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The Geneva Association is in good shape across the board. We are focused on the right topics for the insurance industry and producing high-quality outputs.

The world’s resilience continues to be tested. As we started to emerge from the worst of the pandemic, war arrived in eastern Europe. The ramifications are deep and many: to the Ukrainian people, to international relations, to economies, to markets.

The insurance industry can support society by reaffirming its role as a dependable source of protection. The Geneva Association, through its research and dialogue activities, is an excellent platform to do this. I feel privileged to have been appointed the organisation’s Chairman at this crucial moment in time.

The Geneva Association is in good shape across the board. We are focused on the right topics for the insurance industry and producing high-quality outputs.

At the onset of the pandemic, we launched a special research initiative to help insurers understand the implications for their businesses and the way forward. It offered an overview of viable public-private pandemic risk solutions and projected for insurers how risks would evolve in the post-pandemic world.

The industry also relies on The Geneva Association to bring alignment to our companies’ positions and actions on climate risk. Our climate risk task force issued an innovative framework in 2021 for insurance companies to refer to in their climate risk assessment initiatives. Geneva Association members have also benefited from the organisation’s deep analysis of climate litigation – a fast-emerging and highly relevant topic.
The Geneva Association’s initiatives to highlight insurance’s positive contributions to society go beyond its research. In 2021 Geneva Association members recognised the 2020 and 2021 winners of the Women in Insurance Award and their remarkable achievements: expanding insurance coverage to underserved populations in emerging countries and reducing coal underwriting, respectively. The award itself reinforces that gender equity is a top priority for our industry.

I am excited to work with Jad Ariss and the Geneva Association team to build on this momentum and continue the organisation’s transformation. We are renewing our focus on impact – on making sure our messages and findings effectively reach our key stakeholders, both within the insurance industry and outside it, and bring them meaningful results.

One thing that makes The Geneva Association truly unique is its ability to bring together insurance CEOs. I have witnessed firsthand our shared passion for insurance’s role in society. We have a positive and hopeful story to tell, and through The Geneva Association, the insurance industry and its leaders can tell it together.

Christian Mumenthaler
Managing Director’s Message

At the time of this report’s publication, war has been raging on the European continent for 90 days; a war that was completely unimaginable only a short time ago. At The Geneva Association, our hearts and minds are very much with the Ukrainian people.

From the war’s massive consequences, it is clear that this is a crisis not only for Ukraine or for Europe, but for the entire world.

We see three critical considerations for the global insurance industry:

First, this crisis begs the question, ‘What can insurers, as the world’s risk managers, do to better protect people and businesses from unexpected events and meet the expectations of society?’ The Geneva Association’s foresight approach aims to understand not only the risks that societies and insurers are already dealing with today but also the risks they may grapple with tomorrow.

Second, we are entering a new era of cyber threats, with cyberattacks being carried out alongside physical attacks and as retaliation against other countries and institutions for their roles.

The Geneva Association’s cyber research in 2021 explored the insurability of nation-state-led or backed cyberattacks such as these, namely the challenges related to defining and attributing them.

Third, the international community’s swift reaction to the Russia-Ukraine war is a manifestation that when confronted with a major crisis it can indeed cooperate in an effective manner. This offers some consolation, following the recent reports of the Intergovernmental Panel on Climate Change (IPCC) on what is needed to address the devastating impacts of climate change.

For the second time in two and half years, a tragedy is reshaping the world as we know it. This time it is not a health crisis, it is a geopolitical crisis.
We remained committed in 2021 to supporting the insurance industry in navigating the challenges and opportunities of climate change. On top of our 2021 climate research, we partnered with the Organisation for Economic Development and Cooperation (OECD) to organise a special, high-level event before COP26 on — de-risking the technologies needed to achieve net zero.

Such partnerships are essential to our relevance and impact, and we will continue to strengthen our engagement with key stakeholders: policymakers, regulatory and supervisory bodies, insurance associations, multilateral organisations, academic institutions and others.

The return to pre-pandemic ways for us gradually began in late 2021 with the reintroduction of in-person events. Our General Assembly for CEO members in Zurich made possible the peer-to-peer exchanges for which The Geneva Association has long been appreciated and known. It allowed for candid debate on what the pandemic will mean for insurers and the world in the short, medium and long term.

Thank you to our members and broader constituency for trusting our organisation, both as a platform to confront some of today’s urgent challenges and as a source of fact-based research to inform the way forward. In our perpetually volatile and uncertain environment, I believe The Geneva Association’s role is needed more than ever, and we are honoured to continue fulfilling our mandate.

Jad Ariss
Board of Directors
As of 30 April 2022

Executive Committee

Christian Mumenthaler
CHAIRMAN
CEO, Swiss Re

Lee Yuan Siong
VICE CHAIRMAN
Chief Executive and President, AIA

Joachim Wenning
TREASURER
Chairman of the Board of Management, Munich Re

Oliver Bäte
Chairman of the Board of Management, Allianz

Tsuyoshi Nagano
Chairman, Tokio Marine
Overview of The Geneva Association

In total, the 76 companies of Geneva Association members
> are headquartered in 26 countries around the world
> manage more than USD 21 trillion in assets
> employ more than 2.5 million people
> protect more than 2.6 billion people.

The Geneva Association is the only global association of insurance companies; its members are insurance and reinsurance CEOs.
Based on rigorous research conducted in collaboration with its members, academic institutions and multilateral organisations, The Geneva Association:

- Identifies and investigates key trends and risk areas that are likely to shape or impact the insurance industry and develops corresponding recommendations for the industry and for policymakers.
- Provides a platform to its members, policymakers, academics, multilateral and non-governmental organisations to discuss these trends and recommendations.
- Highlights the positive contributions of insurance to a better understanding of risks and to building more resilient and prosperous economies and societies – in both developed and emerging countries – and thus a more sustainable world.

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**RESEARCH**

- Research reports
- Expert working groups
- Academic journal
- Awards
- Public webinars

**OUTREACH**

- Insurance C-level networks
- Thematic conferences
- Engagement with multilateral organisations and global opinion leaders

**DIALOGUE**
Highlights 2021

January

- Our 2021 #RiskConversations webinar series kicked off with a discussion of our report on social inflation.

February

- Publication of Climate Change Risk Assessment for the Insurance Industry

March

- Geneva Association Economic Forum
- PROGRES virtual event
- Publication of:
  - Regulatory Considerations for Insurance Business Models
  - Mapping a Path to Cyber Attribution Consensus

April

- Chief Investment Officer Roundtable
- Publication of:
  - Climate Change Litigation – Insights into the evolving global landscape
  - Public-Private Solutions to Pandemic Risk

May

- CEO Forum
- Publication of From Risk Transfer to Risk Prevention – How IoT is reshaping business models in insurance

June

- New Technologies & Data Conference
- Climate Change & Environment Conference
- Cyber Expert Forum
- Publication of:
  - The Global Risk Landscape after COVID-19: What role for insurance?
  - Insurancd Industry Perspectives on Regulatory Approaches to Climate Risk Assessment
- Announced Ernst Meyer Prize winners, Chenyuan Liu and Tobias Huber
July
- Announced Women in Insurance Award winner, Nina Arquint, Chief Risk Officer, Swiss Re Corporate Solutions
- Climate Roundtable with IAIS

August
- Publication of New Care Models: How insurers can rise to the challenge of older and sicker societies

October
- Joint GA/OECD pre-COP26 Conference: Future-Proofing Technological Innovations for a Resilient Net-Zero Economy
- Chief Investment Officer Conference
- Evolving Liability Conference

November
- Announced new Chairman: Christian Mumenthaler, CEO, Swiss Re; Vice Chairman: Lee Yuan Siong, Chief Executive & President, AIA; and new Board member: Amanda Blanc, CEO, Aviva
- General Assembly held in Zurich
- Publication of Future Urban Risk Landscapes: An insurance perspective

September
- Special virtual event: Women Sustainability Leaders in Insurance
- Climate Litigation Expert Forum
- Publication of Digital Entrepreneurship and the Supportive Role of Insurance

December
- Health & Ageing Conference
Research and events

Update on Geneva Association research 2020–2021

1 Climate Change & Environment
   - Flood risk management
   - Nature and insurance

2 Health & Ageing
   - Underinsurance in life
   - Digital health
   - New care models

6 Evolving Liability
   - Climate litigation

7 Public Policy & Regulation
   - Climate risk assessment

Special Research Initiative on Pandemics
3 Socio-economic Resilience
- Social inequality
- Urban risk landscapes

4 New Technologies & Data
- Responsible Artificial Intelligence
- New technologies for prediction & prevention

5 Cyber
- Cyber terror & warfare:
  - Common language
  - Attribution
  - Insurance solutions

- Social inflation

- Digital entrepreneurship and insurance

- Regulatory environment for virtual business models

- Insurability of pandemics
- Public-private solutions to pandemic risk
- Post-COVID-19 risk landscape
COVID-19 sparked debate on the role of insurers in shouldering losses related to pandemics and also revealed gaps in coverage across societies. The Geneva Association launched a research series on pandemics and insurance with the aim of helping governments and insurers think about and agree upon feasible, effective ways to work together to better protect society from extreme risks, such as pandemics, going forward.
The first report in the series on pandemics, *An Investigation into the Insurability of Pandemic Risk* (October 2020) demonstrated that pandemic-induced business continuity risk defies essential criteria for insurability in the private market and that governments must play a leading role in fostering effective solutions.

