Banc Ceannais na hÉireann
Central Bank of Ireland
Eurosystem

Understanding the Future of Insurance: Climate & Emerging Risk Survey

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Contents

Introduction

Understanding the future of the insurance sector and the potential impact of emerging risks is an important factor in enabling delivery of our mandate. In particular, addressing the challenges posed by climate change is a key priority for the Central Bank of Ireland. A Climate & Emerging Risk Survey was issued to assess awareness, understanding and management of these risks across the Irish insurance sector.

The statutory objectives of Central Bank of Ireland ("the Central Bank") include the proper and effective regulation of financial service providers and markets. "Emerging risks" may relate either to new risks, which have not previously been identified, or to existing risks that are subject to new or unfamiliar conditions. Some emerging risks have the potential to significantly affect insurance firms' business models, strategies, operations and financial position. In order to measure the level of awareness and industry preparation in respect of emerging risks (in particular climate change and cyber underwriting risks), the Central Bank issued a Climate & Emerging Risk Survey ("the Survey") to a representative sample of insurance firms across all sectors (life, non-life and reinsurance) in Quarter 4 of 2020.

The objective of the Survey was to assess awareness and understanding of key emerging risks across the Irish insurance sector. Over the last few years, there has been a significant shift in the recognition of climate change as a feature of the financial system. What only a short time ago were at best ancillary considerations have now become central concerns, for three main reasons:

- Firstly, commitments made by the international community in the 2015 Paris Agreement, to limit global warming to two degrees, are being translated into government policy commitments, including the role that Central Banks and the financial system should play;
- Understanding the impacts of climate change and the transition to a low-carbon economy is crucial to delivering our mandate, of stability and resilience of the financial system, and protection of consumers; and
- The scale of change required to move to a sustainable, low carbon economy is likely to be profound, and if not managed appropriately, could lead to sudden, and material economic shock, including impairment of assets held by insurers.

Separately, the evolution of technology and the transition to remote working due to the COVID-19 pandemic could result in an increase in the frequency and severity of cyber-attacks. This situation is likely to result in an increased demand for cyber insurance products, which brings new opportunities and challenges for the insurance sector.

A well-developed cyber insurance market can play a key role in enabling the transformation to the digital economy, by raising awareness of cyber risks, facilitating responses and recovery from cyber-losses, and by building good risk management and control practices within this field. Therefore, it is important that insurers understand cyber underwriting risks to which they might be exposed, either directly, through inclusion of dedicated "affirmative" cyber risk cover, or indirectly, where legacy policies fail to exclude cyber risks – "non-affirmative" or "silent" cyber.

The results of the survey reflect a rapidly evolving insurance landscape and further enhances our understanding of the level of exposure and preparedness of Irish undertakings to emerging risks generally, and to climate change and cyber underwriting risk specifically. The results enable us to identify the challenges faced by firms and will inform our future supervisory approach.

Summary Analysis

Methodology

The Survey was issued to a representative sample of 93 insurance firms across all sectors (life, non-life and reinsurance), approximately 95% coverage by total assets. The Survey comprised 70 questions, encompassing both qualitative and quantitative elements, and was split into separate sections including Emerging risk, Climate risk and Cyber Underwriting risk. In line with leading practice, including the Task Force on Climate-related Financial Disclosures ("TCFD") recommended framework, the key components within each section covered risk awareness, governance, strategy, risk management analysis, metrics and disclosure.

"The objective of the Survey was to assess awareness and understanding of key emerging risks across the Irish insurance sector"

Each section has been analysed separately and the results have been compiled based on the information submitted. [1]

Emerging Risk

- **Emerging risks appear well integrated in risk management processes**

Respondents indicated that the identification and assessment of emerging risks is already well integrated within some risk management processes - 78% of firms include emerging risks as part of their risk register, whilst 93% stated that emerging risks form part of the Own Risk and Solvency Assessment ("ORSA") process.

"Emerging risks appear well integrated in risk management processes, but links between these risks and strategy should be enhanced"

- **Positive steps are being undertaken to build awareness and understanding**

The board or senior management regularly consider emerging risks - with 92% of surveyed firms indicating that they do this more frequently than annually. A significant number of respondents (40 firms) seek external support to enhance their capabilities with regard to emerging risks. They do this mainly by participating in industry forums, utilising group level information and expertise, and engaging with external business partners.

