

CATASTROPHE, CLIMATE AND CAPITAL EVENT

Hosted by Inigo in London

A SERIES OF TALKS

We recently hosted the Catastrophe, Climate and Capital event for our key broking partners and clients in London. A timely opportunity to bring climate scientists and reinsurance capital experts closer together to provide leadership and perspectives to build a better understanding of historic events and how these insights are shaping our short and mid-term futures across property D&F.

A summary of our key speakers is presented below, led by Dr Emma Nicholson, Associate Professor in Earth Sciences and Volcanology UCL, who spoke on volcanic hazards and the convergence with climate change, her research themes having a slant towards the interface between science and engineering.



DR EMMA NICHOLSON

We heard about living alongside volcanoes, a reminder that natural catastrophes are something that humanity has to deal with every year. Volcanoes are a crucial part of Earth's system – from geothermal cycles, producing the atmosphere, and providing nutrient-rich soils and oceans.

Emma covered volcanic climate feedback; from lowering earth temperatures for up to 1-3 years to seeing a greater influence of volcanoes in the tropics (where their aerosols impact both hemispheres). Further to this there are multi-hazard intersections: the hydrological cycle is most disrupted in the tropics, where wet regions get drier, and dry regions get (slightly) wetter.

The land precipitation responds faster than ocean precipitation in these regions. Then there is the global impact, as connected systems (e.g. trade, travel, communications) are highly sensitive to volcanic activity.

Societal vulnerability is concentrated in so-called "pinch points" where the ripple effects of disruption would be most widespread and most impactful, for example, the Lahar risk to a metropolitan area. Scenario modelling at Mt Rainer suggests an eruption could generate US\$5 trillion in losses over five years.

Societal vulnerability is concentrated in so-called "pinch points" where the ripple effects of disruption would be most widespread and most impactful.

DR RICHARD DIXON



Inigo's Dr Richard Dixon spoke about climate not being "a future thing". We have seen one degree Celsius of warming since 1960, and now anticipate almost the same again by 2050. We face the danger of using the "rear view" as the basis of our forecasting, even as we see warming happening faster in recent years (in particular, the last decade).

For the sort of 20, 50, 100-year events that worry us in insurance, historical records are inadequate to spot important trends. We rely on fairly static risk models to assess present-day risk and at the same time, we try to understand how risk is changing over time.

Richard told us not to be fooled by the Cat 3+ Hurricane drought of 2006-2016. Simulations by Reask suggest this is misleading data and an anomaly that potentially could be impactful when building models and relying to slavishly on history as a guide.

We regularly see charts with ever-increasing losses plotted over time, but reasons for this are multiple. Some of those factors include the population delta (which is one of the largest drivers), to climate change, but we also see positive trends such as improved building codes and construction which go some way to mitigating the effect of climate change.

For the sort of 20, 50, 100-year events that worry us in insurance, historical records are inadequate to spot important trends.



DAVID FLANDRO

David Flandro of Howden Tiger went on to talk about capital. He noted that USD100bn Catastrophe loss years are now the average. Secondary perils have driven a portion of this, with 2023 being a particularly active year with SCS, flooding and wildfires.

In terms of capital, post Hurricane 'lan' the raising of new capital is lagging previous cycles and is mostly coming in via alternative structures.

Cedents are also bearing more of the risk. For example, the last 20 years has seen an average retention for cedents of 54% of losses. To put those on an equivalent for 2023 attachment levels, this average increases to 64%. Therefore, in theory, a great time to be underwriting reinsurance. Pricing is keeping pace with, and sometimes even outpacing, inflation which may enable (re)insurers to exceed costs of capital.

In practical terms, this means that risk-adjusted rates on line are at their highest level in more than 30 years since the advent of cat modelling.

What limited capital is coming in, is through side-cars and we are seeing some potential start-up activity, but the focus is through asset-light structures, including MGAs, consortia, reciprocals, and other fronting arrangements. We've seen a huge uptick in this activity, and this is a new way that the insurance industry is being structured, it's a new channel through which capital is flowing.

CAPITAL IS CONSTRAINED BECAUSE OF:



Inflation



impairments



Geopolitical



Poor investment returns



Slower capital re-entry



withdrawals