The second report, published in April 2021, examines four exemplary and generic types of public-private pandemic risk solutions:

1. Mandatory or voluntary direct insurance offered by the government and administered by private insurers
2. Government reinsurance backstopping mandatory or voluntary private-sector coverages
3. Mandatory social insurance
4. Post-event financial relief with no pre-event dimension whatsoever

It then compares the benefits of each against seven public policy objectives. All options were found to have distinct strengths and weaknesses. There are various ways that the private insurance sector could, in principle, get involved, from the practical implementation of government-led pandemic risk schemes, risk assessment and prevention services, to limited risk transfer.

### Comparative assessment of government involvement in pandemic risk funding

<table>
<thead>
<tr>
<th>Policy goal / type of government involvement</th>
<th>Direct insurance</th>
<th>Reinsurance</th>
<th>Social insurance</th>
<th>Post-event protection</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Coverage</strong></td>
<td>Low to medium (unless compulsory)</td>
<td>Low (depending on insurer involvement in offering and pricing)</td>
<td>High (but relatively modest level of compensation)</td>
<td>Medium to high (subject to effective distribution channels)</td>
</tr>
<tr>
<td><strong>Public exposure</strong></td>
<td>Medium to high (public sector would absorb all losses not covered by premiums)</td>
<td>Medium to high (public sector would absorb all losses in excess of insurers' deductible)</td>
<td>Medium (public sector would absorb all losses not covered by taxes or contributions)</td>
<td>High (public sector would absorb all losses)</td>
</tr>
<tr>
<td><strong>Matching of funds with needs</strong></td>
<td>Medium (if centrally designed, with limited coverage options)</td>
<td>High (for voluntary private insurance, protected by public reinsurance)</td>
<td>Low (especially for businesses who suffered large losses)</td>
<td>Low (due to ad hoc features, designed under time pressure)</td>
</tr>
<tr>
<td><strong>Risk mitigation incentives</strong></td>
<td>Medium (underwriting considerations likely to be influenced by political objectives)</td>
<td>High (based on underwriting mechanism)</td>
<td>Low (due to undifferentiated prices and benefits)</td>
<td>Low (if businesses expect ‘bail-out’)</td>
</tr>
<tr>
<td><strong>Cost-efficiency of risk transfer</strong></td>
<td>Medium to high (depending on pool size)</td>
<td>Medium (depending on pool size)</td>
<td>High (given large pool size)</td>
<td>Low (risk is removed from the market)</td>
</tr>
<tr>
<td><strong>Operational efficiency</strong></td>
<td>Low (cost of distribution)</td>
<td>Medium (cost of dealing with private insurers)</td>
<td>High (leveraging existing structures)</td>
<td>Medium (but uncertain)</td>
</tr>
<tr>
<td><strong>Macroeconomic benefits</strong></td>
<td>Medium (due to uncertain take-up rates)</td>
<td>Medium (due to uncertain take-up rates)</td>
<td>High (due to broad reach)</td>
<td>Medium (due to ad hoc character)</td>
</tr>
</tbody>
</table>

Source: The Geneva Association, compiled and assessed from quoted sources

- High level of policy objective achievement
- Medium level of policy objective achievement
- Low level of policy objective achievement
The third and final report in the series investigated which social, economic, political and technological trends will stick post-pandemic and how these will impact insurers. Drawing on interviews with experts and industry executives, as well as the findings of a global customer survey of 8,000 insurance customers across eight countries, the report identifies four shifts that are likely to have the most significant effects on insurers and their role in the post-pandemic world, in the following order: accelerated digitalisation; ‘Big Government’; pivot to resilience and sustainability; and more remote working.

From this, it offers recommendations for an expanded role for insurance in the post-pandemic risk landscape.

Risk Conversations webinars

How Much ‘Skin in the Game’? Public-private solutions to pandemic risk

This webinar, held 12 May 2021, presented the findings of Public-Private Solutions to Pandemic Risk, bringing together industry and academic practitioners to explore the strengths and weaknesses of different public-private pandemic risk solutions.
Towards an expanded role for insurance post-pandemic: 5 recommendations for insurers

1. Capitalise on accelerated digitalisation to expand coverage, capture efficiency gains and redefine customer engagement and experience

2. Simplify products and clarify policy wordings

3. Sharpen focus on sustainability

4. Harness heightened risk awareness and the shift to digital to narrow protection gaps

5. Expedite business model innovation to include prevention services

Source: The Geneva Association

What Role for Insurance in the Post-pandemic World?

This special, high-level webinar, held 28 June 2021, elaborated the findings of The Global Risk Landscape After COVID-19: What role for insurance? and discussed the changes that will permanently alter the risk landscape and operating environment for insurers.

Watch Video

Top: Simone Bemporad (Moderator), Director of Communications and Public Affairs, Generali; Kai-Uwe Schanz, The Geneva Association; Jerome Haegeli, Group Chief Economist, Swiss Re. Bottom: Mamiko Yokoi-Arai, Deputy Head of Financial Markets Division, OECD; Renaud Guidée, Group Chief Risk Officer, AXA.
Climate Change & Environment

The Geneva Association’s climate research stream delves into the most pressing challenges and opportunities arising from climate change and nature-based risks – from physical climate risks such as flooding to the implications of transitioning to a low-carbon economy and the erosion of natural ecosystems – to identify the role insurers and other stakeholders can play to help mitigate and adapt to urgent, related risks.
The Geneva Association task force on climate change risk assessment for the insurance industry

In 2020, The Geneva Association established an industry task force on climate risk involving 18 of the world’s largest re/insurance companies, representing the companies of its CEO members. The task force aims to advance and accelerate the development of holistic methodologies and tools for conducting climate risk assessment and scenario analysis. These efforts aim to support re/insurers, regulators and other stakeholders in shaping innovations in this space.

Climate Change Risk Assessment for the Insurance Industry

This first report by the Geneva Association task force offers a decision-making framework for climate risk assessment and scenario analysis for P&C and life re/insurers. The analysis considers all physical and transition climate change risks for the liability and asset sides of the balance sheet, by line of business and over distinct time horizons. It finds that climate change poses different levels of physical and transition risks to both sides of the balance sheet for P&C and life re/insurers. To further drive and advance needed methodologies and tools that produce meaningful and decision-useful information in this space, strengthened collaborations and proactive engagement across the insurance industry and between the industry and the regulatory community, rating agencies, the scientific community and other experts will be required.

Insurance Industry Perspectives on Regulatory Approaches to Climate Risk Assessment (issue brief)

This issue brief by the Geneva Association task force offers a review of the activities of 12 international, regional, national and subnational financial services regulatory bodies, their strengths and their challenges. Though regulators’ initiatives in climate risk assessment have been helpful in promoting dialogue on climate change risk, raising risk awareness and encouraging new thinking, there are a number of challenges facing status quo approaches; for example, data-related issues pose challenges for the comparability and reliability of analyses, particularly for quantitative exercises over long-term horizons. Strengthened engagement between regulators and the insurance industry, as well as coordination among the global regulatory community, are recommended.
Climate Change Litigation – Insights into the evolving global landscape

Climate change litigation has been increasing around the world in recent years, with significant implications for insurers. The Geneva Association, in collaboration with leading legal experts, launched a two-part study to examine this rapidly-evolving area. This first report examines the typology, backdrop and drivers of the climate change litigation landscape.