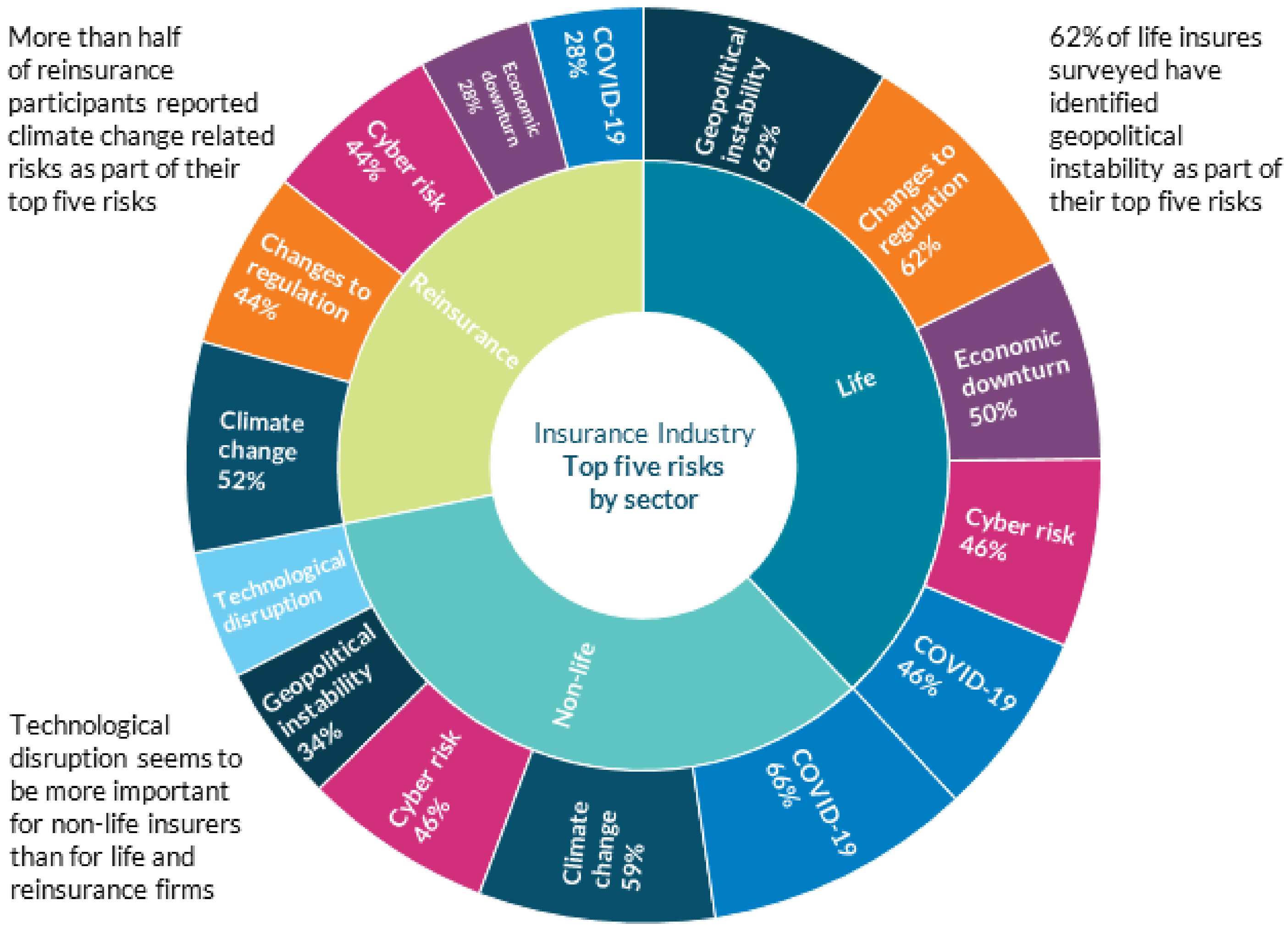
- **There is consensus around key emerging risks**

The results of the survey show that, in general, Irish undertakings have a high level of consensus around key emerging risks. The most significant emerging risks identified by respondents were pandemic risks, more specifically future waves of COVID-19, following by climate change (including physical, transition and litigation risks) and cyber risks (including both cyber threats and cyber

[1] Results shown represent a consolidation of self-assessed responses received from firms. Firms were not required to provide documentation to the Central Bank in support of their answers.

underwriting risks). These results are closely aligned with emerging risk analysis conducted by the Central Bank.

