Emerging Risks Management:

An Overview of Trust Re's Emerging Risks

PERSPECTIVES

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Emerging risks are defined as "newly developing risks or changing risks that are difficult to quantify and which may have a major impact on an organization"[1]. In this article, we provide a brief overview of how Trust Re identifies emerging risks as well as the challenges and opportunities which these risks bring for the insurance and reinsurance industry.

Identifying the risks

Identifying emerging risks enables companies to be better prepared and take proactive measures to analyse and mitigate the potential effects of new emerging factors that can possibly affect earnings and long-term strategy. Emerging risks that are identified, assessed and managed for competitive advantage can be an opportunity rather than a threat. Given the industry and locations that Trust Re operates in, along with the products and services offered, the Company's target and current market presence and long-term strategy is exposed to possible 'Emerging Risks'.

Environmental scanning via monitoring external sources of information, including publications from professional and scientific bodies and analysis and predictions by industry risk experts are some of the primary tools employed to identify potential emerging risks. Additionally, being close to the market and clients enables the Company to be more proactive in identifying any emerging risk that can have a potential impact on its objectives. Quantifying the likelihood and impact of emerging risks, however, is often very difficult, and is not common in the industry, due to the evolving nature of such risks, high level of uncertainty involved and the lack of historical data.

Once the risks have been identified, their development is monitored to determine how they evolve in order to take any related management actions/initiatives, if required. Trust Re also tracks the development of these risks in the relevant industry bodies and may synchronize its approach with the assessment of its peers.

1 https://www.swissre.com/sustainability/risk-intelligence/emerging-risks/sonar.html

Trust Re's Emerging Risks

Based on its recent Emerging Risks Report, Trust Re has identified the following Emerging Risks:

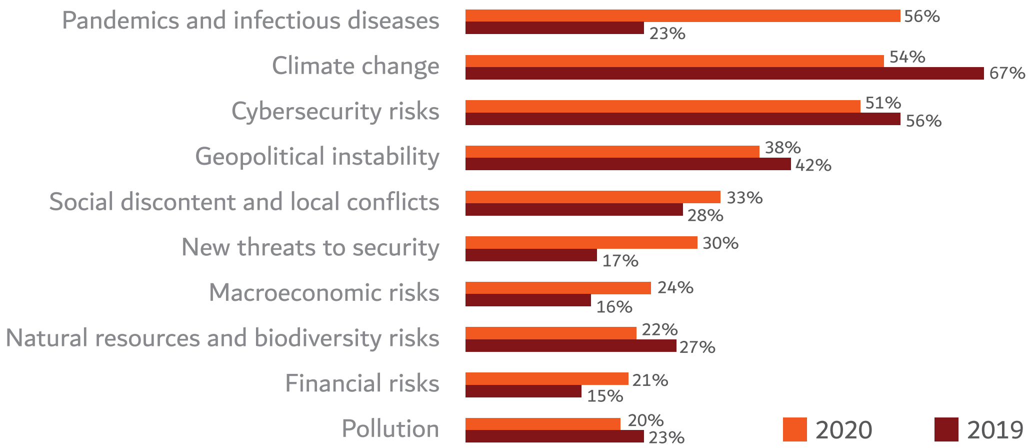
Pandemic and Infectious Diseases (Covid-19)

Pandemic risk, as exemplified by Covid-19, is considered a top emerging risk not only from the aspect of unstudied infectious disease but for the knock-on effects which it has. For example, the effects of Covid-19 spanned soaring public debt, escalating geopolitical tension, growing mental health concerns and surging inequality. The crisis exposed fundamental shortcomings in pandemic preparedness, socio-economic safety nets and global cooperation. The pandemic is as much an economic crisis as it is a health one - lockdowns caused GDP to plunge 12% in the EU and 33% in the US[2].

The key challenge for (re)insurers lies in Covid's impact on property and business interruption insurance.

Business interruption coverage became a key area of concern due to ambiguity in policy wordings. Moreover, supply chain disruption, a further effect of Covid lockdowns, has affected the fulfillment of building projects at all stages of their execution.

A survey by AXA identified pandemics and infectious diseases as the most important risks to society in the next five to ten years. The number of experts that rank pandemics as a major emerging risk more than doubled since 2019, from 23% to 56%, as can be seen in the below chart.



AXA survey result of top emerging risks that may impact society in the next 5 to 10 years (Source: AXA Future Risks Report, 2020)

Cyber Security Risk

The growing use of new technologies, artificial intelligence and self-learning machines, cloud computing, digital ecosystems, new communication standards like 5G and increased dependence on intelligent devices are all part of the global digital transformation of business and society. According to Munich Re, in 2017, 27 billion devices around the world were online, but this number is expected to increase five-fold to 125 billion by the year 2030. In 2018 alone, the estimated economic damage from cyber-attacks amounted to US$ 600 billion. Important to note is that Covid-19 has also precipitated cybersecurity risk with remote working meaning that more people are connected to more devices. Furthermore, personal devices may not be as equipped with cybersecurity as office devices, hence increased risk exposure. The cost of cyber incidents is also rising across the board given the growing complexity of such risks, stringent data protection and privacy regulation which is widening in terms of scope and geographical reach, class action litigation and the damaging impact on business from loss of data or critical systems.