It uses three broad classifications to characterise climate litigation cases – type of litigant, motivation and extent to which the case is about climate change – and identifies seven key drivers behind the development of climate litigation as a global phenomenon.

Seven key drivers of climate litigation

- Physical and transition risk
- Increased awareness
- Implications of COVID-19 economic recovery plans
- Increasing climate commitments
- Developments in climate attribution science
- Availability of funding
- Evolving standards of care

Source: The Geneva Association
Environmental Risks and the Insurance Industry: Stepping up actions

The 2021 Climate Change & Environment Conference, held virtually on 23 June 2021 and co-organised with Swiss Re, explored the implications of environmental risks for re/insurance and how re/insurers can incentivise environmentally sustainable behaviours and business models and raise societal awareness.

In his keynote speech, Sir Robert Watson, former chair of the Intergovernmental Panel on Climate Change (IPCC) and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), outlined actions that need to be taken to tackle climate and environmental risks more effectively.

Panel 1: Executive Insights: Environmental risks as a core business issue for insurers focused on how climate change and nature-based risks can impact insurers on both sides of the balance sheet.

Panel 2: Looking ahead: How can insurers address the drivers and impacts of environmental risks? looked at how to measure the materiality of environmental risks and incentivise behavioural change.
Future-Proofing Technological Innovations for a Resilient Net-Zero Economy

This special Geneva Association climate conference, held virtually on 12 October 2021 and co-organised with the OECD in the leadup to COP26, discussed the technological developments needed to enable the transition to net zero; the role of re/insurers in de-risking and financing the technological pathways to commercialisation; and the partnerships that need to be forged and strengthened to enable and incentivise innovation, sectoral adoption and implementation.

Keynote addresses. Patricia Espinosa, Executive Secretary of the United Nations Framework Convention on Climate Change (UNFCCC), called on the insurance industry to redirect underwriting and investments to decarbonise the economy in alignment with the Paris Agreement, and Tsuyoshi Nagano, Chairman of Tokio Marine, outlined how insurers can use their experience in assessing and managing risk to work with governments and corporates to support them on their pathway to net zero.

In setting the stage for the first panel discussion, Leonardo Martinez-Diaz, Senior Director of Climate Finance to U.S. Special Presidential Envoy for Climate, U.S. government, also outlined how the insurance industry can maximise its contributions to the climate transition, particularly related to technologies.

Panel 1: Scaling up new technologies towards net zero focused on the need to rethink traditional financing systems in order to accelerate the development and scaling-up of new technologies.
In this webinar, experts from the GA Task Force on Climate Risk Assessment presented the findings of the first report and discussed approaches to analysing physical and transition risks for both sides of the balance sheet, quantitative and qualitative scenario analysis for different time horizons, and strengthening multi-stakeholder collaboration to build robust methodologies and tools. (3 March 2021)

**Panel 2:** How can insurers future-proof and finance technological pathways? explored the needed innovations and partnerships to expedite the transition to net zero and meet climate targets.
Health and well-being needs are growing in size and complexity. Ageing populations and the rise in chronic and degenerative health conditions now sit alongside the challenges posed by infectious diseases such as COVID-19. Yet, most health and social/elderly care systems are ill prepared to manage these transitions.

Health and life insurers will need to think about how they evolve their products and operating models to address the gulf observed between health, life and wealth spans. In 2021, The Geneva Association’s research focused on such challenges and the potential ways to address them.
New Care Models: How insurers can rise to the challenge of older and sicker societies

Population ageing, shifting disease patterns and rising costs of care are putting traditional healthcare systems under increasing pressure. New Care Models (NCMs) aim to tackle the problem through better coordination of health and care provision, by enhancing services closer to home and outside hospital settings, and encouraging interventions to promote good health and active care management for vulnerable groups such as the elderly. This report explores the current evidence on the effectiveness of NCMs and outlines what insurers need to do to successfully adopt them.

It is clear that there is currently no universal approach to the way NCMs are implemented and their impact is not yet clear cut. There are early indications of increased customer satisfaction leading to more sales and better retention of policies though, as well as a reduction in the use of expensive institutional care.

The report puts forward three recommendations for insurers to enable them to realise the potential of NCMs: make sure the value proposition of NCMs goes beyond the simplistic notions of choice and convenience; make the shift towards becoming a strategic orchestrator of services rather than simply paying claims; and capture the opportunities afforded by the convergence of life and health products and solutions.

Suggested actions

- Enhance the value proposition of NCMs
- Assume the role of a strategic payer
- Create a cradle-to-grave joint health-life proposition

Source: The Geneva Association

Risk Conversations webinar

New Care Models

This webinar on 2 September 2021 explored the key findings of the report New Care Models: How insurers can rise to the challenge of older and sicker societies and engaged with leading academics and practitioners from the health and life insurance industry who have embarked on this journey with consumer well-being and financial sustainability in mind.

WATCH VIDEO

Top: Christian Wards, Director of Group Healthcare, AIA; Margaret-Mary Wilson, Executive Vice President and Associate Chief Medical Officer, UnitedHealth Group. Bottom: Adrita Bhattacharya-Craven (Moderator), Director Health & Ageing, The Geneva Association; Nicholas Goodwin, Director, Central Coast Research Institute for Integrated Care.
What Will it Take to Ensure a Healthy Recovery from COVID-19?

The past two years have tested individual, societal and economic resilience and given us a new lens through which to consider our well-being: physical, mental, financial and – more broadly – societal. As consumers look to the insurance industry to boost protection, health and life insurers are also having to rethink the way they do business to meet the rising complexity of health and long-term financial needs across all age groups.

The 2021 Health & Ageing Conference, co-organised with AXA and held virtually on 2–3 December, focused first on lessons learned from the COVID-19 pandemic and second on the preexisting forces accelerated by the pandemic that are reshaping health, well-being and longevity. The conference then looked at what this all means for life and health insurers.

Claudio Gienal, CEO of AXA UK & Ireland, discussed the surge in digital health consultations during the pandemic and the need for improved access to technology across the globe to ensure that these services are accessible to everyone in his opening address.

Keynote speaker Andy Briggs, CEO of Phoenix Group, explained how our attitudes towards ageing and retirement must adjust to new realities in light of rising life expectancies. He illustrated the need for improvements in healthy ageing to reduce the economic costs related to this demographic shift.

Part 1: Two years into COVID-19. What have we learnt?

Top: Marie Bogataj (Moderator), Head of the AXA Research Fund and AXA Group Foresight; Anne Boring, Head of Women in Business Chair, Sciences Po. Bottom: Thomas Holzheu, Chief Economist Americas, Swiss Re Institute; Kai Uwe-Schanz, The Geneva Association.

Taking stock of the societal impact of the pandemic explored how the pandemic has changed attitudes towards life and health insurance and exacerbated existing inequities in risk protection.

Top: Alfred Beil (Moderator), Group Chief Medical Officer, AXA; Christine Stabell Benn, Professor, University of Southern Denmark.

A spotlight on vaccines – How will they shape health risks? Focused on vaccine technology, how it influenced the risk landscape arising from infectious diseases and the way in which public discourse around it needs to evolve to become more transparent.

Top: Helen Colhoun, University of Edinburgh; Shekhar Saxena, Harvard T. H. Chan School of Public Health. Bottom: Joan Costa-Font, LSE; Annabel Bentley (Moderator), AXA Health.

Health and health systems – What did COVID-19 hurt the most? Looked at our response to the pandemic and lessons learned by focusing on three areas: chronic disease, mental health and elderly care.
Part 2: Disruptive forces in health & life insurance

Top: Emma Wilkins (Moderator), RGA; Volker Priebe, Allianz Leben. Bottom: Steve Woh, Global Health, RGA UK; Peter Joshi, Humanity Inc.

Longevity and retirement – Disruptive technologies and their influence on practice was dedicated to exploring genetic technology, how it will affect longevity and healthcare, and its impact on life and health insurers.

Part 3: Where do we go from here?

Top: Leena Johns (Moderator), MetLife (MAXIS GBN); Stacy Borans, Advanced Medical Strategies; Alessa Quane, Oscar Health. Bottom: Timothy Shakesby, European Insurance and Occupational Pensions Authority (EIOPA); Nigel Acheson, Care Quality Commission.