Figure 1. Top Five Emerging Risks by Sector



- **But links between emerging risk and strategy should be enhanced**

However, the survey responses did highlight some areas where improvement is required. In particular, 36% of respondents stated they have not implemented or planned any material changes to their business models and/or investment strategy in response to emerging risk. Firms should consider how the output of their emerging risk analysis informs strategic making processes. Where necessary, timely and effective measures should be taken to modify business and investment strategies and/or take measures to strengthen resilience.

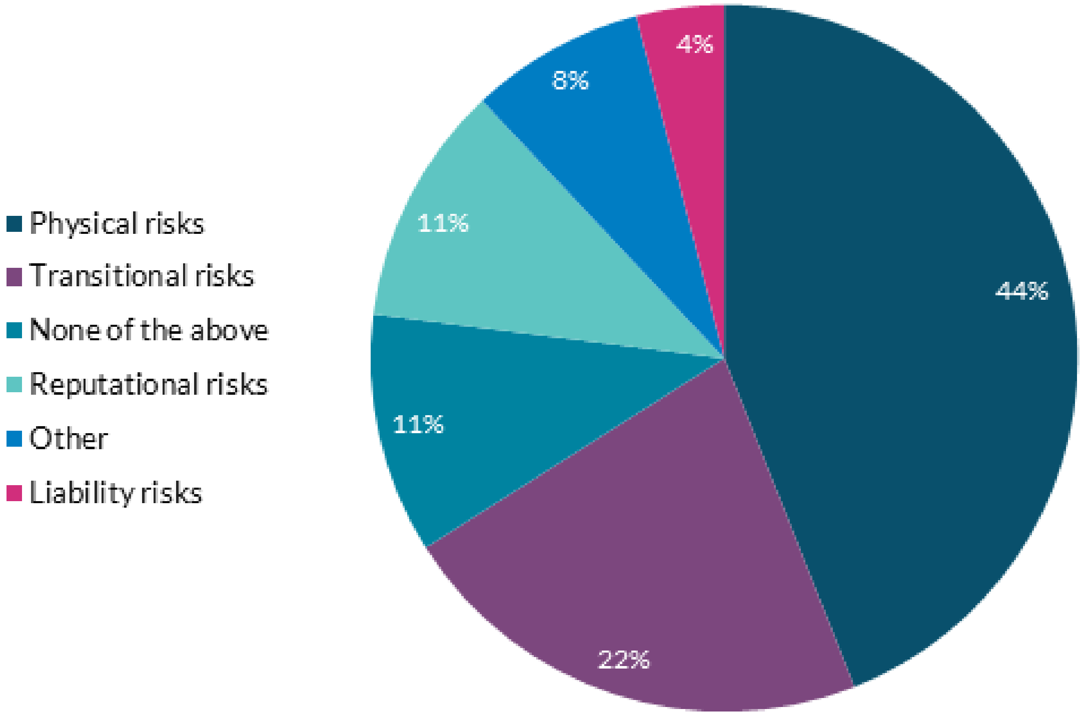
Climate Risk

Survey responses provided five key insights with regard to insurers' awareness and management of climate risks:

- **Good level of awareness of climate risk**

Firms indicated a good level of awareness of the principal risks presented by climate change. 44% of respondents (comprising mainly non-life and reinsurance firms) believe they are most exposed to physical risks[2] and 22% of respondents believe they are most exposed to transition risks[3]. Only 4% of firms identified liability risks (future claims related to climate litigation) as a key concern whereas 11% of firms believe they are most exposed to reputational risks arising from change[4]. This was a growing concern for firms.

Figure 2. Most significant exposures to climate risks



Source: Emerging Risk Survey (2020)
Note: The results are based on 92 responses

“Insurers believe physical and transition risks are the most material risks arising from climate change. There is also a growing concern around reputational risks”.

