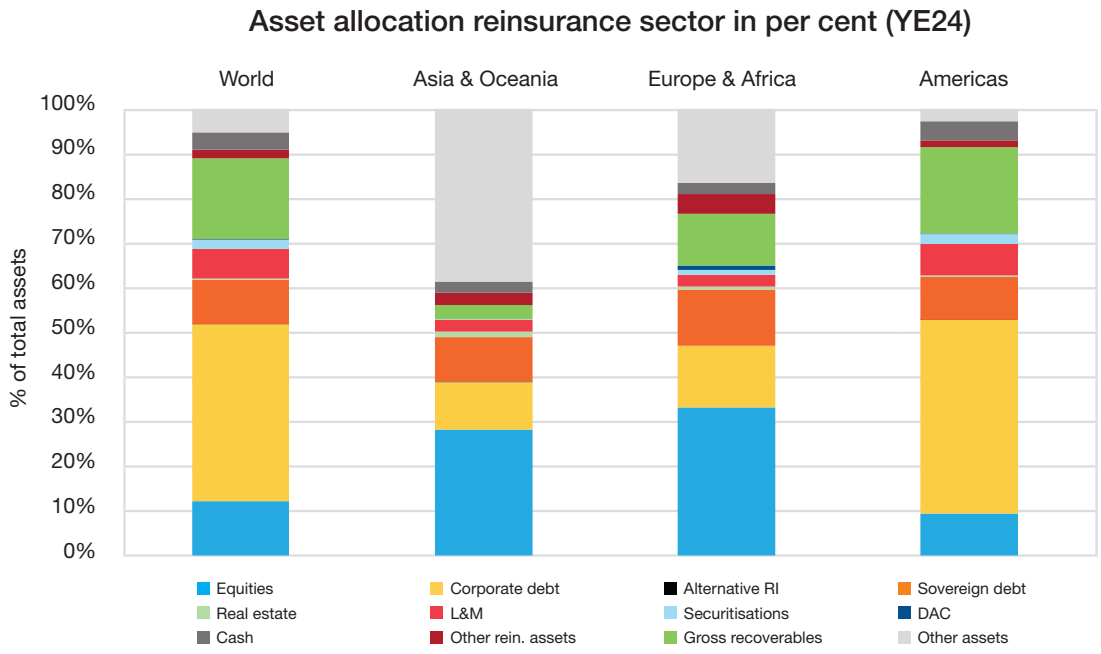


Share of reinsurance net premiums by jurisdiction in per cent (YE24)



Source: IAIS SWM 2025 (reinsurance component and GRMS)

FIGURE 46



Source: IAIS SWM 2025 (reinsurance component and GRMS)

6.5 REINSURANCE ASSET ALLOCATION

Figure 46 shows the regional distribution of reinsurance asset allocations, as derived from the IAIS reinsurance data collections. At the aggregate level, the principal asset classes are corporate debt (40%) and equities (12%). Exposures to equities are higher in Europe and Africa (33%) and in Asia and Oceania (28%). In contrast, reinsurers in the Americas have the majority of investment exposures in corporate debt (43%) and gross recoverables (19%). Overall, reinsurers maintain limited investments in securitisations and real estate.

At year-end 2024, in comparison to the insurance market, the reinsurance market had higher shares of corporate debt (40% compared to 28%) and lower shares of sovereign debt (10% compared with 18%).

