INSURANCE PROTECTION GAPS

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Bridging insurance protection gaps: Regulation, incentives and coordination

The growing frequency and severity of natural catastrophes in Europe—exacerbated by climate change—has exposed a widening insurance protection gap. According to EIOPA's dashboard, only about 25% of losses from extreme weather events in the EU were insured in the past.[1] This threatens both individual and business resilience, and macroeconomic stability and public finances. Addressing this challenge requires a coordinated, multi-layered approach involving regulatory frameworks, national schemes, and EU-level mechanisms.

The role of regulatory frameworks: Solvency II and beyond

Solvency II, the EU's prudential framework for insurers, plays a foundational role in ensuring the financial soundness of insurers and promoting risk-sensitive capital requirements. Enhancing Solvency II to better integrate catastrophe risk modelling and reward risk mitigation efforts could help as it is very important to reflect the evolving risk appropriately to ensure that the capital requirement is adequate. For instance, in light of climate change, new scientific insights and recent catastrophic events, it is important to ensure that the calibration of the natural catastrophe parameters of the standard formula remain sound. EIOPA recently performed the reassessment of the natural catastrophe risk standard formula capital charges.[2] Additionally, impact underwriting—where insurers integrate climate adaptation into pricing and coverage—can align financial incentives with societal resilience. Regulators can support this by recognizing the risk reduction effect of adaptation measures in capital requirements. Here, EIOPA is currently working on an assessment of the prudential treatment under Solvency II of adaptation measures in Nat Cat insurance. Moreover, Solvency II could be adapted to better support agricultural and climate-sensitive sectors, where insurance penetration remains low. This would require more granular risk modelling and potentially the development of open-access catastrophe models to improve transparency and trust.

National schemes: Lessons from CCR and CCS

France's Caisse Centrale de Reassurance (CCR) and Spain's Consorcio de Compensación de Seguros (CCS) offer valuable models of public-private partnerships. These schemes pool risks nationally, provide mandatory or semi-compulsory coverage, and are backed by state guarantees. They have proven effective in maintaining insurability and spreading risk across populations and time. Such schemes could be adapted or expanded in other Member States, particularly where market-based solutions are insufficient. However, national schemes must be carefully designed to avoid moral hazard and ensure that premiums reflect actual risk. Coordination with EU-level frameworks can help maintain subsidiarity while promoting consistency.

EU-Level mechanisms: Towards a coordinated response

Recognizing the fragmented landscape of national responses, the EIOPA and the ECB have proposed a two-pillar EU-level solution[3]:

- An EU public-private reinsurance scheme: This would pool catastrophe risks across Member States, leveraging diversification and economies of scale. Funded by risk-based premiums from insurers or national schemes, or funded fully privately, it would provide a backstop for extreme losses, helping to stabilize insurance markets and maintain affordability.
- An EU disaster risk financing fund: This would support public infrastructure recovery, conditional on pre-disaster risk mitigation measures. It would reduce fiscal shocks and incentivize proactive adaptation.

These mechanisms should complement national schemes, not replace them, preserving subsidiarity while enhancing resilience.

Joint reinsurance arrangements, including EU-wide catastrophe bonds or backstops, could further enhance insurability in high-risk areas. These instruments would provide liquidity post-disaster, reduce reliance on ad hoc public aid, and stabilize insurance markets.

Conclusion

Closing the insurance protection gap requires a comprehensive strategy that combines regulatory developments, market innovation, and EU-level coordination. To effectively address emerging protection gaps, a common EU methodology for identifying and monitoring gaps is essential. EIOPA's dashboard on natural catastrophe protection gaps is a step in this direction. Harmonized data collection, risk assessment, and scenario analysis would enable better policy coordination and targeted interventions. Solvency II must evolve to better reflect climate risks and reward resilience. National schemes like the CCR and CCS offer proven models, while EU-level mechanisms can provide scale and diversification. Finally, financial innovation will be key to maintaining insurability and affordability of Nat Cat insurance.

1. *Dashboard on insurance protection gap for natural catastrophes - EIOPA*
2. *Opinion on the 2023/2024 Reassessment of the Nat Cat Standard Formula - EIOPA*
3. *EIOPA and ECB joint paper: Towards a European system for natural catastrophe risk management - EIOPA*

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Collaboration is essential to reduce the climate insurance protection gap

Europe is the fastest warming continent. From 1981 to 2023, natural catastrophes have caused approximately €900 billion in direct economic losses within the EU. As these weather events intensify, NatCat insurance has become increasingly important in protecting people's livelihoods. Furthermore, where NatCat insurance protection gaps exist, this can slow economic growth and competition through delayed economic recovery. They can also lead to fiscal pressure on governments and increased exposures to credit risk for banks and other financial service providers.

