

Public and Private: PCS® Q2 2015 Catastrophe Bond Report

OVERVIEW

The catastrophe bond market appears to be shifting. Despite a recent run of record-setting quarters and years, issuance activity continues its trend toward larger transactions by fewer sponsors. In fact, the two most striking developments in this year's second quarter came from publicly managed entities and private catastrophe bonds. The former accounted for more than half of catastrophe bond issuance activity by capital raised, and the latter has already topped full-year 2014 issuance activity.

First-half 2015 issuance activity reached \$4.1 billion, a year-over-year decline of 28 percent. The number of transactions completed fell 11 percent, from 18 to 16. While some of the decline in new limit can be attributed to several large second-quarter deals last year — such as Everglades Re (\$1.5 billion) and Sanders Re (\$750 million) — few new sponsors have entered the market, and many familiar faces didn't return.

Total catastrophe bond limits remain below their 2014 peak, despite strong year-to-date original issuance activity. Abundant capacity and low catastrophe activity — particularly in North America — have contributed to this trend, and an apparent shift to more flexible structures with lower frictional costs (such as cat bond lite and collateralized reinsurance) has been a factor as well. But the market doesn't need a constant string of record-setting quarters to be healthy. In fact, the second-quarter respite from new heights may be a natural stage in the maturity cycle as potential and existing sponsors evaluate the alternatives available to them in optimizing capital management.

Of course, this is hardly a grim tale. The first half of 2015 is still the second most active first half in the history of the market, ahead of 2013's \$3.9 billion in first-half original issuance. Nonetheless, the year-over-year drop of nearly 50 percent for second-quarter issuance activity does signal a change. Additionally, the composition of the quarter's sponsor base is telling: More than half of the new limit issued came from sponsors that are publicly managed entities but account for just under half the transactions completed.

H1 2015 CATASTROPHE BOND ISSUANCE

According to data from the Artemis.bm Deal Directory, insurers and reinsurers issued about \$4.1 billion¹ in catastrophe bonds in the first half of 2015, down 28 percent from the same period last year. Average transaction size fell 19.5 percent to \$255 million, in large part because of several very large transactions completed in the second quarter of 2014.

H1 2015 Issuance Activity

	H1 2015	H1 2014
PCS trigger use (\$ millions)	1,300	2,000
PCS trigger use (# of transactions)	6	7
North American issuance (\$ millions) ²	3,800	4,800
North American issuance (# of transactions)	12	14
Total issuance (\$ millions)	4,100	5,700
Total issuance (# of transactions)	16	18

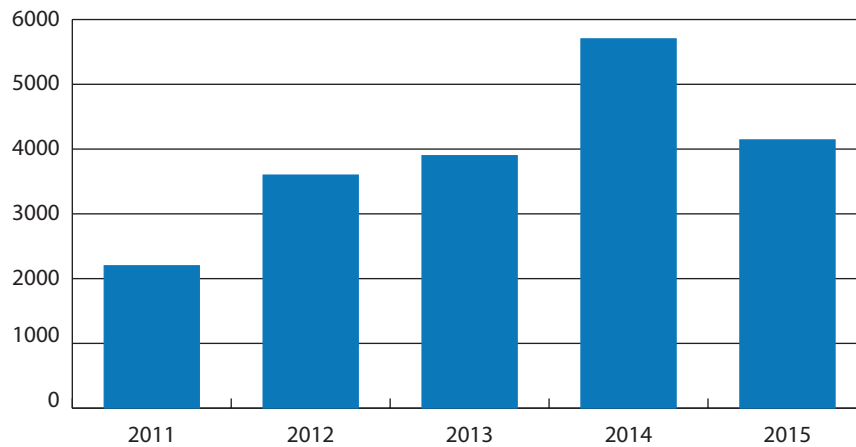
Sources: PCS, Artemis Deal Directory

Use of indemnity triggers surged in the second quarter of 2015, following the first-quarter bump in index trigger use. No second-quarter transactions had index triggers, although two used PCS data for catastrophe designation (\$450 million), bringing the year-to-date total to three transactions and \$700 million using this approach. Among the unique transactions in the second quarter were one with a parametric trigger and a first-time sponsor's indemnity-triggered European earthquake catastrophe bond. So far this year, six transactions have used PCS data, representing approximately \$1.3 billion in capital.

1. This does not include cat bond lite transactions, private catastrophe bonds, or transactions focused on lines other than property catastrophe (such as medical benefits and workers compensation).

