MAJOR EMERGING RISKS IN THE INSURANCE SECTOR

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Insurance in transition: managing change in a rapidly evolving environment

Financial institutions worldwide are facing a rapidly evolving risk landscape that demands strategic foresight and proactive adaptation. In addition to geopolitical tensions and the accelerating impact of climate change, a range of structural and technological challenges are reshaping financial markets. These dynamics are not only reshaping financial markets but also have a profound impact on the insurance sector, which must adapt to the evolving risks.

Demographic shifts and varying customer needs

One of the most pressing challenges for the insurance sector are demographic and social change, particularly an aging population with rising life expectancy and diverging generational priorities and behaviours. While some individuals tend to integrate technology into all aspects of daily life and show interest in sustainable, digital and efficient solutions, others often require greater attention in relation to highly personalized services, such as in healthcare and elder care. For insurance providers, the primary challenge lies in effectively addressing the evolving and diverse needs of each group represented within their portfolios. This trend is closely linked to the future of statutory social security and healthcare systems, alongside the major challenge of establishing a sustainable pension framework.

Climate change and the rising cost of claims

Another major challenge is climate change and its effect on the level of claims within the insurance industry. Insurance is based primarily on the pooling of risks and the resulting diversification. Natural catastrophe (Nat Cat) insurance needs diversification from a geographic and/or a peril perspective to be able to offer affordable prices to cover these risks. However, due to a fragmented market, insurers often act locally rather than on a (trans)national level and rely heavily on reinsurance. This raises the challenge of uninsurability of risks, as the insurance sums paid out do not cover the actual losses of the policyholders, resulting in a large protection gap, particularly in the case of Nat Cat insurance.

However, in the future we will certainly have to expect more frequent and severe Nat Cat events, impacting exposure which is located in areas that are becoming higher risk. Moreover, Nat Cat risks and insurance premiums are calculated using models that rely on historical data which can be limited when it comes to rare weather events like storms or floods resulting from climate change. Consequently, this poses a major challenge for insurance companies, which will have to adapt their business models and internal models accordingly.

Managing geopolitical risk while exploring market potential

Geopolitical risks are also gaining importance and require close monitoring —especially for Austrian insurance groups with significant market shares in Central, Eastern and Southeastern Europe (CESEE). These risks pose challenges, but also open opportunities. Austrian insurers generate a substantial share of their premiums in CESEE and hold strong market positions, with market shares exceeding 30% in several countries. Alongside potential adverse effects from the Russian invasion in Ukraine, the region and its markets offer high potential as far as the development of the insurance markets are concerned. Particularly the growth of insurance density and insurance penetration present great future upside.

Balancing risk and opportunity in a digitally evolving landscape

Moreover, digital technologies, particularly AI, are transforming both the opportunities and risks faced by the insurance industry. As digitalisation accelerates, risks like IT system vulnerabilities, increased incident likelihood and dependencies on large service providers are becoming more prominent, creating new concentrations of risk. Insurers must respond with robust and proactive risk mitigation strategies.

However, this is also true for supervisors, as they are equally affected and must evolve to keep pace with technological change. Our role is to ensure that companies manage risks effectively and only assume risks they can understand and manage supported by a clear, technology-neutral legal framework. However, in today's dynamic environment, detailed regulations often lag behind innovation.

> **Effective and adaptive supervision is needed to keep pace with change for insurances in transition.**

Despite these challenges, technological progress presents significant opportunities for both insurers and supervisory authorities. For regulators, the increasing availability of data enables a more refined and more risk-based supervision. We can further expand data-driven supervision, allowing for earlier detection of emerging risks and more targeted interventions. To fully explore these opportunities, the legal framework must be flexible enough and open to innovation and new developments in the markets. In fast-moving environments, overly prescriptive rules may fail to keep pace and risk stifling innovation. Supervisors must rise to the challenge to ensure effective supervision in a rapidly changing world and keep up with the pace of change.

ANITA FOX
Director of the Michigan Department of Insurance and Financial Services – National Association of Insurance Commissioners (NAIC)

U.S. insurance regulators adapt financial oversight to new investment landscape

In recent years, it has become apparent that the investment landscape in the financial sector has changed, becoming more complex and requiring heightened oversight from regulators. The quantitative easing and low-interest rate environment following the Great Financial Crisis created growth, but the low rates forced sophisticated investors, including insurers, to shift their vision of investments from traditional assets to more alternative investments in order to attain yield and combat inflation.

This shift happened in a relatively short timeframe for U.S. insurers. According to the National Association of Insurance Commissioners' (NAIC) Capital Markets Bureau (CMB), in the years following the financial crisis (2009-2014), insurer investments in hedge funds doubled; private equity (PE) nearly doubled, from $38 billion to $70 billion; and real estate increased by 50%. Since then, those numbers have increased, while investments in more traditional assets, such as bonds, have decreased by about 9%.

While bonds and common stocks still make up the vast majority of U.S. insurer investments (about 74%), it is evident that a move to alternative investments and private credit among insurers will continue, even with the recent rise in interest rates.