Last January, Ireland witnessed the impact climate insurance protection gaps have on households and businesses following Storm Éowyn. The storm is currently estimated to have led to insurance losses of up to €300 million in Ireland, the biggest windstorm loss for Ireland in at least 45 years.

Despite relatively positive penetration rates for property insurance, a flood insurance protection gap continues to exist in Ireland. According to a report published by the Central Bank of Ireland in 2024, 1 in 20 buildings have limited or no access to flood insurance. A challenge faced by many countries is the increase in urbanisation in high-risk (flood-prone) areas. In this context, it is important to find a balance between building new houses to address housing shortages, while not widening the insurance protection gap.

The insurance sector has a key role to play in addressing insurance protection gaps. However, insurance-based solutions cannot address all NatCat risks on their own, nor is it desirable for insurance to remove incentives to proactively plan for and manage disaster risk. Public authorities also have a key role to play in preserving insurability, promoting adaptation, and potentially helping to cover risks that are deemed uninsurable.

Irish government policy remains focused on the development of a sustainable, planned, and risk-based approach to managing flooding. In line with this policy approach, scaling up climate adaptation and mitigation to reduce the risk and increase resilience is crucial. This will rely on cooperation and coordination between all relevant stakeholders, both public and private.

Engagement with key stakeholders in the context of the flood insurance protection gap on a regular basis happens through an interdepartmental co-ordination group. In addition, an industry working group has also been established. These mechanisms allow for information sharing, direct channels of communication with industry, and discussion regarding the development of flood defence schemes, humanitarian schemes, and new policy.

Scaling up climate adaptation and mitigation to reduce the risk and increase resilience is crucial.

Financial literacy and increasing data availability are key pillars to ensuring that the public is aware of the climate risks and how to protect themselves against such risks. An improvement in qualitative data collection and sharing could also lead to more accurate risk pricing and can assist in the development of innovative insurance solutions. Investment in climate resilient infrastructure should complement governmental engagement with the insurance sector to encourage industry to offer innovative sustainable products and invest sustainably in accordance with the principle "Do No Significant Harm".

International discussion papers have considered the "ladder of intervention" approach based on: (i) the private market (including risk-based pricing and deductions in premiums where consumers mitigate risk where possible); (ii) the public sector (which can be prepared for NatCat events through ex-ante financial and defence measures); and (iii) an EU approach to pool risk.

Ireland is actively engaged in, and welcomes, publications in this area from various international organisations, including the IAIS, OECD and the EU Commission as well as the reports from EIOPA and the ECB, which contemplated what an EU level solution might look like. The prospect of pooling risks at EU level to enhance diversification is a particularly interesting idea. Taking flood as Ireland's most pertinent example – flood events here are reasonably uncorrelated to flood events in the EU. Accordingly, there are likely similar examples for other EU Member States, where diversification benefits could be achieved through such risk pooling.

In any policy deliberation, it is essential that any such measures do not lead to less risk reduction and fewer adaptation measures; lower risk awareness; or inadvertently widening rather than reducing the insurance protection gaps over time.

Reducing protection gaps will require strong and intensive collaboration between governments, supervisors, the insurance industry, and civil society.

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From analysis to action: IAIS efforts to address emerging risks

The IAIS' framework for assessing risks and trends

As a global standard setter, the International Association of Insurance Supervisors (IAIS) places significant emphasis on our work being data driven. The old adage that "what gets measured, gets managed" also applies to our efforts to understand how external risks or emerging trends impact the insurance sector, such as the impact of climate change and digital innovation.

Since its inception six years ago, the IAIS' annual Global Monitoring Exercise (GME) has been instrumental in enabling the IAIS to better examine risks to the sector. It provides the flexibility that allows the IAIS to dive deeper into emerging issues. The GME process includes detailed data gathered from insurance supervisors and globally actively insurers, together with discussions with supervisors and stakeholders across the insurance sector to consider in-depth the outcome of the data analysis, and what it means in terms of risks and supervisory responses. The final public product is the Global Insurance Market Report (GIMAR), which is published in December with a preview published in July. The IAIS also develops special topic editions of the GIMAR to delve deeper into relevant topics:

- In 2021 the IAIS published a special topic edition of the GIMAR on climate risk. The report assessed how insurance sector investments are exposed to climate change. The IAIS was able to draw on unique quantitative and qualitative data gathered from across the IAIS' membership to better understand insurers' asset-side exposures to climate-related risks, as well as supervisors' views on these risks.
- In 2023, the IAIS published a special topic edition on cyber risk, presenting an analysis of the risks and trends associated with cyber insurance coverage, cyber resilience in the insurance sector and the impact these risks may have on financial stability.
- Later this year, we will publish a special topic edition on the potential financial stability implications of natural catastrophe (NatCat) protection gaps. The report will focus on how insurance protection gaps may create spillovers to other parts of the financial system and the real economy, such as banking, real estate, households, and government finances.

