Original Risk

How Mexico Could Benefit from Industry Catastrophe Loss Aggregation

PCS
A Verisk Business

#ORIGINAL RISK

Industry loss aggregation solutions provide an intuitive benefit to property catastrophe insurance markets. There's a clear understanding that knowing the loss can help with claim benchmarking, reserving, catastrophe modeling, and working with regulators. For most insurance and reinsurance company executives, the principal benefit of a centralized industry loss aggregation platform is risk transfer. Index-triggered protection—be it from catastrophe bonds or industry loss warranties (ILWs)—can lead to more effective risk management, optimized capital allocation, and ultimately the creation of more shareholder value.

Property Claim Services® (PCS®), a division of Verisk Insurance SolutionsTM, currently provides loss aggregation services in the United States, Canada, and Turkey – as well as loss aggregation for non-elemental offshore energy and ocean marine risk losses worldwide. We've found that introducing industrywide loss aggregation capabilities results in salient risk and capital management advantages for an insurance market, as we saw in Canada following our 2010 launch.

The global insurance and reinsurance industry is hungry for original risk—new risks entering the global risk and capital supply chain offering opportunities for diversification. Peak peril markets, in particular, are crucial to capital providers, and they've been eyeing Mexico for years, as an opportunity to deploy capacity efficiently and to support the risk and capital management needs of local insurers. The only thing missing has been a credible, independent industry catastrophe loss aggregation platform.

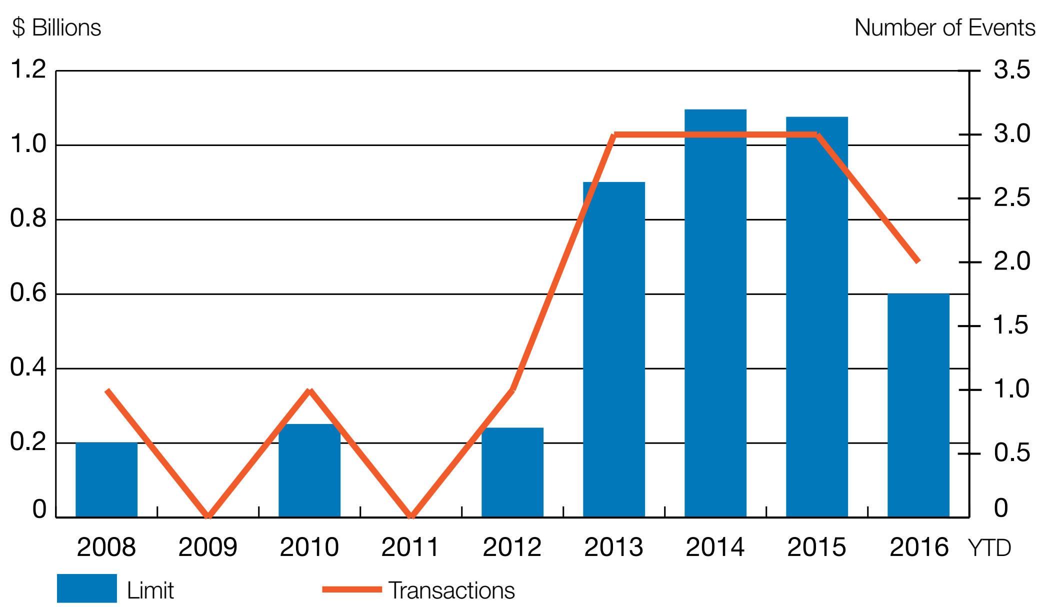
#ORIGINAL RISK

AN OVERNIGHT CHANGE

The catastrophe bond market is still relatively young, with only around 20 years of history. In that time, insurers and reinsurers (and some corporates) have completed more than 300 transactions, amounting to more than $75 billion in cover, according to the Artemis Deal Directory. The overwhelming majority of transactions provide protection for both U.S. hurricane and earthquake risks. However, there is investor appetite to enter new markets and take advantage of diversifying perils (such as Turkish earthquake). And, with as much as $1 trillion waiting to enter a global reinsurance market of only $600 billion, the need to bring more original risk to market is palpable.

CATASTROPHE BONDS INCLUDING CANADIAN RISK

When new risk comes to market with the ability to trigger on an industry loss basis, the capital markets respond. Canada demonstrates that. Prior to the launch of PCS Canada in 2010, only one catastrophe bond that included Canadian risk came to market—East Lane Re, with $200 million in limit. Since then, 17 transactions that included Canadian risk have been completed, with aggregate notional of more than $5.6 billion (not limited to Canadian risk). Of the 17 transactions completed that included Canadian risk, 12 used data from PCS, including the recent pair of Galilei Re transactions, with total limits of above $1.2 billion.