The role of data – The good, the bad and the ugly convened stakeholders from the insurance, provider and regulatory worlds to discuss the responsible use of data in health and life insurance.


Climate change and health – Are we prepared? explored the links between climate change and health and the potential future implications for insurers.

Top: Somesh Chandra, AXA; Adrita Bhattacharya-Craven (Moderator), The Geneva Association; Hidehiko Sogano, Dai-ichi Life. Bottom: Margaret-Mary Wilson, United Health Group; Catherine Foot, Phoenix Group; Jonathon Broomberg, CEO, Vitality Health, Discovery.

The ‘so what’ for life and health insurers? looked at how the industry adjusted to new realities during the pandemic and the effect their experiences will have on their future outlook.
Socio-economic Resilience

Major trends are changing the face of our societies: growing income and wealth inequality, expansion of the gig economy and unabated urbanisation. The COVID-19 pandemic is adding to the challenge as it is likely to have long-lasting economic and social impacts on a global scale. Our research explores the most relevant socio-economic trends and their impact on risk to help pinpoint solutions for more resilient societies.
Cities bring huge economic and social benefits, but they are also complex and vulnerable ecosystems that are exposed to an exponential rise in risks. The future urban risk landscape will be shaped on multiple fronts, from climate change and more frequent and extreme weather events, technological vulnerabilities due to smart urbanisation, to socio-demographic shifts such as growing income and wealth inequality. Against this backdrop, this research report sets out to understand how the urban risk landscape is changing and examine insurers’ potential contribution to mitigating emerging risks and vulnerabilities.

Given their higher exposure to economic loss, cities have a bigger need and scope for insurance than rural areas. With the rise of city-level risk management, insurance is also set to continue to become more relevant to urban risk mitigation strategies. However, a number of challenges need to be addressed, too, primarily arising from population density and asset accumulation as well as the interconnectivity of risks. Uncertainty surrounding climate change and the increased frequency and severity of weather-related natural catastrophes adds to the list of long-standing challenges. In addition, as demonstrated by COVID-19, increased mobility and high population density can drive pandemic risk. The report puts forward the following recommendations for insurers and public authorities:

1. Deploy concerted public-private efforts in risk management.
2. Harness insurance investment funds for building urban resilience.
3. Explore innovation in risk transfer.
4. Address barriers that prevent cities from engaging with insurers.

A simple typology of urban hazards

| Climate change | Natural hazards |
| Smart urbanisation | Unintentional man-made hazards |
| Socio-demographic shifts | Intentional man-made hazards |

Urban risk landscapes

- Acute and chronic physical climate risks
- Cyber risks
- Health risks
- Political risks

Source: The Geneva Association

Risk Conversations webinar

**Future Urban Risk Landscapes and the Role of Insurance**

This webinar on 9 December elaborated the findings of the report *Future Urban Risk Landscapes: An insurance perspective* and examined the implications of upcoming urban risks for the insurance industry and the scope for innovative public-private partnerships and insurance solutions.

 WATCH VIDEO

Top: Snigdha Garg, C40 Cities; Cassidy Johnson, University College London; Arne Holzhausen, Allianz. Bottom: Kai-Uwe Schanz (Moderator), The Geneva Association; Lykke Leonardsen, City of Copenhagen.
New Technologies & Data

Technology is fundamentally transforming business models across all industries, including insurance. The Geneva Association is taking a close look at new and emerging technologies with transformational potential, focusing mainly on how they can benefit customers and society in terms of business models, customer experience, value-sharing and ethics.
Data from Internet of Things (IoT) devices are allowing insurers to develop new approaches to insuring risks by accelerating the shift towards risk prevention and mitigation services. This has the potential to improve the insurability of certain risks, reduce costs for customers, and contribute directly to a healthier and safer society. This report takes a close look at this trend and identifies key drivers behind the successful implementation of such services. It is based on interviews with over 60 insurers, technology companies, start-ups, global organisations and leading academics across all insurance business lines and geographies. Two approaches to risk prevention are examined: real-time risk mitigation and the promotion of less risky behaviour.

Real-time risk mitigation is found to be most mature in commercial lines, driven by the loss control culture present in commercial insurance; conversely, life and health is the least mature field for reasons including regulatory hurdles and the scale of cross-sector collaboration required.

Simply introducing an IoT device to customers is not enough to generate long-term, lasting or safer/healthier behaviour; instead, a structured approach that engages the customer to achieve a sustainable change in behaviour is necessary. From the case studies examined, the report distills a three-pillar approach to achieving such behavioural change.

To achieve success going forward, and in order to realise the huge potential of IoT for promoting safer and healthier workplaces and lifestyles, insurers must treat new data-based prevention services as a whole business transformation. Insurers, their technology partners and regulators must also become more literate in insurance IoT and seek to co-create technology-driven prevention services with tech companies, rather than simply asking them to deliver hardware or algorithms.

**Pillar one:** Create awareness of the current risk levels

**Pillar two:** Suggest a change in behaviour

**Pillar three:** Incentivise the change in behaviour
From Risk Transfer to Risk Prevention: How IoT is reshaping business models in insurance

The trend of IoT-driven risk prevention services in insurance was further explored in The Geneva Association’s inaugural New Technologies & Data Conference, held virtually on 1 June 2021 and co-organised with Sun Life Financial.

Insurers as health coaches – Promoting healthy lifestyles through IoT consisted of a keynote address by J Patrick Bewley, Founder and CEO of EVÔ, who explained that insurers need to go beyond simply offering discounts or rewards for healthy behaviour and put more emphasis on strategy and creating solutions that match individual journeys. The panel discussion then focused on what is really changing in insurance and what needs to be done to better reach consumers and address their needs.

Mastering insurance IoT to prevent P&C perils was dedicated to P&C insurance. It began with a keynote address from Matteo Carbone, Founder and Director of the IoT Insurance Observatory, who described how IoT data can be used to enhance the customer experience, to sell policies in new ways and to develop new knowledge about risks. Panellists went on to highlight successful examples of IoT-driven prevention services and how they have been integrated into insurance value propositions.
The cyber work stream explores the conditions for and impediments to a sustainable cyber re/insurance market, generates insight into the challenges of treating cyber as an insurable peril and promotes the contribution of insurance to mitigate what is a growing societal risk.
Mapping a Path to Cyber Attribution Consensus

Businesses, governments and societies increasingly depend on interconnected online systems, making them vulnerable to viral cyber events and large-scale disruption and destruction. Key factors in determining whether insurance will cover related losses include characterising such events and the outcome of the attribution process, or identifying the responsible actor.

Since insurance policies covering cyberattacks typically exclude war risk, key questions when applying a war exclusion are who was involved and their role – in particular, whether a state actor was ultimately responsible. This requires analysing the state’s control over the perpetrator through a holistic assessment of the circumstances, rather than by analysing the act itself, as well as any benefits the state may have received from the cyberattack. However, without an international standard for attribution, proof of state involvement in cyberattacks, whether cyber terrorism, hostile cyber activity (HCA) or cyber war, can be hard to establish.

This report, the second in The Geneva Association’s and International Forum for Terrorism Risk (Re)Insurance Pools’ (IFTRIP) series on cyber terror and cyber war, provides insurers with a framework for attributing and characterising cyber incidents.
The 2020 SolarWinds cyberattack was one of the largest and most sophisticated to date. On 9 June 2021, The Geneva Association held a cyber expert forum, co-organised with Allianz, to take a deep dive into the background of the hack. The event was exclusively available to the insurance companies of Geneva Association members.

In his keynote speech, Stuart McKenzie, Senior Vice President of Mandiant (FireEye), discussed the challenges that arose for FireEye (a client of SolarWinds) while investigating the intrusion into their own systems. These included helping those affected by the attack by providing countermeasures, deciphering whether FireEye had done anything wrong (and how to improve their own security to prevent future intrusions), and deciding what information to disclose to the public and when.

The subsequent panel discussion focused on how large-scale cyber events like the SolarWinds attack can help shape the cyber insurance offering.
As the world becomes more complex and throws up new global challenges, both novel and well-known liability concerns, ranging from insuring new industrial and digital technologies to the impact of social inflation, surface. What will be the implications for liability lines of business? The Geneva Association evaluates shifts in the liability risk landscape, with particular focus on what the emerging trends mean for the boundaries of insurability.
Digital technologies are transforming the way businesses are formed and operate, fostering a new class of digital entrepreneur. However, the associated shift towards intangible assets also presents new risks and liability exposures. This report explores how insurers are adapting their services to better meet the needs of digital entrepreneurs, as well as possible avenues for future insurance innovation.