Regarding how climate risks are assessed, a small number of firms (11%) indicated they are using non-traditional methods of engagement to enhance their understanding of climate risk e.g. via academia, engagement and recruitment of climate scientists and providing incentives to staff to undertake training and professional development with a climate related focus. These initiatives are positive and demonstrate a strong understanding of the materiality of climate risk.

[2] Common concerns on increases in frequency and severity of extreme events such as floods, windstorms and wildfires coupled with volatile weather patterns
[3] Common concerns on the move towards low carbon economy, the speed at which the transition occurs and the associated impact from a disorderly transition
[4] Common concerns relate to the risk of failing to respond to changing customer expectations and the resulting impacts on the firm’s reputation, failure to consider impacts arising from climate change or not adopting strategic climate options.

- **Governance structures in place for management of climate risks**

The results showed that there are management structures in place for oversight of climate risks (84% of firms) and these are considered more frequently than annually by the board (41% of firms). Whilst respondents indicated that ultimate responsibility rests with the board, roles and responsibilities for climate risk do not appear to have been clearly defined across the organisation. The Central Bank will seek evidence that boards are giving meaningful consideration to climate change.

"Governance structures in place for management of climate risks"

- **Climate risk is not fully integrated into risk management frameworks**

Respondents indicated that some steps have been taken to integrate climate risks into the risk management framework. For example, 54% of firms stated that climate risk is "somewhat integrated" into the risk management framework. A further 20% of firms stated that climate risk is "fully integrated" across the risk management framework. The results highlighted ambiguity between firms and their understanding of what is required to achieve "full integration". Similarly, whilst the ORSA is being utilised (63% of firms) to consider climate risk, the level of analysis varies between firms. The Central Bank expects firms to fully incorporate and embed material climate risks into risk management frameworks.

"Climate risk is not fully integrated into risk management frameworks"

- **Strategy & business models do not yet reflect climate considerations**

Firms should take further steps to fully assess the impacts of climate risks on the business model and reflect this in their strategy. For example, 54% of respondents confirmed they did not have a climate strategy, plan or policy in place; 71% of firms did not have an internal definition of climate change and 67% of respondents do not (directly or indirectly) incorporate climate-related factors into the pricing of insurance products. Whilst some firms have identified opportunities arising from climate change mitigation efforts, including in relation to electric cars, renewable energy, provision of sustainable funds, only a small percentage of firms (6%) have actually taken steps to develop these opportunities. In this regard, there is further work for firms to assess impact of climate related risks on their environment, business model and investments, and where necessary to implement changes to their strategy.

- **Majority of firms are not conducting scenario analysis or stress testing in relation to climate risks**

Firms indicated that they may be exposed to changes in the valuation of financial assets (45%) and liabilities (58%) arising from climate change. However, the majority have not performed forward looking quantitative analysis (stress testing or scenario analysis) to assess the impact of climate change on their assets (77%)

"Majority of firms are not conducting scenario analysis or stress testing in relation to climate risks" or liabilities (79%). Further work is required by firms to identify and quantify their exposures. Firms did highlight challenges around availability of data and the time-periods over which climate change will materialise and how they can determine the appropriate parameters within which to conduct stress testing and analysis. Whilst the challenges presented by the uncertain and long-term nature of climate risks are acknowledged, firms should ensure that material climate risks are included within stress or scenario testing frameworks. The resilience and vulnerabilities of business models should be explored across a range of outcomes. The European Insurance and Occupational Pensions Authority ("EIOPA") opinion on the supervision of climate change risk scenarios in the ORSA[5] sets out a more detailed set of expectations in this regard.

Cyber Underwriting Risk

- **The exposure of Irish firms to "affirmative" cyber underwriting risk appears to be limited**

Approximately 32 firms included in the sample offer some type of affirmative cyber cover. This accounts for 49% of the non-life and reinsurance firms surveyed (excluding health insurers). The amount of gross premiums written (direct business only) reported by these firms amounted to €91m in 2019, with the share of cyber insurance premiums representing less than 1% of the total written by these firms.

