# INSIGHTS – NAT CAT FEATURE



The 14th Conference on Catastrophe Insurance highlighted the need for solutions in closing the protection gap, creating better and more affordable products, enhancing societal resiliency and learning from past lessons.

By Ahmad Zaki



**56** sia accounts for 40% of all economic losses due to natural catastrophes from the period of 1980 to 2015," said Mr Vineet Kumar, Head of the Cat Perils Asia Hub, Group Underwriting at Swiss Re. "Yet it only accounts for 13% of all insured losses in the same period."

The conversation on the protection gap and potential catastrophe losses in Asia is a well-known one. Both the insurance industry and governments within the region are taking progressive steps to mitigate risk through multiple public-private partnerships.

#### **Collaboration is key**

Dr Olivier Mahul, Global Lead of Disaster Risk Finance at World Bank and GFDRR said that with governments becoming increasingly aware of the importance of risk management, this is an avenue of potential growth for the



insurance industry. Collaboration between the public and private sector – combining private sector expertise and public sector policies – is an important step towards physical and fiscal resiliency.

However, insurers have to understand the diverse priorities different governments

- The insurance industry is uniquely equipped to aid in collaborations with governments and development banks in creating resilient societies;
- Digital technology has high potential to narrow the protection gap; and
- Catastrophe models are improving regularly, but there is never enough data.

have in their disaster risk financing needs; some prioritise insuring public assets, some would prefer to develop private assets, while others would prefer to protect key assets and strengthen infrastructure. The fact that government financial needs is likely to be different from private sector perspectives is something that not everyone in the industry is aware of.

"Governments also need enough liquidity for livelihood assistance, including food security, in a post-disaster scenario," said Dr Mahul. Having sufficient infrastructure in place for efficient emergency services and eventually beginning the rebuilding process are also main concerns for the public sector.

Dr Mahul also pointed out that most key decision makers in various ministries of finance around the world do not come from an insurance background. "We need to help them understand the importance of insurance, without getting too technical," he advised.

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Mr George Attard, Head of Aon Benfield Analytics International, reminded the attendees that the insurance industry is uniquely equipped to aid in such collaborations with



governments and development banks in creating resilient societies and having competent risk financing infrastructures. "The industry has the capacity to scale and the expertise to help."

#### **Quantifying financial loss**

No conversation on catastrophe insurance is complete without robust discussion on catastrophe modelling, a technology that has been improving in leaps and bounds over the past few years.

Models examine loss cost figures post-disaster, analyse exposure gaps and help improve resiliency. Dr Michael Drayton, Consultant at RMS, simplified the idea of models: "It



comes down to damage and how policies respond to that damage. Models are here to quantify financial loss."

Driven by data, modelling in Asia has been getting better. Dr Apoorv Dabral, Head of Catastrophe Modelling Asia Pacific at JLT Re said that models have been implementing new



sciences, new information, new vulnerability updates, new wind profiles and new data on secondary perils, all of which allow for higher resolution models.

However, models are not fool proof and definitely not without its flaws. "The data we receive from insurers is typically aggregated, but the model The best way to get the most accurate loss cost numbers is to look at detail level data, going right into a city or district level, although that is not always possible.

might not be able to handle that aggregated data correctly," said Dr Dabral. It boils down to the data quality, the country and the specific peril involved, all of which can result in varying loss costs. The best way to get the most accurate loss cost numbers is to look at detail level data, going right into a city or district level, said Dr Dabral, although that is not always possible.

### Still not enough data

Furthermore, not all data can be collected. "Ideally, we can have so much data that we can just compare structural damage to ground movement," he said, specifically of earthquake models. However, there can never be enough data to accommodate all building types, so simulations based on structural engineering techniques interpolate gaps in that knowledge.

Beyond just looking at financial loss, however, models are utilised by parties outside of the insurance industry in coming up with post-disaster solutions. They have been successfully used in nations across Asia for response planning, creating risk financing structures and planning rebuilding efforts (in terms of materials and structural engineering).

#### **Closing the gap**

Mr Graham Jones, Co-Head of Strategic Advisory, Asia Pacific Region at Guy Carpenter, said the key ingredients to closing the protection gap is proper risk financing, addressing realities of



Some US\$9 billion have been invested in FinTech and InsurTech startups in the region and about \$4 billion of that is aimed at distribution. collaboration between the industry, various government bodies and NGOs.

"It is a well-known fact that insurance take-up rates spike high after a disaster and dwindle back down after a few years have passed," he said. "People have short memories."

The low penetration of insurance is a problem that is not easily tackled. "We must realise that in rural parts of Asia, people might not speak English, or are illiterate. Even then, their local



language might not match with the working language of the region," said Mr Alex Chen, founder and CEO of Asia Risk Transfer Solutions.

This, combined with a lack of trust and low perceived value of the insurance industry amongst the public, emphasises the need for a more accessible, simpler and affordable insurance product for the masses. Continuous innovation of product design, including combining multiple catastrophe covers under one product, is just one step towards closing the gap.

## Focus on distribution

Technology and analytics can prove to be huge boon, allowing the industry to adopt parametric triggers in product design and utilising mobile technology to reach a wider audience more efficiently and effectively. Through cloud computing technology and geosynchronous location tracking, the industry could easily track policyholders and automate settlement processes within a short period of time.

"Some US\$9 billion have been invested in FinTech and InsurTech startups in the region," said Mr Attard. "And about \$4 billion of that is aimed at distribution."

The 14th Conference on Catastrophe Insurance in Asia was held in Singapore and drew delegates from 21 nations around the world.