Compared with a traditional business, a digital firm will typically own relatively few physical assets and will generate much more of its value from intangible assets such as human capital, software and intellectual property (IP). The factors that influence the value of intangibles are, however, complex and not always fully understood. Intangible liabilities include potential obligations and contingencies that lead to reputation loss, IP infringements, claims for injuries or loss from platform/software users, or breaches of cybersecurity/privacy. Intangible risks are difficult to quantify, in part because the legislation and litigation environment in which digital companies operate is itself still evolving. Yet if they crystallised, some could ultimately threaten the viability of a firm.

Insurance has a long history of adapting its solutions to help entrepreneurs cope with unexpected operational setbacks. Over time, the boundaries of insurability risk will move, in part due to the actions of entrepreneurs themselves, and as reliable data helps transform uncertainties into insurable risks. Commercial liability policies as well as affirmative covers like cyber and IP insurance will therefore evolve to accommodate some of the new intangible risks. Alongside marketing initiatives to increase awareness of these emerging risks, the report recommends that insurers pursue ways to sharpen the value proposition of insurance through product, process and organisational innovation.

Source: The Geneva Association
This webinar presented key findings of the report *Digital Entrepreneurship and the Supportive Role of Insurance*. It brought together representatives from the insurance industry and digital entrepreneurs themselves to discuss the changing risk landscape and initiatives insurers are already making in better supporting entrepreneurship and business innovation as well as where further progress may be needed. (November 2021)


Bottom: Karl Gray, Uber; Chris Moore, Apollo 1971.

WATCH VIDEO
Insurance industry practitioners remain cautious about the potential liability claims related to COVID-19 that might ultimately arise. The Geneva Association’s 2021 Evolving Liability Conference, held in a hybrid format in London on 27–28 October and co-organised with Lloyd’s, explored the long-term implications of the pandemic for liability insurance.

Alex Budzier, CEO of Oxford Global Projects, and Fellow at the Said Business School, University of Oxford, discussed rare events like pandemics from a basic, statistical perspective in his keynote address. He explained how the ‘regression to the tail’ framework, which recognises the tendency for new events to be even more extreme than the most extreme to date, may go some way in helping us to predict future such events.

Session 1: Implications for insurers of shifting work and business practices in light of the enhanced knowledge of pandemic risks considered how the physical risk landscape might permanently shift as economies emerge from the pandemic and transition to a ‘new normal’.

Session 2: Paying for COVID-19 – The possible return of inflation and the implications for long-tail insurance claims? reviewed how far COVID-19 might impact claims inflation trends through both macroeconomic and non-macroeconomic channels.

Session 3: Implications for insurers from actual/potential shifts in liability standards/duties of care following the COVID-19 episode highlighted how, at this stage, pandemic-related liability and litigation trends remain difficult to discern.

Session 4: Lessons learned from the pandemic for liability insurers considered the pandemic-related claims experience thus far and the main takeaways from the COVID-19 episode for liability insurers.
Insurance is a heavily regulated industry. Affecting all lines of business, insurance regulations aim to protect policyholders and maintain financial stability. The Geneva Association studies and advises on where regulations and public policy can enhance insurance market development, including in emerging markets, thereby promoting the ability of insurers to act as 'insurers for a better world'.
The COVID-19 pandemic forced many insurers to accelerate their transition to digital business models. Though this has been remarkably successful in many countries, it also highlighted the critical role played by national regulatory frameworks in both facilitating and hindering the shift to digitalisation in the insurance industry.

Drawing from a Geneva Association survey of 27 insurers across 16 jurisdictions, this issue brief explores regulatory and policy barriers to the digitalisation of insurance business models. It finds that:

1. Insurance regulatory frameworks are perceived to be much less conducive to digitalisation than macro-level factors, such as government policies, digital infrastructure and local culture.

2. The three most commonly cited regulatory barriers are paper document delivery provisions, insurance distribution regulation, and a lack of telehealth provisions for medical exam procedures.

3. Regulatory barriers to digitalisation resulted in additional costs for 60% of insurers during COVID-19 lockdowns, with 50% of insurers reporting lost sales and/or operational impacts.

4. Engagement and cooperation between regulators and the insurance sector, and a technology-agnostic regulatory framework, are the two most common factors found in conducive regimes.

Insurance regulatory frameworks should be designed in such a way that they either accommodate future technological developments or can be adapted to a changing environment as needed. Regulatory relief provided during lockdowns, such as allowing electronic signatures, needs to be made permanent and potentially extended across product categories. To facilitate electronic customer on-boarding, more work is needed in the area of electronic identities, which requires efforts from both insurance regulators and the wider policymaking community. Increased collaboration between regulators, policymakers and insurers would greatly support the identification of hurdles to digitalisation and help in finding ways to remove these while still meeting regulatory objectives.
Recovering from the Pandemic: The emerging risk and regulatory landscape

This virtual event, held on 25 March 2021, brought together insurers, policymakers, regulators and supervisors for discussions on policy and regulatory objectives and challenges facing the industry.

In the first session, Foresight on environmental risks, panellists discussed regulatory approaches to climate and emerging environmental risks and what they mean for the insurance industry. Insurance regulators across the globe are trying to grasp the risks emanating from climate change and environmental degradation; current initiatives, however, are fragmented due to a lack of standard, internationally valid technical terms for environmental risk reporting. Industry-led initiatives, such as on climate risk assessment, disclosure or voluntary best practices, should therefore be leveraged to enhance comparability and ensure that disclosure requirements are harmonised. The panel also discussed the stewardship role of insurers in helping their customers to become more resilient to climate change.

The business interruption (BI) protection gap exposed by COVID-19 was the topic of the second session, Balancing customer protection and prudential regulatory considerations during the pandemic. The panel discussed to what extent the issues around BI policies might have laid bare tensions between conduct and prudential regulation, concluding that they were not in conflict as there was no conduct regulatory pressure to provide cover beyond contractual obligations. The focus on BI policies has drawn attention away from areas where insurers are providing pandemic cover, including life and health, event cancellation and travel. The panel concluded with a discussion on the nature of pandemic-related BI claims, and how insurers could be part of government-led solutions considering their limited skin-in-the-game when it comes to taking BI risks on their balance sheets.
In his keynote speech, David Altmaier, President of the NAIC and Vice-Chair of the IAIS Executive Committee, expounded the priorities of the NAIC for 2021 and updated on the implementation of the International Capital Standard (ICS).

In response to the COVID-19 crisis, the NAIC has been working with stakeholders on a federal mechanism to help ensure the widespread availability of BI insurance for pandemic risks. In the area of climate risk, the NAIC is evaluating regulatory approaches that would allow for innovative solutions to better protect consumers. In terms of international developments, it was highlighted that the IAIS is entering the second year of the five-year Monitoring Period of the ICS.

Other activities

The Public Policy & Regulation work stream is in regular interaction with the global regulatory and policymaking community, through stakeholder meetings as well as by responding to public consultations. Key stakeholders in this regard include the International Association of Insurance Supervisors (IAIS) as well as the OECD. Two responses provided in 2021 are described below.

**Public consultation on IAIS draft application paper on macroprudential supervision**

In March 2021, the IAIS invited stakeholders to comment on a draft application paper on macroprudential supervision. The paper provides practical guidance to supervisors on implementing supervisory material related to Insurance Core Principle (ICP) 24 (macroprudential supervision). It is particularly relevant in light of revisions made to this ICP relating to the holistic framework for the assessment and mitigation of systemic risk in the insurance sector (Holistic Framework), which is endorsed by The Geneva Association. The focus of the paper is on the build-up and transmission of systemic risk at the individual insurer as well as sector-wide levels. The Geneva Association highlighted that the paper is disproportionately tilted towards assessing the potential systemic importance of individual insurers. This was recognised by the IAIS in the resolution of comments.

