INSURING THE UNINSURABLE

Parametric insurance products are on the rise as the insurance industry seeks new ways to cover catastrophe-related losses.

by Kate Smith

As he read a report on global natural catastrophe losses, Jamie Miller of Swiss Re was not surprised by the discrepancy between insured and economic losses. And, yet, he was stunned by it.

"It still confounds me that year in and year out, the percentage of insured losses almost never changes," said Miller, head of North America property and specialty lines for Swiss Re Corporate Solutions.

Nearly three-quarters of disaster-related losses were uninsured in 2016, according to Aon Benfield. While it would be easy to dismiss that statistic as being driven by lack of insurance participation in emerging markets, consider this: 70% of losses from Hurricane Matthew, which hit the southeastern U.S. and Caribbean in 2016, were uninsured.

"Even in the most advanced insurance markets in the world, there are still big gaps of exposure for clients," Miller said.

Insurers are searching for innovative ways to fill those gaps, and parametric insurance products are one of the solutions they're using. Parametric insurance products are an increasingly popular way to plug some of the holes that traditional policies haven't covered—from deductible payments to over-limit losses to lost tax revenues.

These innovative solutions have come from new entrants, established players and even insureds themselves. Startups such as New Paradigm Underwriters and Assured Risk Cover have entered the market with supplemental coverages. At the same time, industry giants such as Swiss Re have responded to insureds' needs with parametric insurance products such as STORM and QUAKE.

"If you can figure out a parameter that you can measure and tie it back to loss experience of some sort, then you can create parametric coverage," said Ben Brookes, vice president of capital markets for RMS. "That's exactly what's happening in the industry."

While some of the most well-known parametric insurance solutions, including the African Risk Capacity, were designed for regions of the world where underwriting data was scarce, the concept is taking off in developed markets for the precise opposite reason—the abundance of data.

"We're importing that concept into advanced markets like the United States," said Alex Kaplan, senior

Key Points

Filling a Hole: Parametric insurance products are being used to close the insurance gap.

Data Driven: The increase in data availability could open the door to more new products being created to supplement traditional insurance coverages.

Post-Event Liquidity: These products are designed to build resilience by getting homeowners, governments and corporations the cash they need to get back on their feet.

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vice president of global partnerships at Swiss Re. "What was a fairly blunt instrument maybe 15 years ago is now becoming incredibly honed because of the various data sources we have."

As more and more data becomes available, experts say the potential for new parametric insurance solutions is vast. While the first wave has been around natural catastrophe-related products, the expectation is that solutions could broaden to cover perils such as cyber and expand into areas such as contingent business interruption.

"Because you have this great surge of data sources, you could see a time in the future where every single street lamp in a city has an anemometer in it with a wind gauge or a rain gauge in it," Kaplan said. "It sends data immediately to an insurer who has otherwise insured a small business. Because there was a cloud burst and it rained for half a day, the coffee shop on the corner saw a massive drop in customer activity. The insurer could instantaneously transfer the potential lost revenue as a result of that rainstorm directly onto their mobile phone. You could see that scenario occurring at some point."

Daniel Stander, managing director of RMS, said all of the technological tools are in place to grow this market.

"The data is out there to build parametric products," Stander said. "The know-how is out there to design parametric triggers. The capital is out there to provide parametric covers. From a technical standpoint, there is nothing stopping this."

Stander said innovation in the market is driven as much by insurers as it is by insureds.

"Of course we're seeing the industry lead," he said. "Equally the industry is responding to innovative requests from insureds—be they large corporate insureds or large public insureds, namely governments. For the first time, we're seeing the public sector grasp the idea that unless they can measure their risk properly, they're unable to manage it effectively. That's where these conversations are starting. Not with a request for risk financing, but with a desire to understand exposure and risk. Insurance is then responding to that, and innovative insurance products are a response to that underlying need.

"For the first time in my career, insurance is suddenly very, very fashionable. There is a lot of desire at all levels of government to engage with risk analytics deeply. The conversations are already happening in collaboration: government, modeler and, where appropriate, risk capital provider."

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Threading the Needle

Swiss Re created STORM for just that reason.

A few years ago, a public entity in a hurricane-exposed region approached the reinsurer with a list of exposures that weren't being covered by either insurance or federal assistance.

"There is a very sizable gap between what traditional insurance products cover and what the federal government may cover when it comes to federal reimbursement," Kaplan said. "What we've been attempting to do, in large part, is thread that needle."

Parametric insurance has been the yarn, so to speak. In the past two years, Swiss Re has developed two parametric insurance products—STORM and QUAKE—to provide post-disaster liquidity for public entities and corporations.

"The point of these products is to make sure they have cash on hand to deal with whatever is coming," Miller said.