The majority of respondents provide a relatively broad range of cyber insurance coverage, including coverage for first and third party liabilities or a combination of both. The most standard types of coverage offered are business interruption, data breach, and cyber extortion coverage. There are some undertakings providing cover to legal services and full media liability, although to a lesser extent.

- **There are challenges in disclosing cyber data**

Although 32 firms indicated that they offer some type of cyber insurance cover, less than half of these were able to provide information regarding the premiums, claims and technical provisions. It is acknowledged that challenges may arise with regard to cyber cover included as endorsements to more traditional insurance products, or within reinsurance treaties. Firms with an exposure to cyber risks through their underwriting activities should have a clear understanding of the risks they are exposed to, ensuring that these remain aligned with strategy and risk appetite.

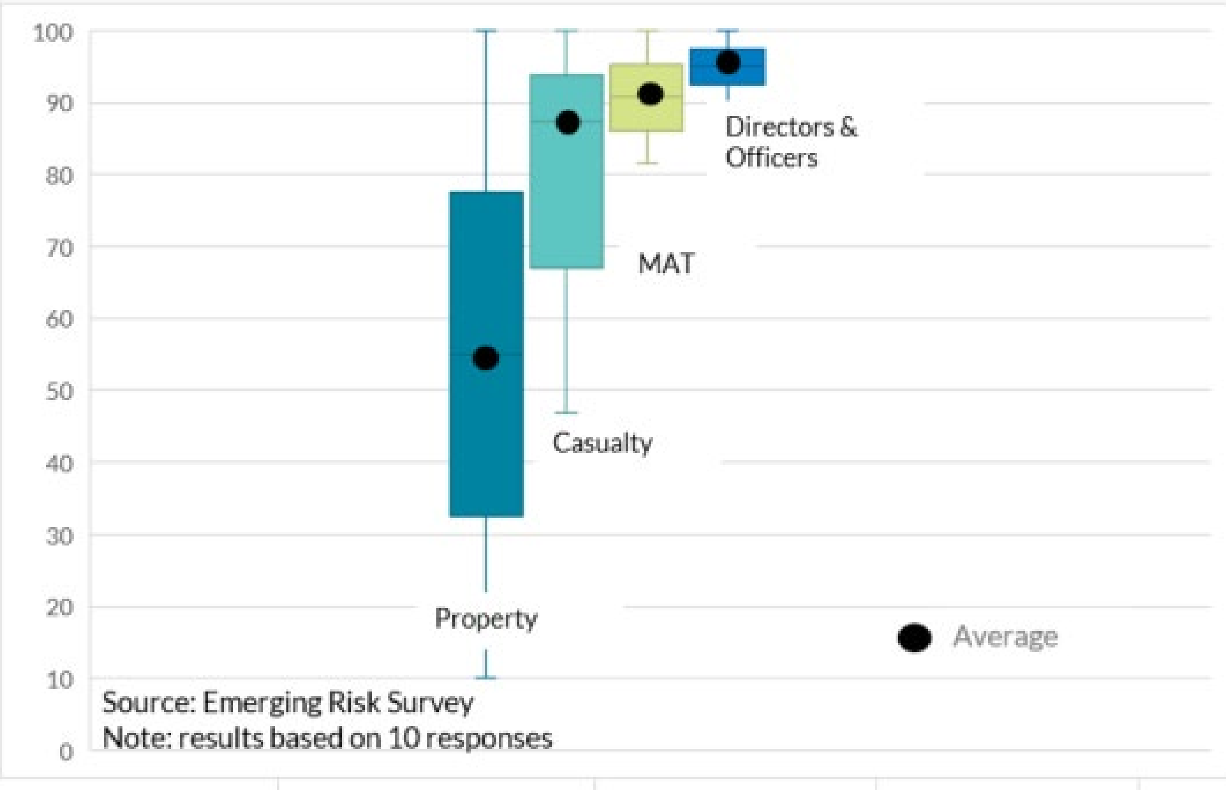
"There are some efforts by the industry to address the challenges arising from non-affirmative cyber but there is still a long way to go"

- **"Silent" cyber risks have not been fully identified – significant exposure may remain.**

[5] Located at: https://www.eiopa.europa.eu/content/eiopa-issues-opinion-supervision-of-use-of-climate-change-risk-scenarios-orsa_en

Only 10 Irish insurance firms reported quantitative information of the percentage of total policy limit exposed to non-affirmative cyber risk. Figure 3 illustrates that whilst the majority of firms acknowledged that traditional lines of business are exposed, views on the extent of exposure varied significantly.

