THE GENEVA ASSOCIATION
INSURANCE FOR A BETTER WORLD

# THE VALUE OF INSURANCE IN A CHANGING RISK LANDSCAPE

Research summary
November 2023

**Kai-Uwe Schanz**, Head of Research & Foresight and Director Socio-economic Resilience, The Geneva Association

Contributing authors:
Alex Braun, Professor, Institute of Insurance Economics, University of St. Gallen
Martin Eling, Professor, Institute of Insurance Economics, University of St. Gallen
Christoph Jaenicke, Research Associate, Institute of Insurance Economics, University of St. Gallen
Aleksandar Jovanović, Visiting professor, ETH Risk Center, Swiss Federal Institute of Technology Zurich
Hélène Schernberg, Executive Director, ETH Risk Center, Swiss Federal Institute of Technology Zurich
Pieralberto Treccani, Research Support Manager, The Geneva Association

## The changing risk landscape

Today's economies and societies are facing a transformation of risk, which is reflected in many of the major events of the past few years. The COVID-19 pandemic was a major systemic shock, affecting most of humanity at the same time, and with long-term implications for risk perception and management. A similarly unimaginable geopolitical shift was the return of war and its long-term effects in Europe. Climate risks are also seemingly spiralling out of control while public and private intangible assets and data are under increasing threat from cyberattacks.

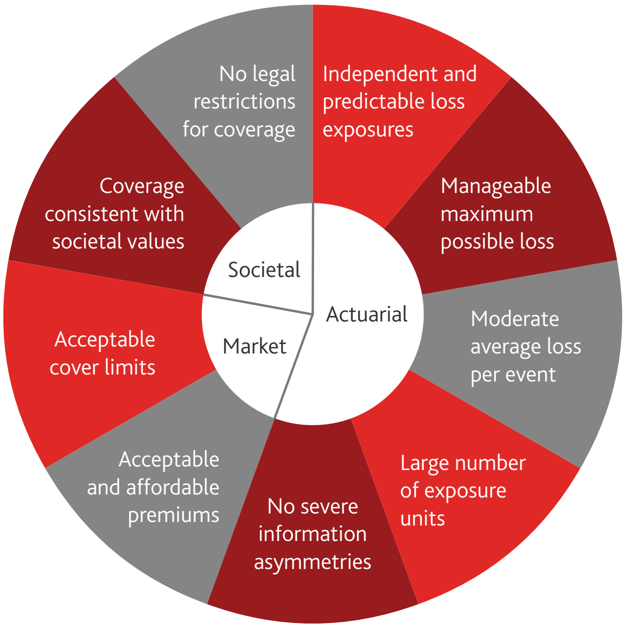
This new global risk landscape is a significant test of insurers' capacity for financial loss absorption, and insurance companies have to be mindful of potential challenges to their traditional value proposition of risk transfer. This discussion has gained momentum in the context of an increasing gap between what stakeholders expect the industry to do and what it is (technically) able to do.

## A novel representation of emerging risks

This emerging gap can be explored through a novel approach to representing and understanding risks. This approach adds a dynamic perspective to the established conception of risk as a function of hazard, exposure and vulnerability. Based on these dynamic risk components, we provide a framework for representing risk as a set of shared features, based on novelty (new risk sources and consequences), the changing nature of existing risks (in terms of frequency and severity), knowledge gaps (involving aspects like complexity, uncertainty or communication) and risk governance (management complexity, uncertainty and pace of change).

We put the spotlight on a number of (emerging) risks which present challenges to insurability and traditional risk transfer, namely intangible and systemic risks. Examples of intangible risks include loss of reputation and general cyber risks such as data breaches. Systemic risks, defined as risks that have the potential to cause economic and societal losses that are sufficiently significant to result in the breakdown of an entire (economic) system, can arise both with tangible (e.g. climate change and cyberattacks on physical assets) and intangible characteristics (e.g. large-scale business interruption as a result of a pandemic). In the presence of systemicity, the fundamental mechanism of risk pooling and redistribution – spreading the losses of the few among the many unaffected by disaster – no longer works.