Opportunities abound for (re)insurers as a result of many companies seeking to buy cyber insurance covers to reduce their exposure to cyber and reputational risk and to safeguard their balance sheets. Challenges lie in the complexity of assessing and identifying cyber risk given that many insurers rely on numerical models to assess risk; as a result, this increases the probability of breaching risk appetite/limits.

2 World Bank Group : Global Economic Prospects (June 2021)

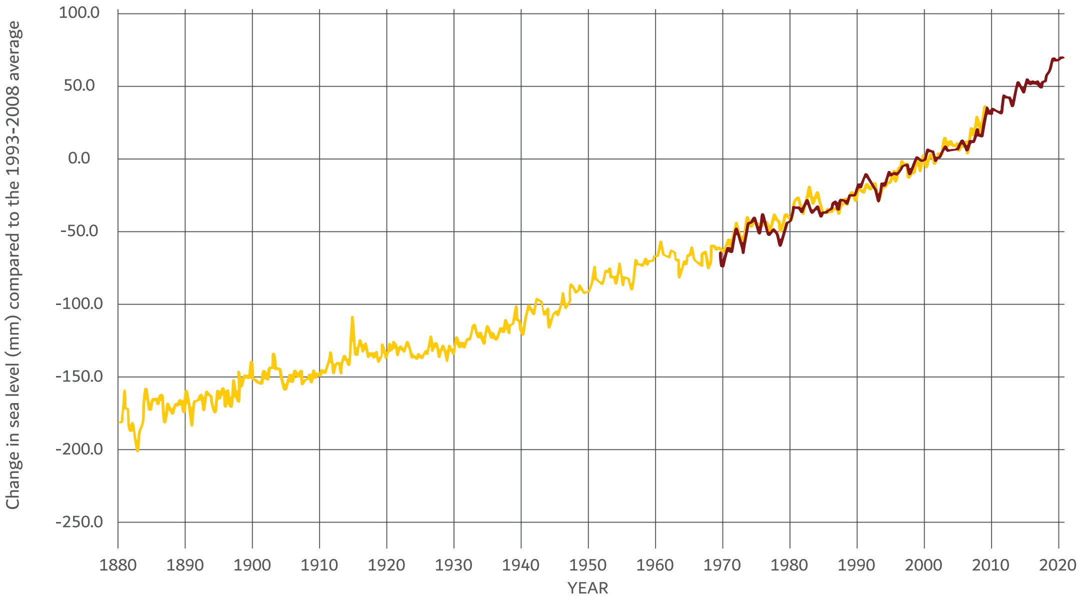
Global Warming and Climate Change

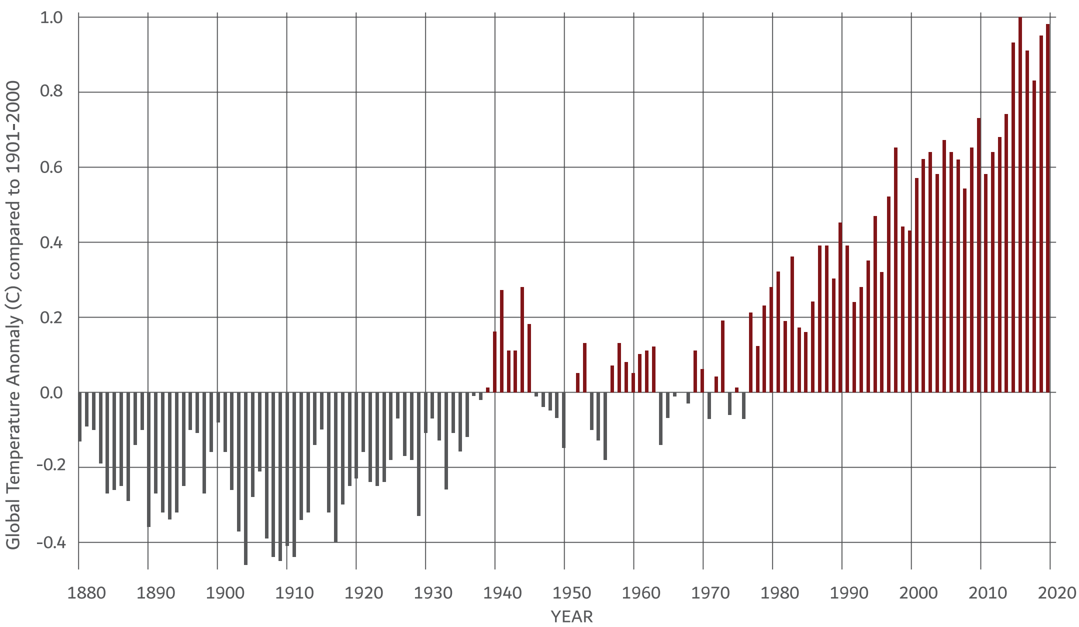
Climate related issues have dominated in the top 5 long-term risks in terms of likelihood. Climate change is one of the biggest emerging risks for insurers, particularly given the increase in the frequency and severity of natural catastrophe ("nat cat") events, the related losses have had significant impact on (re)insurers. Pricing for natural catastrophes based on past experience is challenging as catastrophe models have not fully considered the new normal. There is a need for (re)insurers to review their pricing, exposure management and reinsurance/retrocession strategies. For insurers, the challenges of climate change are many and include:

- lack of historical data and model limitations
- difficulty in reasonably pricing the risk
- threat to coverage availability
- imperfect information and moral hazards
- risk of accumulation
- solvency risk
- transition risk

Opportunities lie in the increased demand for reinsurance.