Emerging risks and trends continue to be monitored in the regular, annual GME process. For instance, this year the GME will consider the extent to which insurers are able to identify cyber risks, apply policy exclusions and limit their exposure. The IAIS will also monitor supervisory activities to gain insights into developments within the cyber market.[1] The IAIS also continues to improve its insights into climate-related risks, including by gathering more detailed information on insurers' assets to enhance the analysis of insurers' investment exposure to climate-related risks; and since 2023, also collecting information on insurers' liability risks related to exposures to NatCat events. This is work in progress, supervisors continue to develop their capabilities to identify, design and implement appropriate and relevant data collections that can support climate-related risk assessments.

Supporting supervisory responses to emerging risks

The IAIS' assessment of emerging trends in the insurance sector is designed to inform an effective supervisory response to the risks and opportunities that these may present. In recent years, the IAIS' focus has been on the shift from analysis to supervisory action on emerging risks – in particular, adjusting our globally recognised standards for insurance supervision, where necessary, and supporting our members in their implementation, including by promoting an understanding of supervisory issues and sharing good supervisory practices.

Climate risk

In April, the IAIS published an Application Paper[2] that provides a comprehensive overview of how the IAIS' Insurance Core Principles (ICPs) can be applied to address climate-related risks. This comprehensive paper aims to support supervisors in effectively integrating climate-related risks into their supervisory practices, thereby strengthening the resilience of the global insurance sector. The paper outlines good practices and guidance for supervisors in several areas, including the role of supervisors in assessing climate-related risks and the integration of climate-related risks into corporate governance, risk management and internal controls. It also considers the impact on valuation and investment practices and outlines steps to integrate climate risk in into supervisory reporting, public disclosure and macroprudential supervision. The paper provides supervisors with practical support on how to address group supervisory issues, the role of climate-related risk scenario analysis and important market conduct considerations.

The next phase of the IAIS' work on climate risk is to further support our members with practical knowledge and capacity building. This includes work to assess the extent to which NatCat models used by insurers have already embedded climate change as well as a review of existing decision-useful climate metrics disclosed by insurers and those included in supervisory reporting.

Natural catastrophe protection gaps

In recent years, the IAIS has also devoted considerable efforts to supporting supervisors with addressing the issue of widening NatCat protection gaps. NatCat protection gaps are a global challenge, affecting both advanced and emerging market and developing economy (EMDE) jurisdictions. The consequences from these gaps go beyond economic losses, as NatCat events can also have devastating human and societal impacts.

Insurance, including reinsurance, has an important role in enhancing societal resilience, by managing physical risk and the financial impacts of NatCat events. Insurance provides financial protection, enables faster recovery and reduces economic disruption from extreme weather events. Insurance can also incentivise risk reduction and enhance preparedness, helping to limit losses before disasters strike. However, there are significant challenges to insuring NatCat events, as rising risks infer higher insurance costs, making coverage less affordable for those who need it most.

The IAIS has been leading efforts to bring stakeholders together and highlight the importance of this topic in the global policy agenda. For example, in 2023 the IAIS issued a "Call to action"[3] report which made it clear that all insurance supervisors, implicitly or explicitly, have a role in addressing protection gaps. This year, the IAIS developed a G20 input paper[4] for the Sustainable Finance Working Group under the South African G20 presidency, together with the World Bank. The paper provides actionable insights for jurisdictions to narrow the protection gap:

- The paper highlights foundational actions essential for effective insurance-based solutions, including:

  - Building capacity to assess exposure to NatCat events and protection gaps.

  - Implementing risk-based and proportionate supervisory frameworks.

  - Improving financial literacy and risk awareness.

  - Incentivising risk reduction through measures like disaster-resistant building codes and resilient infrastructure.

- The paper emphasises the transformative potential of innovative insurance solutions to reduce risk and limit economic losses, such as, parametric insurance, microinsurance, risk transfer mechanisms (including catastrophe bonds, reinsurance, and regional risk pools).