In addition to alternative investments, U.S. regulators are seeing a movement of PE ownership into the insurance industry, especially of life insurers. Currently, the CMB notes that there are about 137 PE-owned insurers. Although this is a trend that has been occurring for many years, it has received attention in recent years given the overall structural shift in the life insurance sector.

Investments in alternative investments add a layer of complexity that regulators must understand. Further, in concert with, but not exclusive to, PE ownership and the growing use of alternative investments in life insurance, regulators are also seeing increased use of cross-border asset intensive reinsurance. Often, as a result, assets in these structures, including alternative investments, fall outside the purview of the U.S. risk-based capital framework. Therefore, U.S. state insurance regulators are taking a number of steps to improve transparency on capital governance and ownership structures along with international collaboration and coordination.

Since 2022, the NAIC and U.S. state insurance regulators have discussed the "13 Considerations" addressing financial transparency around PE-affiliated insurers and related investment activities, including conflict of interest issues, privately structured securities, and offshore/complex reinsurance, among others. Each of these considerations is being reviewed and resolved by the applicable NAIC groups assigned to them.

> **Investments in alternative investments add a layer of complexity that regulators must understand.**

More recently, in February 2025, the NAIC launched its Risk-Based Capital (RBC) Model Governance Task Force to modernize and strengthen the RBC framework to respond to emerging market risks and support innovation. The goal is to develop a set of guiding principles for the RBC framework to facilitate a consistent approach to future adjustments. These principles will serve as a strategic foundation to ensure that all revisions to the RBC framework are enhancements that uphold its integrity, adaptability, and global competitiveness.

As the insurance sector continues to grow cross-border in nature, U.S. state insurance regulators understand that the regulatory changes we are considering could affect the broader global markets and regulatory requirements in other jurisdictions. As such, we are working to ensure coordination with our colleagues in other jurisdictions via international organizations such as the International Association of Insurance Supervisors (IAIS), and the Organisation for Economic Co-operation and Development (OECD), and through our extensive bilateral discussions. For example, at the IAIS, the NAIC provides a significant amount of data to support the annual Global Insurance Market Report (GIMAR), which has recently included focus on the use of alternative investments. Additionally, the IAIS is currently working to finalize an issues paper on structural shifts in the life insurance sector which intends to provide a framework for understanding macroprudential and financial stability implications of this shift.

Change is inevitable, and that means we need to work to understand it. The work U.S. state insurance regulators are doing, both domestically and internationally, is just that – working to understand the challenges, risk, and opportunities of this changing landscape and what needs to be done to ensure consumers remain protected and our supervisory approaches and regulatory systems remain robust and transparent.

PETRA HIELKEMA

Chairperson – European Insurance and Occupational Pensions Authority (EIOPA)

Managing climate risk while balancing calls for regulatory simplification

Climate change poses multifaceted risks to insurers, including physical risks from extreme weather events and transition risks form the shift to a low-carbon economy. In light of this, EIOPA encourages a forward-looking management of these risks to ensure the solvency and viability of the industry.

One way to do this is through the Own Risk and Solvency Assessment, or ORSA. EIOPA's Opinion on the supervision of the use of climate change risk scenarios in the ORSA marked a key milestone in EIOPA's sustainability activities, supporting the integration of climate-related risks into insurers' risk management practices in a structured and forward-looking way.

The results of the monitoring exercise show a clear and very positive shift in the undertakings risk management of climate change risk, which is increasingly being integrated into insurers' risk management processes. Contrary to the situation observed in 2021, most insurers in the scope of the exercise now include climate change scenarios in their ORSA, considering both transition and physical risks, and scenario analysis has become a key element in assessing the financial impact of these risks.

Stress testing is also a valuable tool in assessing insurers' resilience to climate related risks. EIOPA incorporated a natural catastrophe scenario in the 2018 EU-wide insurance stress test and has published a paper setting out methodological principles that can be used to design bottom-up stress test exercises that aim to assess the vulnerability of insurers to climate risks. More recently, EIOPA participated in the one-off "Fit-For-55" climate scenario analysis, a joint exercise with the European Banking Authority, the European Securities and Markets Authority, and the European Central Bank. This exercise, at the invitation of the European Commission, showed that under the scenarios examined, transition risks alone are unlikely to threaten financial stability. However, when transition risks are combined with macroeconomic shocks, they can increase losses for financial institutions and may lead to disruptions. These findings underlined the need for financial institutions to integrate climate risks into their risk management in a comprehensive and timely manner.

One challenge for supervisors and the insurance industry to assess and manage sustainability risks relates to the availability of data and loss models. Comprehensive open-source data is needed to improve the accuracy of the risk assessments, in conjunction with open-source models integrating forward-looking climate considerations. EIOPA is addressing this challenge through knowledge-sharing initiatives, workshops. For example, EIOPA developed the "CLIMADA-app", a user interface to facilitate the use of the CLIMADA open-source catastrophe model.

It's important to be pragmatic when finding the balance between simplification and sustainability.