**Public consultation on IAIS draft issues paper on insurer culture**

In June 2021, the IAIS requested stakeholder input on a draft issues paper on insurer culture. The paper forms an initial exploration as to how culture intersects with prudential and conduct risks, the components that contribute to insurer culture, and provides examples of the role of culture in managing these risks. The Geneva Association commended the IAIS for recognising the importance of diversity and inclusion and the role it plays in sound decision-making, ultimately leading to better business and consumer outcomes, but also cautioned against prescribing one ‘right’ or ‘good’ culture, considering its multifaceted nature. The supervision of culture can be problematic if it is based on subjective observation of individuals’ behaviour in accordance with an arbitrary definition and assessment of culture. Challengingly, good and bad culture can manifest in various ways and present differently from one insurer to another and from country to country.
General Assembly and CEO Forum
In November 2021, Geneva Association members gathered in Zurich for our annual General Assembly. They engaged on some of the biggest issues for the insurance industry and society right now – climate change, AI, economic inequity, and diversity & inclusion.

Keynote speech: Recent Progress in iPS Cell Research and Application

Professor Shinya Yamanaka, Nobel Prize for Medicine (2012)

While therapeutic techniques based on stem cell technologies offer huge promise for overcoming the woes of ailing and ageing societies, offering them at scale, on time and affordably is challenging. Disease prevention remains the most cost-effective option and needs to be prioritised as such by insurers.

Panel 1: Climate Change – How will the world become net zero? analysed the efforts needed to achieve net-zero targets by 2050 in the fight against climate change. A successful transition will hinge on the establishment of a global market for renewable energy, which requires related infrastructure and the development and scaling up of new, innovative technologies. Insurers can help by offering solutions that support these technologies, and by moving away from underwriting and investing in coal.

Panel 2: Artificial Intelligence: Progress for humanity or threat to societies? looked at the benefits AI can offer insurers and how these can be realised without threatening customer trust. By facilitating the shift towards business models based on risk prediction and mitigation, AI can increase the value proposition of insurance. Transparent regulations and governance structures as well as fair, explainable systems and algorithms will help to retain customer trust by combatting concerns over discrimination, bias and data misuse.
Panel 3: Mitigating Widening Economic Inequality: Which role for the insurance industry? explored ways for insurers to support financial inclusion and to mitigate economic inequality based on the mutualisation of risk. Insurers can maximise their contribution to financial inclusion by simplifying products and offering more basic coverages. Underserved customers require different and tailored distribution approaches, and insurers need to do more to partner with governments, NGOs and multilateral organisations to promote economic equity more generally.

Climate litigation awareness session. Climate litigation is a recent and growing phenomenon with significant implications for insurers. This session shed light on the factors driving this upward trend and outlined what insurers can do to limit their exposure – for example, putting a framework in place to monitor this evolving area, raising awareness of the issue at the board level and among insureds, instituting appropriate climate risk governance, and including litigation risk in their approach to climate risk management.

Keynote speech: Notes on the Global Economy
Professor Paul Krugman, Nobel Prize for Economics (2008)
The macroeconomic impact of COVID-19 will likely be muted. Pandemic effects are expected to dissipate by 2023/24 and the familiar challenge of secular stagnation will likely come to the fore again. The world remains awash with savings compared with desired investment, which will keep long-term real interest rates very low.

Keynote speech: The world economy in 2021 and beyond
Jean-Claude Trichet, former President of the European Central Bank and Governor of the Banque de France
Though the extraordinary response of governments, central banks and the private sector avoided the onset of a major economic depression on the back of the COVID-19 pandemic, we experienced the worst recession since World War II. Jean-Claude Trichet expounded the current economic situation and where we are now in terms of recovery, as well as the long-term challenges facing the global economy.

A second edition of The Geneva Association CEO Forum, held on 27 May 2021, convened global insurance leaders to exchange views on the changes underway in the industry as a result of the pandemic and how the risk landscape will be affected over the long term.
Keynote speech: Global Coordination on Risk Assessment and Supervisory Responses
Jonathan Dixon, Secretary General, IAIS

The IAIS influences global risk management practices, such as the development of the Insurance Capital Standard (ICS), which aims to create a common language for the assessment of insurance group solvency and is currently being tested over a five-year monitoring period until 2024. Climate change and cyber are also pressing topics for the IAIS.

Panel 4: Diversity & Inclusion – Why does it matter? discussed how insurers can advance the diversity, equity & inclusion (DE&I) agenda and the benefits this can offer their companies. As well as the ethical and socio-economic imperatives, DE&I also makes good business sense; links have been made between diverse management teams and higher revenues due to innovation. Panellists highlighted the need for more women in business leadership and CEO positions and promoting based on potential rather than years of experience.

Moderated interview: Peter Maurer, President, International Committee of the Red Cross (ICRC) in conversation with Christian Mumenthaler, CEO, Swiss Re

The ICRC works predominantly in hyper-fragile regions of the world where war, internal conflict and structural poverty are pervasive. Though re/insurers have little influence over the political determination and conflict management in countries, they have a role to play in enabling fragile countries and their citizens to mitigate the risks they face from, say, climate change, which is also undermining stability in certain regions.

Panel 1: Insurance in the post-pandemic global risk landscape discussed a number of trends that will have particular relevance for insurance, including an increase in remote working, digitalisation and climate change.

Panel 2: Impact of the pandemic on business strategies of insurers looked at the extent to which recent changes in the insurance sector are related to COVID-19, and how the pandemic might impact insurers’ business models going forward.
Geneva Association Women in Insurance Award

The Geneva Association’s first-of-its-kind international award recognises a female insurance leader whose work has made a demonstrable contribution to societal good.

The award is given out each year at The Geneva Association’s General Assembly, our annual gathering of insurance CEO members.

Charles Brindamour, CEO, Intact Financial Corporation; Nina Arquint, Chief Risk Officer, Swiss Re Corporate Solutions.
In 2021, the award’s second year, nominations were accepted under the following priority areas:

- **Climate and environment:** better integrating climate risk into underwriting methods or promoting climate-resilient investment approaches, for example
- **Health:** improving health outcomes for people through new services (diagnostic, treatment) or forms of insurance cover
- **Innovation:** using new technologies or data to make insurance cover more meaningful for people or businesses
- **Inclusive insurance:** developing new pricing or distribution models that give low-income or remote populations access to insurance cover (e.g. microinsurance)

**2021 winner**

The 2021 award went to **Nina Arquint**, Chief Risk Officer at Swiss Re Corporate Solutions, for her work and commitment to driving the reduction of coal underwriting. Nina has been a driving force within the Swiss Re Group on the topic of sustainability over the last five years. She is the executive sponsor of a comprehensive sustainability strategy across the Swiss Re Group, an effort that will make a defining contribution to achieving the UN Sustainable Development Goals. Currently, she supports Swiss Re’s corporate clients in de-risking their investments to achieve their ESG goals and help to mitigate sustainability risks.

**Special recognitions**

In 2021, the selection committee distinguished two additional women executives with special recognitions: **Heidi Delobelle**, the first female CEO of AG Insurance, for her exceptional leadership achievements, and **Lucia Silva**, Group Head of Sustainability and Social Responsibility of Generali, for impactful sustainability initiatives.

**Selection committee members**

The selection committee for the 2021 Geneva Association Women in Insurance Award was comprised of **Dame Inga Beale**, former CEO of Lloyd’s, **Ms Lucie Martel**, Chief Human Resources Officer of Intact Financial, and **Tsuyoshi Nagano**, Chairman of Tokio Marine.

**Award ceremony**

Our first Women in Insurance Award ceremony took place at the 2021 General Assembly dinner and recognised both the 2021 and 2020 winners. Geneva Association Chairman Christian Mumenthaler presented **Garance Wattez-Richard** the 2020 award in the ‘inclusive insurance’ category; and Charles Brindamour, CEO of Intact Financial, presented **Nina Arquint** the 2021 award in the ‘climate & environment’ category.

**Women Sustainability Leaders in Insurance**

In this conversation moderated by Jo Scott, Chief Marketing & Communications Officer, Lloyd’s, **Nina Arquint, Heidi Delobelle** and **Lucia Silva** discussed their initiatives to advance sustainability objectives – the tangible benefits for society, key success factors and what the work has meant to them.
C-level networks

The Geneva Association’s high-level meetings bring together top decision makers from global insurance companies and experts to discuss priority topics.

Geneva Association Economic Forum (GAEF)

Exploring the Economic and Social Fallout from the Pandemic – Zooming in on inflation risk and ESG

The GAEF is a platform for chief economists, chief strategy officers and senior market research and corporate planning professionals from global insurance companies to discuss the economic and political environment and the implications for the insurance industry.