- The paper also makes it clear that collaboration across stakeholders is key. This includes public-private insurance programmes (PPIPs), which leverage the strengths of governments, supervisors, insurers, and civil society to deliver targeted and scalable solutions.

As a next step, the IAIS will develop a practical resource, together with the World Bank and other partners, that can assist supervisors and policymakers in addressing NatCat protection gaps.

Looking ahead

The role of insurance is critical to provide societal resilience – especially in a changing insurance landscape. Insurance supervisors aim to ensure that insurers can sustainably fulfil this role. By assessing the risks insurers face, supervisors can develop adequate supervisory responses in support of financial soundness and financial stability of the insurance sector, and the financial health of consumers.

IAIS is well-placed to support its membership to tackle emerging trends and challenges across the global insurance sector, including those from accelerating risks such as climate change or cyber. We will continue to take a data-driven approach to support globally consistent supervisory responses to these evolving challenges.

1. *See IAIS (2025b), Global-Insurance-Market-Report-2025-mid-year-update.pdf*
2. *See Application-Paper-on-the-supervision-of-climate-related-risks-in-the-insurance-sector.pdf (2025a),*
3. *See IAIS-Report-A-call-to-action-the-role-of-insurance-supervisors-in-addressing-natural-catastrophe-protection-gaps.pdf (2023),*
4. *See– WBG (2025), G20-SFWG-input-paper-Identify-and-address-insurance-protection-gaps.pdf*

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Is the "Protection Gap" an inevitability?

A recent report by France Assureurs[1], the representative body for the insurance profession in France, underscores that climate change is now perceived as the paramount risk for the insurance sector, on a par with cyberattacks. This entails an increase in the frequency and severity of climatic events (droughts, storms, floods, etc.). These incidents can be acute (such as storms) or chronic (such as rising sea levels), with global repercussions for property, crops, infrastructure, public health, migratory flows, and the entire economy. Insurance is at the forefront: in 2024, French insurers disbursed 5 billion euros in compensation for natural events. Supporting policyholders during these often-critical times is the very essence of our profession.

As risk managers, insurers, and investors, we have a pivotal role to play in the transition to a global net-zero economy. Insurance companies can assist their clients—and more broadly, the economy—in their efforts to mitigate climate change. As investors, they can establish ESG (Environmental, Social, and Governance) criteria in their responsible investment policies and engage in exacting dialogues with the companies in which they trust. However, in property-casualty insurance in the retail market, their ability to influence policyholder behavior remains limited.

Conversely, the role of insurers in adapting to climate change is central. Through their expertise in risk modeling and risk management, insurers contribute to a better understanding, prevention, and reduction of the impacts of climatic hazards. And as risk bearers, they protect households, businesses, and public institutions by absorbing the economic shocks related to these events.

The 2024 SIGMA study by the Swiss Re Institute[2] reveals significant disparities between countries in terms of coverage against climatic disasters. The global "protection gap" has reached a record level of 385 billion dollars: nearly three quarters of losses are uninsured.

In this context, France stands out with a resilience index of 83%. This success is primarily explained by its unique model, the "Cat Nat" regime, based on a public-private partnership that induces efficiency and sustainability. The natural disaster guarantee is automatically included in home insurance contracts ("fire" or "property damage") and motor contracts thanks to a surcharge. Insurers collect premiums and compensate for losses, while the state oversees the system (surcharge rates, deductibles, coverage scope) and provides unlimited reinsurance coverage (50% reinsurance quota). This risk-sharing with the state allows insurers to cope with the consequences of a natural disaster regardless of its scale and ultimately guarantees that each victim will be compensated.

As risk managers, insurers, and investors, we have a pivotal role to play in the transition.

The second success factor: the widespread adoption of home insurance (more than 95% of market penetration), which allows for strong risk pooling. This pooling is a true national treasure: it guarantees affordable rates (approximately 300 euros on average per year) while ensuring solidarity between territories.

So, can we genuinely fear a "protection gap" in France? No, as long as the current model endures. The system is robust, and an inflation of climatic claims, which represent on average 100 euros on the premium, is manageable. But yes, if certain players opt for the individualisation of risks. The increasing use of high-quality data would allow for fine-tuning of rates, leading to a decrease of premiums for low-risk properties but a surge for the most vulnerable. This is a misuse of technology but not a fatality. Worse still, some insurers might withdraw from areas deemed too risky, making them uninsurable. Generally, the fewer actors present in a market, the more insurability can be called into question, which is already being observed in the local authorities market.