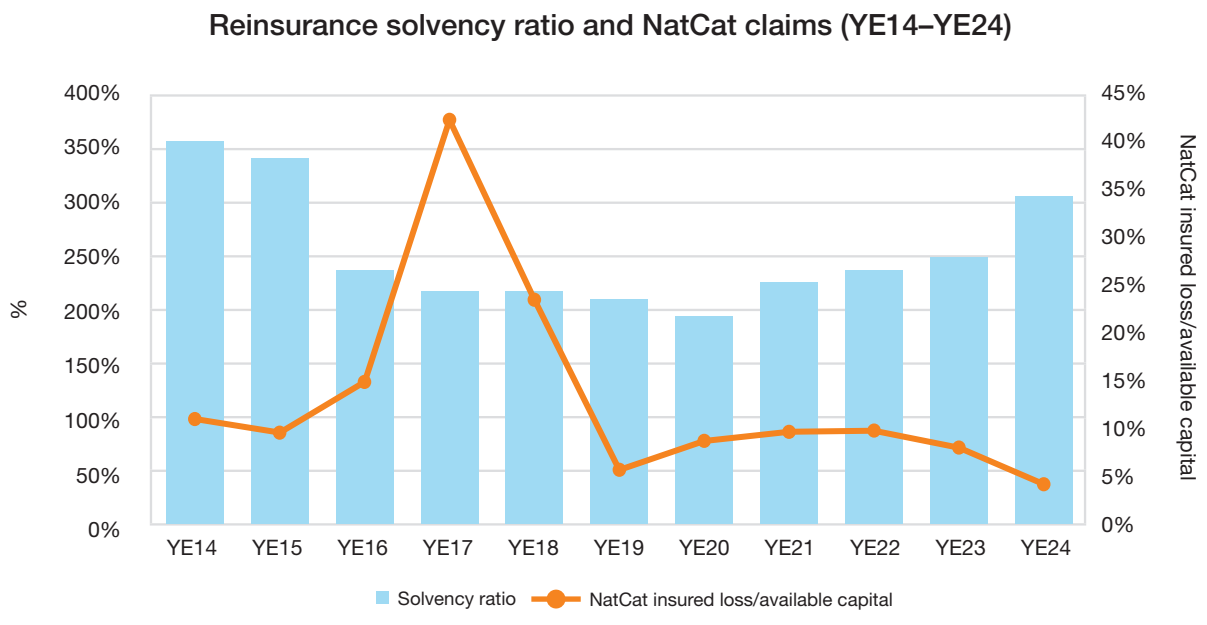
6.6 REINSURANCE SOLVENCY AND CAPITAL

Figure 47 shows the aggregate solvency ratios for the reinsurers included in the IAIS reinsurance data collection over time. Following a decline from 2014 to 2020, solvency ratios in the global reinsurance sector have been on a steady upward trajectory since 2021. The recent trend of reinsurers' solvency ratios does not match the trend of the overall insurance sector solvency ratios, which are broadly stable at higher levels in recent years.

For NatCat developments, data on insured losses from the Swiss Re Institute were used.[58] The measure of available capital was based on IAIS SWM data. The comparison shows that even in 2017, which saw the highest amounts of NatCat claims (due to three major F4/F5[59] category hurricanes – Harvey, Maria and Irma), the claims reached a maximum of 42% of the total amount of available capital. In 2024, the ratio of NatCat insured losses to available capital decreased to 4%. However, the decrease in the ratio was driven by a substantial increase (due to the SWM reinsurance component reporting of the US in 2025) in the available capital collected through SWM data, which outpaced the increase in NatCat insurer losses.

Reinsurers maintained strong solvency positions at the end of 2024, with solvency ratios on a steady upward trajectory since 2021.

