

Actuarial progress in Singapore

Asia Insurance Review brings you some of the highlights from the Singapore Actuarial Conference 2021 held in November 2021.

By Anoop Khanna



The keynote address for the five-day online conference, which was attended by over 200 delegates, was delivered by Monetary Authority of Singapore director insurance department Wai Yi Lee. In her address Ms Lee tracked the progress made by the actuarial community in Singapore during 2021 and the agenda for 2022 and beyond.

Ms Lee said she would include these under four categories – capital framework; stress testing, surveillance and ERM framework; safety nets and resolution framework and regulatory framework on products.

On the risk front, she categorised the risks into four types – macroeconomic risks, counterparty concentration risks, liquidity risks and climate risks.

InsurTech trends and opportunities

The second session of the first

day was delivered by Society of Actuaries Research Institute MD research Dale Hall.

He said technology today is more than just a convenience. He detailed how technology is being applied to insurance by way of start-up concepts and innovations.

Mr Dale said, “While the focus is largely on venture capital, many insurers are also creating their own internal paths to create and incubate ideas.” He said this is happening across different value chains in the insurance industry – distribution, product innovation, underwriting and claims adjudication and process efficiency.

He said the Asia Pacific has come across as the most flexible of global markets to work with InsurTech innovations, while Europe comes out as the least flexible in this regard. Actuaries have great opportunities to act as a conduit for combining data with insurance opportunities.

Genetic testing and impact on insurance

Swiss Re senior manager underwriting office and innovation Asia SuJin Park spoke about genetic testing and the impact on insurance. She spoke of regulations of genetic testing, information in life and health insurance underwriting and genetic testing and anti-selection risk for insurers.

Ms Park said, “Clinical and over-the-counter genetic testing will continue its rapid growth while increasing regulatory pressure will restrict request and use of genetic tests and family history for insurance underwriting. The growing availability of predictive health information from genetic testing can lead to increased exposure to anti-selection.”

Potential future impacts of COVID-19

Munich Re chief medical officer (life



and health) APAC, ME and Africa Andreas Armuss said COVID-19 variants pose a greater challenge. He said herd immunity is essentially impossible and everyone will be infected at some point in time. Those without basic immunity by vaccination or recovery are still at increased risk of severe disease.

Dr Armuss said the future impact of mortality will depend on:

- Level of basic immunity determined by vaccination plus natural immunity
- Waning immunity against severe disease
- Non-pharmaceutical interventions with low level of immunity
- Future variants
- Available new drugs

Dr Armuss said long-COVID is another major aspect that is still not well understood. He said the latest

data from the UK indicates that there is a decreasing trend in symptom prevalence over time.

In controlled observations with non-COVID patients, neuropsychologic symptoms like fatigue and brain fog were lower than previously estimated and vaccines seem to have a positive impact on the course of long-COVID, but difficult to quantify.

Digital insurance – where is the tipping point

Swiss Re lead life and health solutions SEA and India Joycelyn Bui delivered a session on digital insurance's tipping point. She spoke about the challenges and what could be the winning formula and said that InsurTech had been a hot sector for venture capital funds over the last decade. However, the pandemic further accelerated the trend to digitalise insurance.

She said consolidation is happening, with larger amounts invested but lower number of deals across the globe. She said large insurers have even set up InsurTech focused venture capital arms to invest directly. Speaking about the challenges for digital insurance, Ms Bui said insurance remains a complex financial product.

Quoting a McKinsey report Ms Bui said digital ecosystems will account for 30% of global revenues by 2025, up from 2% today and around \$70tn by 2030. She said platform business models are by large already outperforming traditional models.

Climate modelling challenges

Conning head of risk solutions Matthew Lightwood in his presentation *on Climate – Modelling Challenges for the Next Big Financial Risk* said the demand for companies to assess and monitor the potential impact of different climate risks on their organisation is gathering pace.

He said the regulator in these circumstances aims to size the risk, understand the impact on a firm's business model and encourage management of risks and inform future strategic decisions.

"Assessing climate risk on a portfolio is challenging to implement in practice," said Mr Lightwood.

He said climate risk reporting is rapidly becoming a requirement for financial institutions but can be challenging to define and implement. It requires classification of scenarios and there is much uncertainty about timing and magnitude of effects. Above all it can be technically and resource intensive.

Climate change and actuaries

An actuarial team from PwC discussed climate change insurance regulatory considerations, including MAS' overview and stakeholder overview and relevant climate change reporting standards, including Task Force on Climate-related Financial Disclosures standards.

The important climate change risks that insurers need to consider including physical and transition risks were also a major part of the presentation. Climate change risk assessments and integration into risk management frameworks are equally important.

The speakers also detailed climate change scenario testing – data, methodologies, CAT model integration and net zero in insurance – greenhouse gas quantification and business integration.

Parametric insurance exploring the possibilities

Parametric Insurance: Exploring the Possibilities, Examining the Realities was delivered by Zurich North America vice president and emerging solutions director Jonathan Charak.

Mr Charak said, "Parametric insurance is not a new idea; technology has let it flourish. Further the insurance industry has a 'protection gap'...and parametric insurance is part of the solution to narrow the protection gap."

He said, further parametric insurance can provide a solution for climate resilience, or even insure the environment.

"Parametric insurance provides additional coverage for economic losses caused by predetermined weather and climate triggers and offers payouts according to project geographical location and coverage period. The payouts are based on triggers and economic losses offered only for months with weather concerns," he said. ■