The nature of insurance is a solidarity with a fragile balance, which relies both on the regulatory framework and on the collective discipline of insurers. But faced with the announced intensification of climatic events, maintaining the status quo will not suffice. It is urgent to establish a genuine culture of risk and to collectively invest in prevention, protection, and adaptation.

An entity such as Crédit Agricole, a territorial bankinsurer, is fully legitimate to take on this challenge. True to its history, it will know how to assume the role of "territory shaper" in building sustainable climate resilience, side by side with public authorities for the overall protection of the society.

1. *fa_cartographie-prospective-2025.pdf*
2. *sigma-resilience-index-2024.pdf*

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Protection gaps in the climate and cyber risk areas

Economic losses from natural catastrophes and cyber incidents are rising. This question of "protection gaps" is particularly acute in the climate and cyber risk areas.

Zooming in on the area of natural catastrophes, Swiss Re research shows that in 2024 economic losses from natural disasters totalled USD 318 billion, confirming the 5-7% annual growth rate that has been the norm of recent years. Of these, 43% were insured – or USD 137 billion. For 2025, the current estimate is that insured losses will reach USD 145 billion in 2025, confirming that USD 150 billion is the new estimate for insured losses.

Despite this growing trend, the reinsurance market maintains its capacity to absorb peak loss scenarios. Traditional reinsurance capital stands at approximately USD 500 billion, providing sufficient capacity to withstand even 1-in-10-year scenarios where insured losses exceed USD 300 billion. Alternative capital, such as insurance-linked securities (ILS) including catastrophe bonds, add further capacity to manage low-frequency, high-severity risks and to support retrocession. To maintain resilience, it is essential that growth in both traditional and alternative reinsurance capital keeps pace with rising natural catastrophe exposures.

Other stakeholders, too, have to step up to maintain an adequate level of protection. Specifically, there is a need to maintain the focus on adaptation to an already fast-changing climate. The public sector plays a central role in promoting and undertaking risk-reduction measures. These include preventive infrastructure, enforcing adequate building codes, investing in adaptation, and rebuilding in ways that improve resilience for the future ("build back better" approach).

There is also the question whether public-private initiatives, such as currently being introduced or envisaged and discussed in Italy, Greece or Germany, or at EU level with the ECB / EIOPA proposal on a public reinsurance scheme, can contribute to closing natural catastrophe protection gaps. Such measures, if designed properly, can have benefits, such as increasing insurance penetration or promoting prevention and adaptation. This requires, notably, following the principle of risk-based underwriting. Any publicly initiated reinsurance scheme should be mindful of not crowding out or disrupting the private (re)insurance market, which in turn might lead to increased reliance on government intervention. Ultimately, such initiatives should complement - not replace - the private re/insurance market.

Closing the existing gaps will be challenging and requires the involvement of all stakeholders.

Zooming in on the cyber risk area, Swiss Re's latest research shows that global cyber insurance market expanded rapidly between 2017 and 2022, with average annual growth of 32%. While rate-driven expansion has cooled, Swiss Re still projects USD 16.6 billion in premium for 2025, up 8 % over 2024. Yet most cyber risk remains uninsured.

Insurance penetration is concentrated in large corporate clients, estimated at approximately 80% for firms with annual revenues over USD 10 billion, compared to only 10 % of SMEs (under USD 100 million). With large corporates already largely covered, future organic growth (clients purchasing new policies and existing clients purchasing higher limits) depends mainly on first-time SME buyers rather than on selling higher limits to existing clients.

Geographically there is an uneven distribution of cyber premiums across regions. North America writes 70 % of global cyber premium, Europe 19 %, and Asia-Pacific just 8 %. This split highlights both differing levels of market maturity and the sizeable runway for growth in Europe and APAC.

Closing today's protection gap will require simpler, lower-cost products for smaller businesses, more efficient digital distribution, and basic risk-management support that raises minimum cyber-hygiene standards. Equally important are better data, model accuracy, and risk transparency - especially around systemic issues such as cloud-service concentration - to let underwriters' price confidently and deploy additional capacity in underserved segments.

With risks rising, the protection gap issue is very high on everybody's agenda. This is particularly true for climate and cyber risks. Closing the existing gaps will be challenging and requires the involvement of all stakeholders. Through its expertise and risk modelling capacity, the re/insurance sector has a key role to play. In fact, the many new, innovative solutions available mean that the sector is better equipped than ever to design and deliver risk transfer solutions, even for emerging or previously uninsurable risks. However, re/insurers' capacity to do so depends on a regulatory environment that supports global capital efficiency and enables risk-based, market-driven solutions. Public intervention should focus on enabling this role, not replacing it.