A city, for example, might use the payout to remove debris, pay overtime wages for employees, or to replace lost tax revenue related to diminished tourism in the wake of an event.

"If you think about a major coastal city which thrives on tourism, for example, when a hurricane comes through and takes out the hotels for a number of months, those hotels are generally insured to the teeth," Kaplan said. "The physical property is insured and their revenue stream is otherwise insured through business interruption. But think about all of the lodging taxes, sales taxes, and convention revenues that are lost. The insurance policies that cover these cities currently don't cover that to any meaningful extent. And the federal government will not reimburse lost revenue."

Though commercial clients have different challenges than public entities, they too have gaps that create economic loss.

"What we'll do with a client is pretty straightforward," Miller said. "We'll sit down with a client and say, 'What is going to cause you disruption that you would have the inability to recover funds from? What is traditional insurance not going to cover?'"

Swiss Re can then customize its product with defined triggers, ZIP code level wind speed for windstorm and seismic measure for earthquake, to meet the client's need.

QUAKE and STORM were just starting points, Kaplan said. The company envisions creating similar products for as many perils as possible.

"Data is the key," Kaplan said. "The products won't all work identically. Some perils are incredibly challenging. If you think about a convective storm or wildfire, there's obviously very different characteristics behind those and the data that is produced.

"But at the end of the day, if what we're creating is a foundation for a quick-paying product that provides capital and liquidity very quickly after the event, that covers things that no one else is covering, we're going to try to replicate that across as many perils as the market needs."

Peace of Mind

Assured Risk Cover (ARC), a California-based startup, brought the same concept to personal lines with its recently launched StormPeace product.

StormPeace, a parametric insurance product that offers hurricane coverage for Florida homeowners, developed out of ARC co-founder Alok Jha's desire to give back to society.

Working in Silicon Valley, Jha felt a nudge to do something bigger with his life. With a doctorate degree in civil engineering from Stanford, he had spent his career assessing risk, both as a consultant and as a modeler.

"I always had the itch to do something far beyond my day job," he said. "I wanted to do something meaningful with my life and give back to society.

"I spent evenings and weekends looking for what I could do."

That search brought him back to a subject he knew well—catastrophes. Having spent more than eight years as a senior director at RMS, Jha was well-versed in hurricane, earthquake and flood risks.

And he saw a pain point in post-storm resilience—slow claims payments.

"Following catastrophes, especially hurricanes, people go through a lot of financial and emotional turmoil," he said. "I looked at that and thought, 'You know what? I can do something about that problem.'"

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In 2013, Jha founded ARC with the goal of easing that pain point. He leveraged his experience at RMS, where he worked on hurricane models and catastrophe bonds, and created StormPeace.

"People do these real-time transactions," Jha said. "I thought, why not bring this idea down to the actual people who need money right away?"

StormPeace policies pay out immediately after a hurricane, bridging the gap between when the damage occurs and when a homeowner's insurance claim pays out.

"The money that we wire them can be used for a wide variety of expenses," Jha said. "It's for expenses that you incur. If you have to get a generator for a power outage, or a tree fell in your backyard or you have a deductible on your windstorm policy that you had to pay out of your pocket. You can use this payment to settle those things. That's the resilience part, helping people get back on their feet quickly."

Payments are based on three factors—strength of the hurricane, the distance between the insured property and the closest point of the hurricane, and the actual loss to the policyholder.

"When a live hurricane is happening in the Atlantic or the Gulf of Mexico, we will inform each of our policyholders, 'Mr. Jones, there is a live hurricane and on our mobile app you can track what this live hurricane is doing vis-a-vis your home,'" Jha said. "We'll tell them the strength of the hurricane and distance from their home and whether they will be eligible for any payment. So while the hurricane is on, they can see what it's doing in relation to their home.

"And when the hurricane ends we can send an electronic notification to them saying, 'Hurricane Alex that just ended was this strength and this distance away from your home, so you're eligible for this percent of your limit.' Policyholders need to attest that they had that amount of loss or greater, and then we wire the money to their bank account. No adjusters, no delays. Once they receive the money, they have 45 days to upload proof of loss for the amount of money that we just sent."

While Assured Risk Cover writes the policies and handles the claims, Topa Insurance provides the paper. Tony Manzitto, executive vice president and chief operating officer of Topa, was immediately impressed with the product's design and potential.

"I wanted Topa to be a part of the vision," said Manzitto, who spent 22 years at Swiss Re before joining Topa in 2014. "I thought my reinsurance contacts would be very interested in this product and we could attract the reinsurance capacity. We were successful in placing A+ capacity behind us that takes a lot of the risk.

"I thought with the parametric attachment, the secondary trigger, that would be the hook. I knew the capital providers would like it because they could model it." BR