2. This includes catastrophe bonds that included the United States and other regions.

Historical H1 Issuance Activity



Sources: PCS, Artemis Deal Directory

The year-over-year decline in capital raised and transactions completed may provide a sense that the insurance-linked securities (ILS) market is changing, but it takes a closer look at second-quarter issuance activity to truly appreciate the transition that appears to be in the works. Catastrophe bonds sponsored by publicly managed entities account for 53 percent of the capital raised in the quarter — and nearly half the deals completed. Net of those transactions, sponsors completed five catastrophe bonds in the quarter, raising approximately \$1.3 billion. In fact, capital raised by publicly managed entities represents 34 percent of the first-half total.

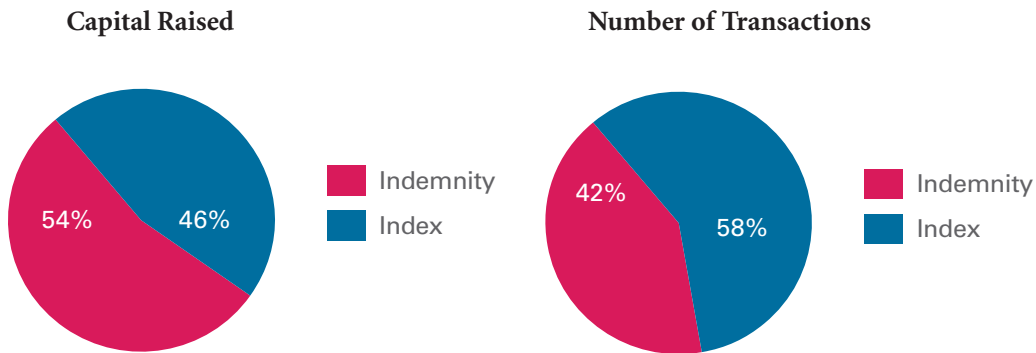
The slowdown in catastrophe bond issuance can be attributed to rate pressure across the reinsurance industry and the adoption of more cost-effective and flexible structures (such as cat bond lite and collateralized reinsurance). But it also appears that a narrowing of strategic intent has come to bear. The concentration of issuance activity from publicly managed entities — all veteran sponsors — is but one indicator of this trend. Only two of this year's catastrophe bonds came from first-time sponsors (Manatee Re in the first quarter and Azzurro Re I in the second), amounting to only 8 percent of capital raised in the first half. The catastrophe bond market — this year, at least — seems to be focused on specific market niches. This may be a function of the multiyear coverage that catastrophe bonds provide, because some sponsors don't need to come back to the market every year. It's worth watching these dynamics, however, to see if they'll become a constraint on the sector's growth.

CAT BOND LITE REACHES NEW HEIGHTS

The use of cat bond lite structures continues to grow rapidly. Six publicly revealed transactions in the second quarter (\$200 million) brought the year's total to \$400 million across 12 "lites."³ In all of 2014, ten publicly revealed cat bond lite transactions resulted in \$242 million in risk transfer. Clearly, this market continues to gain momentum rapidly.

Index remains the trigger of choice for this piece of the market. Seven transactions and \$185 million use the PCS Catastrophe Loss Index. As measured by capital raised, though, indemnity has greater adoption, with five cat bond lites accounting for \$212 million. In the second quarter, two Dodeka series cat bond lite transactions accounted for \$38 million in new capital.

2015 Cat Bond Lite Issuance by Trigger Type



Sources: PCS, Artemis Deal Directory

The continued growth of cat bond lite adoption indicates that the market has seen the value of securitization for private transactions in conjunction with a streamlined issuance process. And the structure, rigor, and discipline involved in issuing through a cat bond lite platform may give this form of issuance an edge over private catastrophe bonds.

The cat bond lite structure aims to provide a route to securitization that doesn't involve the onerous issuance requirements of traditional catastrophe bonds — while still providing the structural discipline and transparency that have characterized catastrophe bonds since the market's inception. As a result, sponsors have increased flexibility to complete smaller and more targeted transactions quickly while managing their cost of capital.

