

Strengthening Societal Resilience

An Interview with Maryam Golnaraghi, PhD, Director of Climate Change and Emerging Environmental Topics, The Geneva Association

experience spans over 20 years in international executive and senior advisory positions in industry, government and the United Nations. She works with the C-Suites and boards of insurance companies, financial institutions, governments, regulators and international organizations to enable and scale up the integration of climate risks and opportunities into core business and investing; increase investments towards a low-carbon economy in



areas such as sustainable infrastructure; and build operational and financial resilience to extreme events for people, businesses and governments. In June 2020, she was included in a list of those "Most Influential on Climate Change" produced by InsuranceERM. From 2004 to 2014, as the Chief of the Disaster Risk Reduction at the United Nations World Meteorological Organization (WMO), Golnaraghi headed an international program that assists governments with developing national policies and institutional capacities in disaster and climate risk management, risk financing and risk transfer. Golnaraghi also supported UN member states with the development of national early-warning and emergency-preparedness systems, leveraging the latest technological developments and regional cooperation in weather, water and climate forecasting. Following the 2004 Indian Ocean Tsunami, she served as an adviser to former U.S. President Clinton in his capacity as the UN Special Envoy on Tsunamis. Prior to joining the UN, from 1997 to 2004, as the founder and CEO of Climate Risk Solutions Inc., a leading Boston-based research and advisory firm, she delivered innovative climate risk assessment and risk management solutions to companies in the energy, agriculture and financial sectors. Golnaraghi serves on a number of international, governmental, industry and non-profit advisory boards and has served as a senior advisor to the UN, international development banks and government officials. She has authored numerous internationally referenced reports and the book titled, Partnerships in Multi-Hazard Early Warning Systems (Springer-Verlag 2012). She holds a BS in Chemical Engineering from Cornell University, and a MS in Applied Physics and a PhD in Physical Oceanography from Harvard University. She served as a senior research fellow at the Harvard Business School.

Association (genevaassociation.org) has been carrying out its research role for the past 46 years and established a global reputation for high-quality and forward-looking work. In its role as the leading international think tank of the insurance industry, The Geneva Association detects early ideas and emerging debates on political, economic and societal issues concerning the industry, inspires and initiates further research into and analysis of such issues, orga-

nizes debates on the issues detected, disseminates research results and analysis, and pushes underlying ideas among clearly defined target groups. The Geneva Association carries out this role through seven research programs: Climate Change and Emerging Environmental Topics; Health and Ageing; Socio-economic Resilience; New Technologies and Data; Cyber; Evolving Liability; and Public Policy and Regulation.

Will you provide an overview of the Geneva Association and how you define its mission?

The Geneva Association is an international think tank whose members are insurance and reinsurance CEOs. In total, the companies of The Geneva Association members manage almost \$17 trillion in assets and account for over a third of global insurance premiums. The core mission of The Geneva Association is to work on highly strategic topics of global relevance that allow the industry to best serve its role as risk managers and investors.

Insurers provide financial protection to individuals, businesses and governments against risks and support entrepreneurial risk-taking and economic growth for a premium. To do this, they make significant investments in understanding risks (for example, mortality, morbidity, natural catastrophes) and emerging or future developments that may influence their frequency and severity. Insurers are also an important source of investment in the economic, technology and financial sectors. Through these activities, the industry plays an essential role in the sustained prosperity of our economies and societies.

The Geneva Association works with the C-Suite of the insurance industry as well as experts, governments and policymakers, regulatory and standard setting bodies, academia and the scientific community, to explore emerging risks

and the evolving risk landscape in a number of critical areas, including climate change and emerging environmental topics, which I lead; health and ageing; new technologies and data; cyber risk; and socio-economic resilience. We explore solutions and opportunities for strategic partnerships through which the industry can continue to enhance and expand its societal contributions.

What are your key areas of focus leading climate change and emerging environmental topics at the organization?

The core of our mission is to find strategies and solutions for transitioning to a resilient, low-carbon economy and ways in which the insurance industry can enhance and expand its contributions at scale. As a starting point, I encourage readers to refer to our 2018 report on Climate Change and the Insurance Industry. For 2020-2021 we are working at the forefront of four highly critical and strategic topics.

In 2020, we established a first-of-its-kind industry-led task force on "climate risk assessment for the insurance industry" to analyze and develop relevant and meaningful climate risk analytics methodologies and approaches for insurers on both sides of the balance sheet, as per the recommendations of the Task Force on Climate-related Financial Disclosure (TCFD). As part of this initiative, we will also be working with insurers around the world on their adoption and with regulators to shape future regulations on meaningful risk assessment, scenario analysis and stress testing for this industry. I would love to see the board and C-Suite of every insurance company in the world start to understand climate risks and consider climate change as a core business issue. Then, the power of this industry as a catalyst in the transition to a much more resilient, low-carbon economy will be unleashed. As a next step, we will also work with the scientific community and climate risk data providers to harness best information for the insurance industry. We hope that this industry-level initiative will set an example for other industries, for companies to come together to develop and converge on relevant industry-specific approaches and practices relevant to their business models and decision-making.