There are of course always areas for improvement. Within the Solvency II framework, there is scope to better reflect climate sensitivity. For example, there is room within the ORSA to strengthen guidance on incorporating long-term climate scenarios, particularly those related to the causes of global warming. There is also the potential to refine stress testing practices to capture the financial impacts of both physical and transition risks at a granular level.

Given growing calls for reducing regulatory burdens, it is important to find a pragmatic approach in striking the right balance between simplification and sustainability. Overall, EIOPA's view is that a more efficient and proportionate regulatory framework will enable insurers and pension funds to focus on what matters most: providing innovative, affordable, and sustainable financial solutions to European citizens and businesses. Cutting red tape and eliminating unnecessary complexity can provide opportunities for growth, investment, and job creation.

However, simplification cannot be at any cost, nor can it undermine financial stability or high standards of consumer protection. This is also true of sustainability targets and economic ambition must always be aligned with environmental and social responsibility. As a supervisor, EIOPA has a critical role to play in promoting sustainable finance, mitigating climate risk, and ensuring that our industries contribute to a more resilient and equitable future.

EIOPA therefore aims for a balanced approach to simplify rules where possible while ensuring that EU (re) insurers and occupational pension funds continue to have sufficient access to high-quality, standardized and consistent sustainability data. Especially in the context of mounting climate risks, such sustainability data are important reference points that allow for a sound assessment of sustainability-related risks and the provision of reliable information to consumers and investors.

As the insurance sector navigates the complexities of climate change, EIOPA will continue its work to build up sustainable insurance and pensions, including by addressing protection gaps, for the benefit of EU citizens and businesses.

MICHAEL STEEL
Head of Insurance Solutions – Moody's

Understanding and mitigating the increasing natural catastrophe risks

Natural Catastrophe (Nat Cat) losses are rising, both in frequency and severity. This is driven by a combination of factors including inflation, urbanization and a warming planet. If current trends persist, global Nat Cat insured losses will reach an annual average of USD 150-200 billion by the end of this decade. Disasters will displace more and more people each year. This projected increase underscores the need for effective campaigns of targeted risk reduction, higher rates of insurance and other forms of risk transfer.

Risk mitigation is fundamental to limit the escalation of Nat Cat losses, through the siting and protection of buildings and physical infrastructure as well as the financial approaches to managing that risk. Measures such as improved urban planning, stricter building codes, and investment in resilient infrastructure can reduce the vulnerability of communities to natural disasters. However, these efforts require sustained commitment and collaboration between public and private sectors. Moody's is at the forefront of aiding risk management and reduction, including assessing Nat Cat risks, and providing tools to help manage them.

As a leading provider of insights on interconnected risks, Moody's has developed the most comprehensive Nat Cat models available to the insurance, financial and regulatory markets. These models help all stakeholders in the risk quantification and risk transfer chain to make informed pricing and accumulation decisions about current and future risks.

Another vital strategy for mitigating the impact of Nat Cat losses and addressing the uninsured protection gap is the better use of risk transfer to achieve the most efficient deployment of capital resources. Diversification across different perils and countries can enhance the resilience of financial systems to Nat Cat events (severe losses are unlikely to occur at the same time across different perils or geographies). The role of diversifying risk is currently left to reinsurers and the largest insurers with their multi-territory portfolios.

The European Union could have a significant role in promoting and structuring public-private partnerships. A recent paper by the European Central Bank and the European Insurance and Occupational Pensions Authority draws on Moody's Europe Flood HD models to demonstrate that by pooling flood risk across Europe, the cost of capital per unit of premium could be reduced by up to 40% and as a consequence, the premium for policyholders could reduce by around 26% overall, making insurance more affordable. If the penetration rate of insurance increases, further reductions in premium are anticipated, highlighting the potential benefits of broader insurance coverage and collaborative risk-sharing mechanisms.

Insightful risk models, mitigation & efficient use of capital are crucial to combat Nat Cat losses.

Such ambitious collaborative risk-sharing and pooling mechanisms will need to bring together not only public-private partnerships and innovation within the insurance sector, but also increasingly other financial institutions. For banks, for example, this means testing mortgage and other loan portfolios to analyze whether insurance is in place to protect against catastrophic losses. This will be particularly important for flood coverage, especially for countries that have previously had a desultory attitude to offering flood protections.

All these ambitions require institutions to move towards a common language of risk—one that bridges technical modeling with strategic decision-making. This shared vocabulary around probabilities and portfolio-wide metrics is needed to facilitate clear communication across risk, finance, and executive teams. Nat Cat exposures are not only required to be collated and quantified but also integrated into broader enterprise risk frameworks. A harmonized approach to levels of risk facilitates regulatory engagement and cross-sector collaboration, both of which are critical to building systemic resilience. Analysis using comprehensive Nat Cat models helps form the foundation of such a common language of risk.

In conclusion, beyond well-funded campaigns of risk reduction, insightful risk models, mitigation, and efficient use of capital are crucial to improve the management and diversification of rising Nat Cat losses. Moody's is committed to playing a vital role in helping to advance these efforts, providing tools and insights to enhance our collective resilience against natural catastrophes. By working together and leveraging innovative solutions, we can better protect our communities and economies from the growing threat of Nat Cat events.