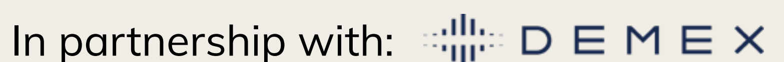
In conversation with The Demex Group: Covering the weather protection gap

In partnership with: 

The Demex Group's President & CEO Bill Clark and Chief Risk Officer Matt Coleman recently joined Matthew Grant and Henry Gale on the InsTech podcast to talk about how increasing losses from non-catastrophic weather events leave enterprises and insurers exposed.

Weather risk and insurance: the background

While there is a large, established (re)insurance market for businesses and insurers to buy protection against catastrophic weather events (such as hurricanes), there have historically been fewer ways for organisations to transfer risks associated with non-catastrophic weather events.

Non-catastrophic weather events, including temperature changes, rainfall, wind and snow, can cause physical damage to property, but may impact business costs or revenue even if damage is not sustained. For example, severe rain delays construction projects, thunderstorms result in reduced footfall at shopping centres and damaged fences from strong winds mean insurers pay out many small claims from one event.

In the past, businesses and insurers have typically retained or self-insured these risks, meaning they did not buy insurance or reinsurance to cover them. This worked when financial losses from weather events were insignificant, but since 1980, non-catastrophic severe weather events have become five times more frequent. Climate change is resulting in more losses from non-catastrophic weather and some organisations can no longer afford to retain this risk.

> "This is a problem that organisations understand. They have always retained a certain amount of risk, but because of climate change and weather volatility, that retained risk has become higher and higher and is becoming an economic strain on the business."
>
> – Bill Clark, President & CEO, The Demex Group

The Demex Group: A different approach to transferring climate risk

The Demex Group is a technology-enabled MGA, spun out from Munich Re in 2020. It structures (re)insurance products covering non-catastrophic weather risks for SMEs, corporates and insurers.

Demex ingests data about a business or insurer's historical losses from weather events and combines it with historical weather and climate data, to analyse the effect of weather on the organisation's balance sheet. It develops a customised index of weather variables as a proxy to measure what the organisation would expect to lose from a weather event.

This index is used to deliver a parametric insurance product. The index is monitored by Demex and if it exceeds a predefined threshold, the policyholder receives a pay-out.

> "Many of the risk models used in the insurance market are built to understand events, such as natural catastrophes, that do not happen frequently and when they occur, they cause great losses. Modelling weather events which occur more frequently and cause smaller losses requires fundamentally different data sets and methodologies."
> – Matt Coleman, Chief Risk Officer, The Demex Group

To price its insurance products, Demex has developed proprietary risk models. Unlike infrequent events such as hurricanes, weather is always occurring, so there is a vast abundance of historical data on temperature, wind, rainfall and other variables, at a granular location level, that Demex uses in its models. This provides an opportunity to understand the probability of various weather conditions and how climate change affects the probability of those conditions over time.

US insurer works with Demex for reinsurance to cover growing weather losses

An insurance company in the Midwest US experienced escalating weather-related losses over recent years, which put its surplus at risk. A surplus is a form of retained earnings an insurer holds to provide a cash buffer against unforeseen circumstances. If a series of weather events occurs in a year, causing more loss than expected, the surplus is the capital set aside to pay those claims.

> "Historically this insurer believed its retained weather risk was around $10 million USD per year. But midway through 2022 it found that its weather-related losses were exceeding $30 million USD and eventually rose to more than $50 million USD. At a certain point it becomes financially undesirable to hold that much risk on your balance sheet... Many insurance companies in the US are faced with this exact problem."
> – Bill Clark, President & CEO, The Demex Group

Demex worked with the insurer, its reinsurance broker, and reinsurers to structure a parametric reinsurance product with a customised index that models the expected losses the insurer would face from weather events.

Responding dynamically to weather losses as they happen

This product, which Demex calls Retained Climate Risk Reinsurance, was developed in response to insurers facing spiralling losses from weather risks they had previously retained. In some cases, it may become clear halfway through a year that an insurer's surplus or rating is at immediate risk if it faces more weather losses. Demex has structured 'stub policies' (reinsurance policies that cover less than a year) so that companies can top up on coverage if they cannot afford to retain weather risks for the remainder of the year.

To find out more about The Demex Group, **read their latest blog post here**.

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