Second is mapping climate litigation risk and what it means as a risk and an opportunity for the industry. Climate litigation has always been the elephant in the room and the most inefficient way to enable climate change action. There is an opportunity for insurers to work proactively with their corporate clients and governments to motivate and incentivize proactive climate action

Third is the role of the insurance industry in transitioning to a low-carbon economy. There is a large investment gap in building resilient, low-carbon infrastructure in various sectors to enable the transition at scale. In many countries, almost no consideration has been given to assessing the physical climate risk to public infrastructure projects and incorporating this risk across projects' life cycles. Non-life insurers, with their risk assessment, pricing and risk transfer expertise, are well positioned to work with governments to contribute to the de-risking of public infrastructure, whereas life insurers, in their capacity as long-term asset managers, can play a key role in mobilizing long-term private capital to resilient, low-carbon infrastructure projects. We are working to identify evolving risks and opportunities to facilitate public/ private partnerships for building resilient, lowcarbon public infrastructure.

Finally, emerging environmental risks such as biodiversity loss, plastics, ocean and air pollution have significant impacts on society, the economy and business models. We are launching a study with the insurance industry and a number of partners to identify and map the impacts of various emerging environmental risks and explore ways in which the industry can help manage and incentivize mitigation of these risks.

Will you highlight your efforts to build economic resilience to disaster and climate risks?

The insurance industry provides expertise in catastrophe and climate risk modelling, risk pricing and raising awareness about these risks and how to reduce them based on significant risk reduction and risk prevention research for households, businesses and governments. It also offers innovative risk transfer solutions to build financial resilience to impacts of extreme events and incentivize risk reduction and risk prevention measures through lower premiums. Beyond mature economies, over the last decade the industry has stepped up its collaboration with development agencies, international organizations and governments to expand insurance protection for climate-related and other natural disasters in emerging and low-income economies.

As the world responds to the COVID-19 crisis and governments are preparing their economic stimulus plans, the potential compounding effects of weather-related extremes such as floods, tropical cyclones and wildfires could significantly challenge a country's emergency management capacities and slow down the socio-economic recovery.

At The Geneva Association we are working on ways in which the insurance industry can further enhance its contributions to building resilience to climate-related and other natural disasters. Building resilience has become a priority for many countries around the world in recent years due to the rising socio-economic impacts, including threats to human lives and livelihoods as well as direct and indirect economic impacts.

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As part of our deep commitment to strengthening socio-economic resilience to extreme events and climate change. The Geneva Association has undertaken a major study to take a deeper look at the evolution of flood risk management (FRM), particularly in light of the changing risk landscape, in five mature economies (the U.S., England, Germany, Canada and Australia). Working with a large network of experts from different public, private and academic sectors, we paid special attention to governance, institutional frameworks and the interplay of risk assessment, risk communication and awareness, risk reduction, risk prevention, risk financing, risk transfer (e.g., insurance) and reconstruction measures across various stakeholders. Managing the risk of extreme events is a multifaceted challenge that requires coordinated action from a wide range of stakeholders, with clearly defined roles and responsibilities for each. We concluded that there is a need for a paradigm shift from reacting to crises towards a risk-based, anticipatory, holistic and all-of-society approach to managing the potential impacts of catastrophes. We need to further strengthen effective collaborations and provide incentives for those tasked with managing risks, as well as those at risk or involved in creating risks, to change their behavior. As a next step, together with our members, we are convening roundtables with key stakeholders to explore solutions and opportunities for stronger multi-stakeholder collaboration to overcome the challenges to strengthening societal resilience.

How do you define success when addressing long-term challenges?

We take a systematic approach to understanding the nature of long-term challenges, along with the risks, opportunities and hurdles, to be able to meaningfully address these

challenges at scale and move the dial. For example, to scale up investment towards a lowcarbon economy, we need to figure out what major hurdles lie in the way of directing the core of investments for institutional investors to this transitioning, and not just the relatively small percentage of total investment currently dedicated under impact/responsible investing. Institutional investors face a number of challenges, for example the lack of a globally-agreed taxonomy for resilient low-carbon investing, relevant risk and opportunity information, a stable and meaningful regulatory framework, a pipeline of investment-grade projects and an efficient market. Success in addressing the challenges will involve working diligently through the right mechanisms to overcome these hurdles and transform the financial system to allow for investing long-term at scale. Every hurdle removed is considered a success towards achieving the main long-term goal.

Does the rise of nationalism and shifting political risks change your approach to quantifying risk?

In mapping the evolving risk landscape we consider many different types of risks which in themselves can be very challenging to quantify. For example, depending on the application, we look at market-related risks, financial- and capital-market-related risk, regulatory risk, political risk, policy risk, technology risk, operational risk, environmental risk and development risk, to name a few. We thrive on working with top experts and data providers with an anticipatory approach, trying to understand how emerging or future developments may influence the risk landscape.

How do you define resilience and what are the characteristics of a resilient organization?

I define resilience as the ability to anticipate, prepare, plan for, reduce, prevent, absorb, recover from, and more successfully adapt to adverse risks and shocks. A resilient organization is one that has the culture, mindset and capacities to do this as well as continue to monitor and learn from every experience, using a systems-based approach to address weaknesses and enhance its resilience over time.

How critical is resilience to the work of The Geneva Association?

Building financial resilience to various risks is at the core of the insurance industry's and The Geneva Association's mission and activities. The ability to provide financial protection against various risks is founded on the significant investments the sector makes in understanding the risks (for example, mortality, morbidity, natural catastrophes) and emerging or future developments that may influence their frequency and severity. This allows insurers to price the risk, establish a cost for the insurance coverage, innovate new products and services as well as develop approaches for managing the risks.

Do you feel that resilience is something a person is born with or can it be taught?

I believe resilience is built over time through experience, awareness, the right mindset and continuous learning. ●