The 2021 edition was held virtually on 24 March. It gathered more than 30 chief economists, chief strategy officers and other senior executives from the global insurance industry – a record turnout.


Session 1: The global inflation outlook

The discussion explored the short- and medium-term impacts of the pandemic on inflation levels and the factors driving them. Although accelerated digitalisation could result in a productivity boom and potentially curb inflation pressures, deglobalisation could add to inflation by driving up the cost of consumer goods and inputs. It was agreed that should inflation ‘show its ugly face’, central banks are unlikely to hike interest rates fast, given the enormous amount of debt in the public and private sector.

Roundtable discussion.

Session 2: The role of insurance in promoting the social dimension of ESG

Participants highlighted that ESG objectives align with the fundamental business model of insurance, which is about risk-sharing and mitigation as well as resilience building. Therefore, the most obvious way for insurers to contribute is to build on their tested business model. Additional efforts should be predicated on transparency, e.g. disclosing ESG-related risks and building a taxonomy to help guide investment and underwriting decisions.
The Chief Investment Officer (CIO) Conference is an annual meeting of insurance CIOs and senior asset managers from global insurance companies to discuss issues and trends that impact insurance asset management and investment strategies.

The Geneva Association’s 2021 CIO Conference, co-hosted by Allianz and held virtually on 7 October, looked forward to the key challenges for insurers in the new normal, notably climate change and negative real rates, convening CIOs from our member organisations, leading thinkers and experts to consider how insurers can plan for and navigate this environment.

The electricity sector was the first to deal with energy transformation. Technology continues to drive a revolutionary change across all aspects of the supply chain. Going forward, the focus is on continued decarbonisation of generation and increased investment into distribution networks to make them larger, denser and more resilient to extreme events. Insurers are eager to get involved. Sustainable development goal-linked issuance at the corporate level was highlighted as one area of focus, and it was suggested that long-term investors could begin to own, rather than simply finance, new infrastructure.

**Panel 1 – Net zero: Moving the needle?**

Insurers help customers to build resilience against tail risks and extreme events. That creates a natural interest in climate change and a need to evolve both product suites and business models. Two clear areas of focus emerge for the insurance industry: stewardship, namely active ownership of companies and investments so that the right transition paths can be progressed, and concerted policy engagement.

**Panel 2 – What goes around: The impact of COVID-19 on the credit cycle**

Post-pandemic, inflation is a key concern, given the rapid rise around the world. Credit fundamentals are less important now than liquidity and, critically, the path of liquidity. Though there is a lot of debt, access to capital is still easy for borrowers, rates are low and there has been no shock to the financing system. Our fate rests more than ever in the hands of central banks. The challenge is that the pressure to tighten is rising; managing that path in the coming years against a backdrop of rising inflationary pressures and nervous markets will be a careful balancing act.

**Panel 3 – Guess the price, whack the mole and other parlour games**

For many insurers, private assets have become a natural evolution of portfolio strategy as real rates stay persistently negative. However, as their allocations grow, challenges have also emerged and there is increasing debate about what to do with this growing segment of the book. For example, integrating ESG criteria into the private asset portfolio and aligning them with broader strategic objectives, such as net-zero targets, is a key challenge. Understanding the impact of it all is critical for insurers, as they build out these portfolios and make pragmatic, real-world decisions.

**Fireside chat: Transitioning the Real Economy**

Francesco Starace, CEO of Enel

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**Chief Investment Officer Roundtable**

This roundtable, held on 13 April 2021, provided an online platform for The Geneva Association’s CIO Network to debate one of the key challenges for insurance portfolios today: core fixed income in a negative yield environment.
The Geneva Association began publishing The Geneva Papers on Risk and Insurance in 1976. Since its inception by the Association’s first president, Professor Raymond Barre, the journal has had two objectives: 1) to help elaborate and confront key strategic issues for the insurance sector; and 2) to stimulate a constructive dialogue between the insurance sector and its social and economic partners.

The following issues of The Geneva Papers were published in 2021:

**Volume 45, Issue 1 (January 2021)**
Articles in this issue focus on issues including the investment behaviour of insurers, models for data breach cyber risks, the role of distribution channels in market discipline, and risk-based capital regulation in Malaysia.

**Volume 45, Issue 2 (April 2021)**
Special Issue in Memory of Orio Giarini
This special issue was published in memory of Orio Giarini, co-founder of The Geneva Papers and
Geneva Association Ernst Meyer Prize

The Geneva Association awards the prestigious Ernst Meyer Prize, worth CHF 5,000, annually for university research work in the form of a doctoral thesis which makes a significant and original contribution to the study of risk and insurance economics.


Chenyuan Liu’s thesis details how cost-sharing rules, asymmetric information problems, and capitation payment models affect the design of health insurance plans, with implications for the overall efficiency of healthcare markets. Tobias Huber’s dissertation investigates the behavioural factors behind people’s decision-making in various insurance contexts, comparing against the predictions of neoclassical models. The findings shed light on how customers react to premium increases, how life insurers can better estimate mass lapse scenarios, and the relationship between levels of risk aversion and risk management decisions.

Volume 45, Issue 3 (July 2021)
Special Issue on Microinsurance

Edited by David M. Dror and Martin Eling, this special issue contains seven articles focusing on various aspects of microinsurance. Both the supply and demand sides are examined, and several risk categories are considered: microinsurance in general (life and non-life), life and health, and agricultural. Four of the seven papers deal with the Asian environment, while the other three focus on Africa.

Volume 45, Issue 4 (October 2021)
Special Issue on Trust in Insurance

The final issue of 2021, edited by Luigi Guiso, was dedicated to the subject of trust in insurance. It brings together three articles, which analyse the effect of societal trust on insurers’ risk-taking strategies, transparency around the use of new artificial intelligence (AI) technologies to retain customer trust, and the impact of digitalisation on the importance of traditional policyholder risk declarations.


Secretary General of The Geneva Association from 1973–2000, who died on 28 February 2020. It consists of contributions by researchers and former members of The Geneva Association who knew Orio well, either in the form of research articles on topics that echo Orio’s research interests or testimonies to his role in shaping fields of study in risk and insurance as well as personal careers. It was edited by Christophe Courbage and Henri Loubergé.

Chenyuan Liu, University of Wisconsin-Madison
Tobias Huber, Ludwig Maximilian, University of Munich
External engagements

Strategic external engagement is a core feature of The Geneva Association’s outreach strategy. Throughout 2021, Geneva Association experts presented our research findings and perspectives to key stakeholder audiences: insurance companies, policymakers and regulators, insurance associations, multilateral organisations, academia and media, among others.

**Intelligent Insurer**

- **The Re/insurance Lounge**
  - 2 February 2021
  - Participation in the panel session ‘Plugging the flood gap: risks and opportunities for re/insurers’.

- **The Economist**
  - **Climate Risk Summit: North America**
    - 16 March 2021
  - **Climate Risk Week Europe**
    - 14 September 2021
  - Participation in the panel ‘From data to decision-making’ and presentation of the Geneva Association report *Climate Change Risk Assessment for the Insurance Industry* at The Economist’s Climate Risk Summit: North America. Fireside chat at Climate Risk Week Europe on ‘Insurance and pricing risk – what is the role of the insurance industry in mitigating the impact of climate change?’

- **Cornell University**
  - **2021 Perspectives on the Climate Change Challenge Seminar Series**
    - 29 March 2021
  - Address on ‘Transitioning to a Resilient Low-carbon Economy: How Addressing Climate Change is Being Integrated Into Core Business and Investing in the Private Sector’.
Invited talk
1 April 2021
Presentation of the first two reports in The Geneva Association’s research series on pandemics and insurance.

Resilience Week
7 June 2021
Introduction to the session ‘Climate resilience: How can insurers contribute to reducing the gaps in protection against climate-related risks? And, as long-term investors, what is their role in supplying sustainable investments?’.

Conversations about Climate Change and Insurance
29 June 2021
Moderation of the panel ‘Insurability of Floods in a Changing Climate and the Need for Public-Private Action’.

2021 OECD-ADBI Roundtable on Insurance and Retirement Savings in Asia
29 June 2021
Moderation of the session ‘Emerging technologies and innovation: opportunities and challenges’.

China Taiping Insurance International Cooperation and Development Forum
9 September 2021
Presentation of the Geneva Association report New care Models: How insurers can rise to the challenge of older and sicker societies.
**EIOPA**

**7th Global Insurance Supervision (GIS) Conference**
15 September 2021
Participation in the panel ‘The impact of the pandemic on protection gaps’.