According to the National Oceanic and Atmospheric Administration (NOAA), due to the effects of global warming, the global average surface temperature increased by 2 degrees since 1880 and sea level increased by 89 inches since 1880, as can be seen in the below figures.





History of global surface temperature and sea level since 1880, (Source: NOAA, 2020)

Transition to Low Carbon Economies

As per a study by Lloyd's, the shift to a low carbon economy by 2030 is expected to have particular impact on seven business sectors (fossil fuel, heavy industry, aviation and marine, road transport, power, agriculture and construction) and ten lines of business (Energy, Aviation, Marine, Motor, Construction, Credit, Property, Product Liability and other liability) with implications for both existing and new insurance business which pose both risks and opportunities for (re)insurers. These sectoral impacts are expected to lead to shifts in the general size of (re)insurance markets and will change (re)insurers' underlying risk profiles.

Class of business	Existing contracts	New contracts	Insurance demand and size	
Energy – fossil fuel	Asset stranding and liabilities from production sites will have impact	Introduction of carbon capture storage S and co-firing with biomass	Decline in sectoral size due to product demand contractions	↓↓↓
– renewables	Evolving regulations and business models	Risks in power purchase agreements can be better insured	Growth in sectoral size due to move away from fossil fuels	↑↑↑
Aviation	Performance of new fuels unclear	Limited change in technology pre-2030	Sectoral slowdown due to modal shift	↓↓
Marine	Risks from retrofitting ships, new fuels and cargo types	Handling of new fuels and cargo types	Unclear: slowdown but risks emerge with new fuels and cargo	-
Motor	Internal combustion engine driven more in rural areas	New business models involving electric vehicles and pay-per-use	Unclear: growth varies across vehicle types and usage	-
Construction	Perils change, but impact on claims is unclear	Tighter building standards and energy efficiency requirements	Retrofits and new materials; but offsite construction lowers risks	↑
Credit, financial guarantee and M&A	Profits and business interruption	New sources of revenue risks faced by various businesses	New technical and business environments require insurance	↑↑
Property	Perils change, but impact on claims is unclear	Changes in supply chains require insurance for properties	Unclear: changes in exposure vary a lot by property type	-
Product liability and recall	Liabilities from energy efficiency and sustainability standards	New liabilities associated with low carbon products	New technologies and fuels require insurance	↑↑
Other liability	Increasing pressure from climate change litigations	Provide cover for climate change related settlements and litigation	Magnitude of risks increases expected to result in growth	↑↑↑

Notes: For existing contracts and new contracts, the darker the shade of red, the greater the magnitude of changes. These could be positive or negative from the perspective of insurers. For insurance demand and size, upward arrows suggest an increase and downward arrows suggest a decrease.
Source: Lloyd's and Vivid Economics, 2020 Source: Lloyd's and Vivid Economics, 2020

Heatmap of the transition impact on major insurance business classes by 2030 (Source: Below 2°c – Insurance for low carbon economy, Lloyd's, 2020)

In general, the shift is an opportunity for (re)insurers to help manage new risks and support investment in the growing low carbon sectors. Key challenges for (re)insurers come from rapidly changing risk profiles and structural changes to some business sectors.

Renewable Energy

Over the last 10 years, renewable energy sources have grown so much that they are now the primary source of new energy additions and are expected to take over the majority of energy production in the future. This will become more pronounced as economies around the world aim to transform to low carbon economies driven by a need to reduce the impact of climate change, regulation, policy incentives, rebalancing of economic activity and widespread deployment of low emission technologies.

As the world moves towards lower carbon energy sources, the renewable energy sector is growing at a significant rate providing considerable opportunities for (re)insurers. Emerging economies account for the majority of the growth in renewable energy. Total global investment in the sector has surpassed investment in the oil and gas sector. China, India, sub-Saharan Africa and the Middle East aim to significantly increase their investments in renewables over the coming years. The demand for insurance cannot be overlooked given the rapid growth in this industry.

Conclusion

In managing emerging risks, it is imperative to recognize the interconnectedness of risks. This is key across a number of areas and has been evidenced most recently by the global pandemic which not only brought to the fore health matters, but also business interruption, supply chain disruption and cyber to name but a few. Assessing a company's emerging risks is necessary to mitigate against a tarnished brand image, reputation and value.

Appendix - References

This article has been prepared with reference to the following sources.

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