## FIGURE 1: THE FUNDAMENTAL CRITERIA OF INSURABILITY




*Source: The Geneva Association, based on Berliner*[1]

Against this backdrop, the traditional core of the insurance industry's customer and societal value – the absorption of financial risks – as well as its prerequisites are under the spotlight (Figure 1). For climate and cyber risks, for example, we identify major obstacles to insurability such as a lack of randomness and independence as well as highly problematic loss potentials (Table 1). For intangible risks such as loss of reputation, key insurability challenges include information asymmetries and loss measurement.

## TABLE 1: INSURABILITY OF EMERGING RISKS

| | | Emerging risk | | | | | |
|---|---|---|---|---|---|---|---|
| | | **Climate change** | **Food and water shortages** | **Cyberattacks on critical infrastructure** | **Loss of reputation** | **Socio-political instability** | **Common cyber risks (data breaches, ransomware)** |
| Criteria | Randomness and independence of loss occurrence | ▲ | ▲ | ▲ | ■ | ▲ | ▲ |
| Criteria | Maximum possible loss | ▲ | ▲ | ▲ | ■ | ▲ | ● |
| Criteria | Average loss per event | ▲ | ▲ | ■ | ● | ■ | ● |
| Criteria | Number of independent exposure units | ■ | ■ | ■ | ● | ■ | ● |
| Criteria | Information asymmetries | ● | ■ | ■ | ▲ | ● | ■ |
| Criteria | Insurance premiums | ■ | ■ | ■ | ■ | ■ | ■ |
| Criteria | Cover limits | ▲ | ▲ | ▲ | ■ | ■ | ■ |
| Criteria | Public policy | ● | ● | ● | ● | ■ | ● |
| Criteria | Legal restrictions | ■ | ■ | ● | ● | ■ | ● |

*Source: Institute of Insurance Economics (University of St. Gallen) and The Geneva Association*

1 Berliner 1982.

## Thinking beyond risk transfer

In response to the changing risk landscape and mounting challenges to insurability, an increasing number of insurers are launching customer propositions that go beyond their traditional role of absorbing financial risk. We propose three specific avenues for insurers to maintain or even expand their relevance:

1) Provision of additional risk services, namely risk assessment, prediction, prevention, mitigation, assistance and education (Figure 2).
2) Provision of dedicated risk and investment products which promote sustainable development, especially related to product design, underwriting, claims and asset management (Figure 3).
3) Engagement in public-private partnerships (PPPs) which address the largest and most complex risks modern societies are facing. This can range from enabling commercial risk transfer to replacing it by removing extreme and volatile risk from the insurance market.

### FIGURE 2: RISK SERVICES BEYOND RISK TRANSFER

| Risk assessment | Risk prediction | Risk prevention | Risk mitigation | Risk assistance |
|---|---|---|---|---|
| • Climate and cyber risk assessment for customers' scenario analyses | • Frequency and severity prediction models for accurate pricing | • Promotion of healthier lifestyles and safer behaviours through wellness initiatives | • Supporting customers in designing and implementing emergency responses, also for uninsurable/difficult-to-insure risks (e.g. pandemic business interruption) | • Less post-event stress and enhanced peace of mind for customers |
| • Business interruption risk assessment for customers' exposure and safety management | • Health prediction services for foreseeing worsening health conditions | • Reduction of hospitalisation risk through telematics- based insurance | • Supporting customers in developing business continuity plans | • Promotion of improved customer risk management through post-event risk consultancy |

Risk education
- Improved risk mitigation as a result of financial and insurance literacy initiatives
- More effective utilisation of healthcare and preventive services and overall claims reduction on the back of improved risk literacy