**InsuranceERM**

**Insurance Risk & Capital Americas 2021**
22 September 2021
Participation in the panel ‘How is the Nature of the Cyber Threat Changing and how Should Insurers Respond to the Spike in Ransomware Attacks?’.

**Insurance Risk & Capital EMEA 2021**
2 December 2021
Participation in the session ‘Tech Innovation and what this Really Means for the Insurance Sector’.

**Responsible Investor**

**RI Canada 2021**
29 September 2021
Participation in the session ‘Green taxonomies & economic transformation’.

**AXA Research Fund**

**Expert Series Webinar**
4 October 2021
Moderation of the webinar ‘Coastal Resilience and the Role of Nature Based Solutions’.

**Swiss Re Institute**

**Virtual Expert Forum on Behavioural Data and Digital Wellness Platforms**
27 October 2021
Presentation of the Geneva Association report *Digital Health: Is the euphoria justified?*
**Professional Risk Managers’ International Association**

**Canadian Risk Forum 2021**  
1 November 2021  
Participation in the panel ‘Climate Change – Risk Management, Regulation, and Fiduciary Duty’.

**Climate Action**

**Sustainable Innovation Forum 2021**  
9 November 2021  
Participation in the session ‘Managing Physical Climate Risk in Portfolios’.

**Singapore Reinsurers’ Association**

**17th Singapore International Reinsurance Conference (SIRC)**  
16 November 2021  
Chaired the panel session ‘Insurability of Pandemic BI Risk’.

**IAIS**

**Annual Conference 2021**  
18 November 2021  
Participated in the panel ‘Pandemic risk cover’.

**CRO Council**

**Annual Meeting**  
9 December 2021  
Keynote speech on ‘Implications of COP26 for insurers and GA research on climate risk’.
Communicating for impact 2021

Through its communications strategy, The Geneva Association aims to advance progress towards its strategic goals and reach key stakeholders. Our research activities, events, awards, media coverage and social media output in 2021 continued to raise awareness of emerging and relevant trends for insurers and to highlight the positive role insurance can play in society.

We were able to again grow our online audience and reach in 2021, with a 44% increase in user traffic to our website compared to 2020 and a 54% increase in LinkedIn followers. We also saw a noticeable uptick in media mentions, which more than doubled from 55 in 2020 to 111 in 2021.
Website

+44% in website users
+34% in web page views

Social media

+54% in LinkedIn followers

Media

+102% in number of media mentions

Events

3,418 event participants in total (+144% increase)

Research reports

+60% in unique downloads of all reports

Academic journal

324,037 in article downloads (+13% increase)
+22% in submissions
Appendix:
2021 publications and events

*Climate Change Risk Assessment for the Insurance Industry* by Maryam Golnaraghi and the Geneva Association Task Force on Climate Change Risk Assessment (February)

*Regulatory Considerations for Digital Insurance Business Models* by Dennis Noordhoek (March)

*Mapping a Path to Cyber Attribution Consensus* by Rachel Anne Carter and Julian Enoizi (March)

*Climate Change Litigation – Insights into the evolving global landscape* by Maryam Golnaraghi, Joana Setzer, Nigel Brook, Wynne Lawrence and Lucia Williams (April)

*Public-Private Solutions to Pandemic Risk* by Kai-Uwe Schanz (April)

*From Risk Transfer to Risk Prevention: How IoT is reshaping business models in insurance* by Isabelle Flückiger and Matteo Carbone (May)

*The Global Risk Landscape after COVID-19: What role for insurance?* by Kai-Uwe Schanz (June)

*Insurance Industry Perspectives on Regulatory Approaches to Climate Risk Assessment* by Maryam Golnaraghi and the Geneva Association Task Force on Climate Change Risk Assessment (June)

*New Care Models: How insurers can rise to the challenge of older and sicker societies* by Adrita Bhattacharya-Craven (August)

*Digital Entrepreneurship and the Supportive Role of Insurance* by Darren Pain (September)

*Future Urban Risk Landscapes: An insurance perspective* by Kai-Uwe Schanz (November)

**Translations (research summaries)**

**Chinese**

保险业的气候变化风险评估: 全盘的决策框架和对资产负债表两端的关键考虑 by Maryam Golnaraghi and the Geneva Association Task Force on Climate Change Risk Assessment

数字化保险业务模式的监管考虑事项 by Dennis Noordhoek

公共部门与社会资本合作应对大流行病风险的解决方案 by Kai-Uwe Schanz

从风险转移到风险防范: 物联网如何重塑保险业的商业模式 by Isabelle Flückiger and Matteo Carbone

新冠肺疫情后全球风险格局: 保险的作用是什么? by Kai-Uwe Schanz

新型护理模式: 保险公司如何应对日趋严重的老龄化和病态社会的挑战 by Adrita Bhattacharya-Craven

数字化创业与保险的支持作用 by Darren Pain

未来的城市风险格局: 保险视角 by Kai-Uwe Schanz

**Japanese**

パンデミックリスクについての官民連携: 事業機会や課題とトレードオフ by Kai-Uwe Schanz

リスク移転からリスク防止へ: モノのインターネット(IoT)は保険業界のビジネスモデルをどのように変えているか by Isabelle Flückiger and Matteo Carbone

コロナ後の世界のリスク展望: 保険の役割は何か? by Kai-Uwe Schanz

新しいケアモデル: 保険会社は高齢化・医療負担増加社会の課題にどのように対応できるか by Adrita Bhattacharya-Craven

デジタルアントレプレナーシップと保険の支援的役割 by Darren Pain

将来の都市リスクの展望: 保険の役割 by Kai-Uwe Schanz

**Blogs**

*Promoting greater economic protection against man-made catastrophes: 20 years of lessons from 9/11* by Rachel Anne Carter


*Mental Health: It took a global pandemic to rethink our ‘put on a brave face’ approach* by Adrita Bhattacharya-Craven


*Antimicrobial Resistance: The risk ofundoing modern medicine as we know it* by Adrita Bhattacharya-Craven, David Tordrup and Rebekka Aarsand

The Geneva Papers

One regular issue (January)
Special Issue in Memory of Orio Giarini (April)
Special Issue on Microinsurance (July)
Read the summary
https://www.genevaassociation.org/news/articles-interest/geneva-papers-special-issue-microinsurance

Special Issue on Trust in Insurance (October)
Read the summary

Events

C-Suite conferences

Geneva Association Economic Forum (GAEF) (24 March)
Read the summary
https://www.genevaassociation.org/geneva-association-economic-forum-2021-meeting-summary

CIO Roundtable (13 April)
Read the summary
https://www.genevaassociation.org/chief-investment-officers-roundtable-2021-summary

CEO Forum (27 May)
Read the summary
https://www.genevaassociation.org/news/annual-reports/member-ceo-forum-2021-summary

Chief Investment Officer Conference (7 October)
Read the summary
https://www.genevaassociation.org/chief-investment-officers-conference-2021-conference-summary

General Assembly (10–12 November)
Read the summary
https://www.genevaassociation.org/general-assembly-2021-summary

Thematic conferences and meetings

Programme on Regulation and Supervision (PROGRES) virtual event (25 March)
Read the summary

New Technologies & Data Conference (1 June)
Read the summary

Climate Change & Environment Conference (23 June)
Read the summary

Joint OECD–Geneva Association Conference (12 October)
Read the summary

Evolving Liability Conference (27–28 October)
Read the summary
https://www.genevaassociation.org/evolving-liability-conference-2021-summary

Health & Ageing Conference (2–3 December)
Read the summary
https://www.genevaassociation.org/health-ageing-conference-2021-summary

Risk Conversations webinars

Social Inflation: Navigating the evolving claims environment (25 January)

Climate Change Risk Assessment for the Insurance Industry (3 March)

Cyber Terror and Cyber War: Towards consensus on language and attribution (19 April)

How Much 'Skin in the Game'? Public-private solutions to pandemic risk (12 May)

What Role for Insurance in the Post-pandemic World? (28 June)

New Care Models (2 September)

Digital Entrepreneurship and the Supportive Role of Insurance (23 November)

Future Urban Risk Landscapes and the Role of Insurance (9 December)

Women in Insurance

Women Sustainability Leaders in Insurance (29 September)
This annual report covers the period January–December 2021