FIGURE 47

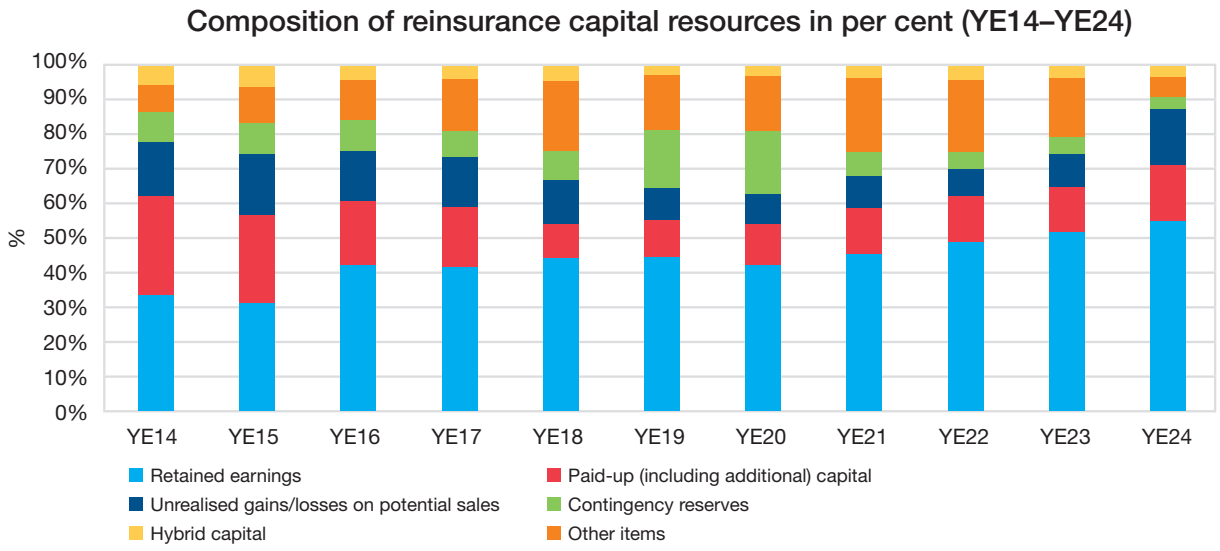


Sources: IAIS SWM 2025 (reinsurance component and GRMS); Swiss Re Institute

[58] See https://www.sigma-explorer.com/ and https://www.swissre.com/institute/research/sigma-research/sigma-2025-01-natural-catastrophes-trend.html.

[59] Based on the Saffir-Simpson hurricane wind scale, which classifies hurricanes that exceed the intensities of tropical depressions and tropical storms into five categories distinguished by the intensities of their sustained winds.

FIGURE 48

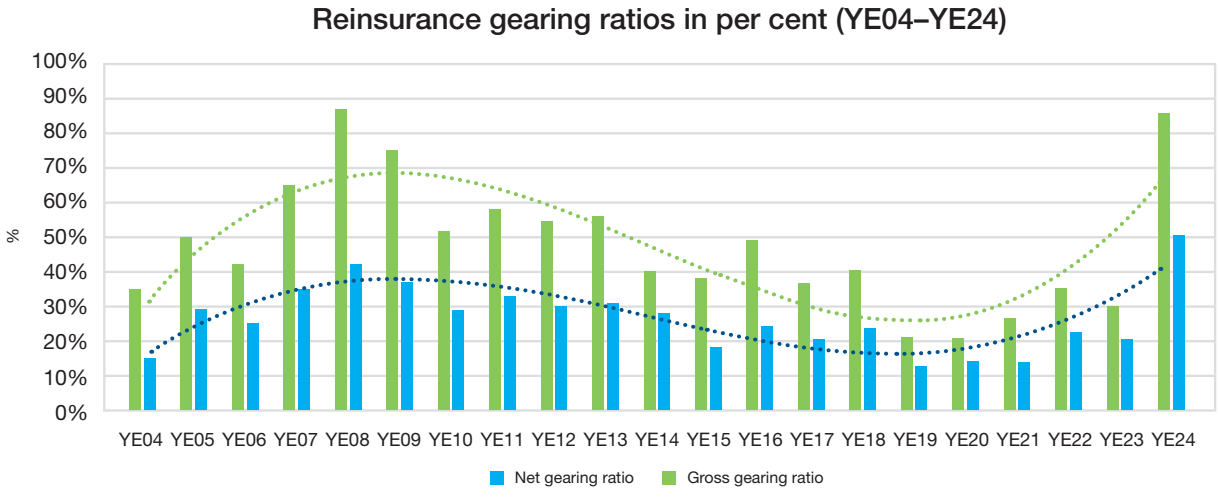


Source: IAIS SWM 2025 (GRMS)[60]

Figure 48 shows stability in the composition of reinsurers' capital resources since 2014. Year-end 2024 was marked by increases in the shares of retained earnings and unrealised gains.