Figure 3. Percentage of policy limit exposed to non-affirmative cyber risk



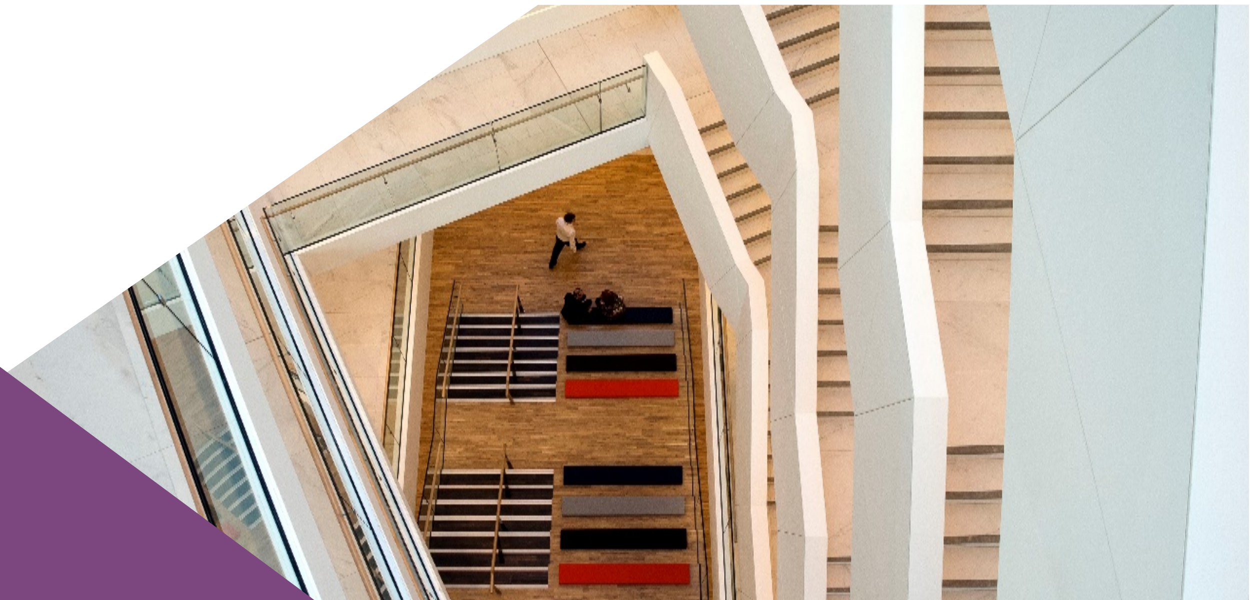
59% of respondents (30 firms) stated that they are taking specific actions to assess and monitor non-affirmative cyber exposures. However, a significant minority (29%) indicated that there is no action plan in place to assess their portfolio in this context. All firms should ensure that robust product oversight frameworks are in place and incorporate within these a regular review of policy wordings, to ensure that these are clear, unambiguous, and minimise the risk that may arise from non-affirmative cyber exposures.

Conclusion & Next Steps

The Survey has provided valuable information on the current state of firms' risk management practices. Whilst a number of good practices have been highlighted, further work is required to incorporate and embed climate risks, and emerging risks more generally, in organisational risk management frameworks.

Firms can expect the Central Bank to become increasingly active and intrusive in its approach to the supervision of emerging risks, including cyber underwriting risk. Ongoing supervisory engagement, as well as individual inspections and analysis work will be used to assess the progress that firms are making in developing risk identification, measurement and product oversight approaches.

The Central Bank will continue to develop its own capabilities in relation to climate change. A centralised unit has been established to coordinate and drive this work across the organisation. We remain actively involved with organisations such as the Sustainable Insurance Forum ("SIF"), International Association of Insurance Supervisors and ("IAIS") and EIOPA in relation to climate risk, in order to influence the development of policy and guidance material, and where appropriate, to participate in data collection and quantitative analysis.



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