Sources: PCS, Artemis Deal Directory

#ORIGINAL RISK

Catastrophe Bond	Limit (US$ Millions	Issuance Year	PCS
Galilei Re	$525	2017	Yes
Galilei Re	$750	2016	Yes
Galileo Re	$300	2016	Yes
Atlas Re	$300	2016	Yes
Kilimanjaro Re	$625	2015	Yes
Atlas Re	$150	2015	Yes
Galileo Re	$300	2015	Yes
Tradewynd Re	$500	2014	No
Kilimanjaro Re	$500	2014	Yes
Riverfront Re	$95	2014	Yes
Tradewynd Re	$400	2013	No
Galileo Re	$300	2013	Yes
Tradewynd Re	$125	2013	No
Tramline Re	$75	2013	Yes
Blue Danube	$240	2012	Yes
Merna Re	$250	2010	No
East Lane Re	$200	2008	No
Total PCS Issuance			
Total Issuance			

Sources: PCS, Artemis Deal Directory

The introduction of a loss aggregation platform and industry loss index provides an opportunity for new sources of capital to enter a market, which comes with a number of important benefits:

- Diversification of protection outside the global insurance and reinsurance system
- Fully collateralized protection
- Multi-year cover
- Potentially lower cost of capital
- Protection of intellectual property, underwriting practices, and other proprietary information

In addition to catastrophe bonds, the use of ILWs that included Canada increased significantly following the launch of PCS Canada. Data is difficult to source given the opacity of the ILW market, but several reinsurance brokers—representing significant market share—have indicated increased transactional activity as a result of the availability of a credible, independent industry loss aggregation solution. There has been some Canada-only ILW activity (we're also aware of this from cedents), but the more common approach is to do a regional transaction that includes both Canada and the United States.

Although the launch of PCS Turkey is still too recent to show significant market developments, early indicators are consistent with the trend that followed the launch of PCS Canada. Reinsurance brokers are already getting inquiries from cedents about the availability of the loss aggregation solution and they are expressing interest in laying off risk on an industry loss index basis.

NEXT STEPS FOR CATASTROPHE BONDS IN MEXICO

Mexico is no stranger to catastrophe bond protection. Since 2006, six transactions have either focused on risks in Mexico exclusively or included them as part of a broader risk area. During this time, sponsors raised more than $1.6 billion in capital to provide reinsurance or retrocessional protection. Both the Fund for Natural Disasters of Mexico (FONDEN) and commercial re/insurers have used capital markets capacity for reinsurance protection.

Catastrophe Bond	Limit (US$ Millions)	Issuance Year	Trigger Type
Tradewynd Re	$500	2014	Indemnity
MultiCat Mexico	$315	2012	Parametric
Blue Danube	$240	2012	Modeled Loss
MultiCat Mexico	$290	2009	Parametric
Fusion	$140	2007	Parametric
CAT-Mex	$160	2006	Parametric
Total Fonden	$905		
Total Mexico	$1,645		

Sources: PCS, Artemis Deal Directory

#ORIGINAL RISK

Transactions for FONDEN accounted for more than half of capital raised for protection in the region. Those four catastrophe bonds used parametric triggers – meaning that they would provide payment in the event of a natural event (e.g., hurricane or earthquake) of a certain magnitude. Tradewynd Re used an indemnity trigger – payments would be based on the sponsor's own losses. And Blue Danube had a modeled loss trigger, relying on a catastrophe model to determine the payment amount in the event the transactions terms were met.

While Tradewynd Re and Blue Danube went untested, FONDEN did see MultiCat Mexico threatened twice and triggered once.

The first time, in 2014, appears to have been fairly straightforward. MultiCat provided hurricane protection for M7.4 earthquakes (or larger) for part of the country. The Guerrero event that year resulted in an M7.2 earthquake – close but insufficient to trigger protection. S&P didn't put the notes on CreditWatch.

In 2015, Hurricane Odile made landfall and nearly triggered a partial payment of MultiCat Mexico. A hurricane with central pressure of 921 to 932 millibars (mb) would have resulted in a payment of 50 percent of the limit, and central pressure of 920 mb or less would have resulted in the exhaustion of the catastrophe bond. Originally thought to be 930 mb, the result was later revised upward to 941 mb by the National Hurricane Center (reporting agent for the transaction).

A year later, Hurricane Patricia caused a 50 percent loss for MultiCat Mexico's hurricane tranche of $100 million. The hurricane made landfall with a central pressure measuring 932 mb. However, the data sources used weren't always as clear as the market would have liked, highlighting the importance of a using commercial entity as the reporting agent on a transaction. The process of determining that the transaction had triggered took longer than many expected and did involve some ambiguity because of the reporting agent.

Industry loss triggers, like parametrics, do involve basis risk, but the ILS community has identified several advantages:

- The reporting agent (PCS in the vast majority of cases) uses a specific methodology.
- The reporting agent is aware of its role in the transaction – and is engaged appropriately.
- As a commercial entity, the reporting agent understands the need for disciplined loss aggregation and reporting. It remains unbiased, but understands the importance of accurate and timely delivery.
- The reporting process remains faster than indemnity triggers.
- While slightly longer than parametrics (depending on the size and nature of the event), industry loss triggers have the potential to be more straightforward and reliable (depending on how a parametric is structured).

READY FOR A BITE

The global reinsurance and ILS community is ready to taste any new peak peril catastrophe risk that can come to market, and Mexico have been a priority for some time. The only thing missing is an independent, reliable, and accurate industry loss aggregation solution. Upon implementation, it will bring more capacity, diversification of capital sources, and a range of other benefits. The market's experience in Canada shows the trend, and Turkey and global marine and energy are already showing an adoption curve. Insurers can manage their risk and capital more effectively when they have access to independent industry loss estimates—and their shareholders benefit most.

Tom Johansmeyer | Assistant Vice President – PCS Strategy and Development

Phone: +1 201 469 3140 | **Mobile:** +1 201 377 8429

tjohansmeyer@verisk.com

in/tjohansmeyer

@tjohansmeyer

Verisk™

#ORIGINAL RISK