Figure 49 illustrates declining gearing ratios[61] between 2008 and 2019, meaning that capital resources were growing more rapidly than recoverables from retrocession. Reported gross and net gearing ratios increased in 2024. The year-end 2024 results are affected by the SWM reinsurance component reporting from the US in 2025.

FIGURE 49



Source: IAIS SWM 2025 (reinsurance component and GRMS)

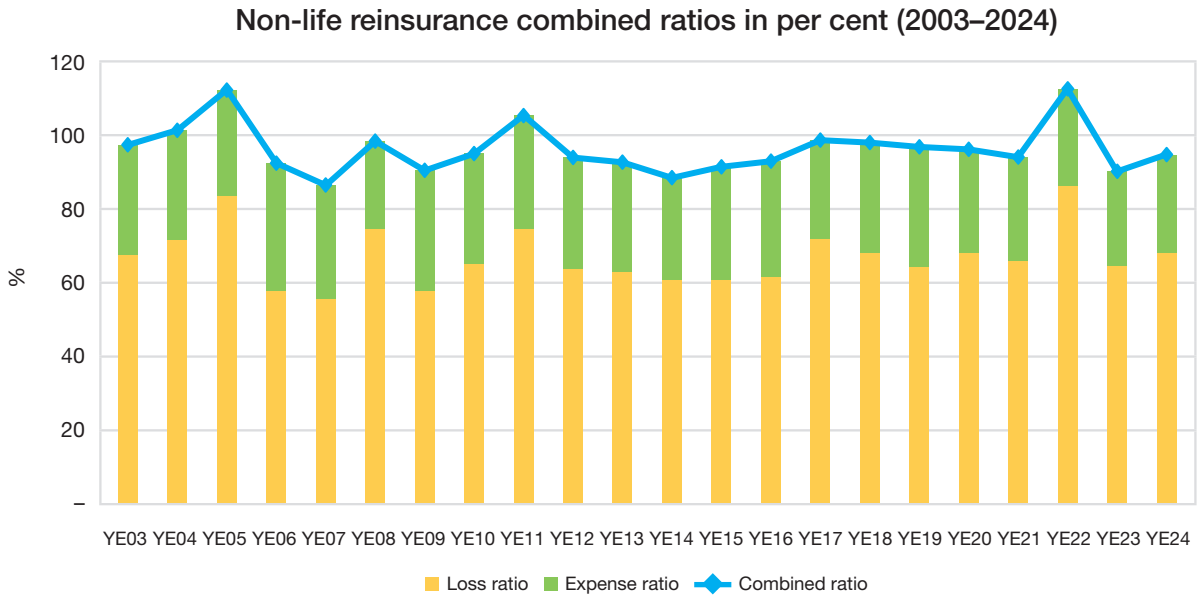
[60] From 2019 to 2021, this data was collected through the SWM reinsurance component.

[61] The gross gearing ratio is defined as the ratio of gross recoverables from reinsurance and retrocession divided by total capital resources. The net gearing ratio is the ratio between net recoverables from reinsurance and retrocessions divided by total capital resources. "Net" recoverables refers to net of collateral and offsetting items.

6.7 REINSURANCE PROFITABILITY

Figure 50 shows developments in the average net combined ratio of the global non-life reinsurance market covered by the SWM data collection. The combined ratio was at 95% in 2024, after a sharp increase in 2022, which marked the highest value since 2005.[62]

FIGURE 50



Source: IAIS SWM 2025 (GRMS)[63]

The non-life reinsurance market's combined ratio was stable at 95% in 2024, recovering from a sharp increase in 2022.

[62] The 2005 combined ratio was driven by Hurricane Katrina in the US, which caused losses of $82 billion. The high combined ratio in 2011 was driven by the severe tsunami in Japan and flooding in Thailand. The increase in 2022 was driven by high insured losses from NatCat events (Swiss Re: https://www.swissre.com/institute/research/sigma-research/sigma-2023-01.html).

[63] From 2019 to 2021, this data was collected through the SWM reinsurance component.

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