*Source: The Geneva Association*

### FIGURE 3: SUSTAINABILITY-DRIVEN PROPOSITIONS ALONG THE INSURANCE VALUE CHAIN

| Product design | Underwriting | Claims | Asset management |
|---|---|---|---|
| • New products (e.g. cyber, mobility, retirement)<br>• Green products (e.g. electric vehicles)<br>• Inclusive, 'essential value-based' products<br>• Products which incentivise risk prevention and mitigation (e.g. pay as you live, pay as you drive, 'building back better') | • Forward-looking risk-based pricing (e.g. climate risk)<br>• Risk-based pooling of major individual (e.g. accident) and social risks (e.g. longevity)<br>• Risk transfer linked to (minimum) standards of resilience (e.g. cyber insurance)<br>• Impact underwriting (e.g. microinsurance for small farmers)<br>• Inclusive underwriting (e.g. insurance for cancer survivors) | • Services that assist customers in preventing the insured event from occurring (e.g. theft)<br>• Non-financial compensation or support to restore the well-being of the customer pre-occurrence (e.g. rehabilitation)<br>• Services to reduce risk post-occurrence (e.g. 'building back better')<br>• Fraud detection measures to counteract illegitimate claims<br>• Efficiency measures which enable faster, automated payouts | • ESG integration<br>• Negative and positive/best-in-class screening<br>• Active ownership<br>• Impact investing<br>• Sustainable life insurance savings products<br>• Funding of green or climate technologies<br>• Investments in sustainable infrastructure (e.g. decarbonised, climate resilient, age appropriate) |

*Source: The Geneva Association*

Through these propositions, insurers can effectively leverage their unique capabilities such as risk expertise, strong relationships with insureds and investees as well as their long-term risk and investment perspective. This strategic shift beyond traditional risk transfer allows insurers to contain the cost of risk and, as such, preserve insurability. It also responds to evolving customer expectations, enhances the overall customer experience and increases engagement.

## The customer perspective: Findings from a global survey

To empirically substantiate these findings, The Geneva Association commissioned an online customer survey, capturing perspectives from customers in the world's six largest insurance markets: the U.S., China, the U.K., Japan, France and Germany. In each market, a sample of about 1,000 economically, regionally and demographically representative insurance policyholders were polled – approximately 900 retail customers and 100 commercial customers in total, representing companies with up to 250 employees. The survey was conducted in the second quarter of 2023 and yielded the following key findings:

- The survey results confirm the relevance of the insurability debate. Both retail and small commercial buyers of insurance express concerns about the future availability and affordability of certain types of cover, particularly in areas such as longevity, natural catastrophe and commercial cyber and business liability risk.

- Encouragingly, the difference between levels of actual usage (about 30–50%) and interest (more than 80%) suggests a sizeable potential for additional risk services, especially in prevention and assistance, warranting continued investments from insurers.

- Among retail customers there is (still) a lack of awareness of dedicated sustainability and financial education services.

- Customers from small and medium-sized enterprises (SMEs) prioritise insurers' ethical credentials rather than specifically designed or labelled sustainability initiatives. For retail customers, price is the key determinant of buying decisions. Going forward, price will play an even larger role for both segments. The results also reveal that the current and future role of additional risk services in influencing purchasing decisions appears to be limited.

- Retail and SME customers prefer personal, rather than virtual, interaction with their insurers. This channel therefore needs to be retained for insurers to continue to deliver value to their customers.

- Most customers are in favour of PPPs aimed at promoting the availability and affordability of insurance. There is, however, no majority support for spending taxpayers' money, which, if representative of the electorate, would limit the scale and scope of such PPPs.

In conclusion, the voice of the customer seems to corroborate the main conclusions of the research: people and businesses are concerned about the future availability and affordability of certain types of insurance. They also want their insurers to collaborate more with governments to mitigate emerging insurability issues.

However, the survey results also suggest a sober and realistic perspective on additional risk services offered by insurers. On the one hand, levels of customer interest are significantly higher than levels of actual usage, indicating a certain potential for such services. On the other hand, the results suggest that that the current and future role of additional risk services as a determinant of insurance purchasing decisions should not be overestimated.

Risk transfer is expected to remain at the core of insurers' customer and societal value. Having said this, insurers should respond to the increasing challenges to insurability by providing a broader spectrum of risk services in order to contain the cost of risk and respond to evolving customer needs. The determination and creativity with which they do so will allow them to convince customers of the value of these propositions and to monetise them.

## References

Berliner, B. 1982. *Limits of Insurability of Risks.* Prentice Hall.