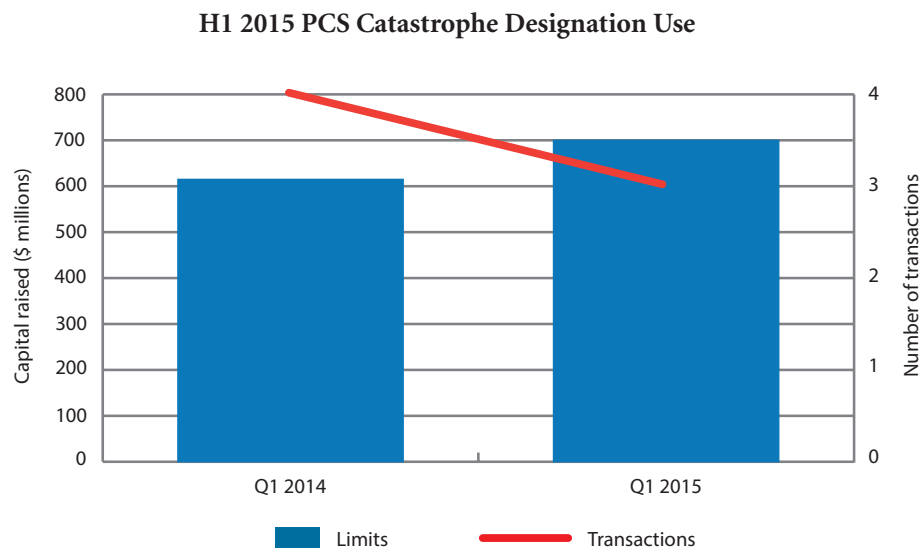
3. Compass Re is not included as a cat bond lite transaction because of the legacy Compass Re special purpose insurer.

Additionally, the cat bond lite structure enables more participants to enter the ILS sector. Funds with a mandate to participate only in securitized transactions, for example, can use cat bond lite instead of collateralized reinsurance or industry loss warranties (ILWs) to issue and consume risk.

Interest is growing in the cat bond lite structure across the market, with the greatest opportunities for traditional insurers and reinsurers seeking to securitize ILWs and other risk transfer instruments. Inquiries to PCS® about cat bond lite have accelerated this year, particularly from untapped areas of the market.

CATASTROPHE DESIGNATION IN INDEMNITY-TRIGGERED TRANSACTIONS

Three catastrophe bonds have taken advantage of the increased discipline and clarity that comes with the use of PCS data for independent catastrophe definition in indemnity triggers — one of the three being a first-time user of this approach. While the number of sponsors using PCS catastrophe designation fell from four to three year over year, the capital raised climbed 14 percent to \$700 million. This remains below 2013’s first-half peak of approximately \$1 billion, but that year’s first-half result was skewed by the \$500 million Tar Heel Re transaction.



Source: PCS

For PCS to designate an event a catastrophe in North America, it must generate an industry insured loss of at least \$25 million and affect a significant number of insurers and insureds (the threshold for Turkey⁴ is \$10 million). The PCS team reviews 40 to 50 events in North America every year that have the potential to become catastrophes. Last year, the team designated 37 catastrophe events in the United States and Canada.

PCS TURKEY LAUNCH

PCS and Istanbul Underwriting Center (IUC) have worked together to develop a catastrophe loss index for risk in Turkey. Using a retrospective, claims-based methodology — as PCS does in North America — PCS Turkey can help the industry transfer risk more effectively and optimize capital allocation all along the risk supply chain.

How PCS Turkey Works

As with PCS in the United States and Canada, PCS Turkey relies on projected ultimate loss estimates from industry data participants. PCS and IUC use those estimates to develop a total insured catastrophe loss estimate based on market share data.

PCS Turkey provides catastrophe loss and claim count estimates by CRESTA (Catastrophe Risk Evaluating and Standardizing Target Accumulations) zone for:

- residential: building and contents
- motor: residential and commercial
- commercial: building, contents, and business interruption

PCS Turkey will provide estimates for events caused by all perils with a catastrophe designation threshold of \$10 million.

PCS Turkey Reporting Time Frames

Catastrophe designation: generally within 48 hours of the event

First catastrophe loss estimate: 2 weeks after catastrophe event designation

First resurvey result: 45 days after the event

Second resurvey result (as needed): 90 days after the event

Subsequent resurveys (as needed): every 60 days until the loss estimate is fully developed

For catastrophe events with the earthquake peril, PCS Turkey will issue the first catastrophe loss estimate as soon as possible.

4. PCS and Istanbul Underwriting Center collaborated to launch PCS Turkey on May 27, 2015. Details are available later in this report.

Reporting Process

Members of the PCS and IUC teams review events likely to reach the \$10 million threshold to determine when they should contact industry data contributors to supply projected ultimate loss estimates. If the claim types and volumes suggest that an event could be a catastrophe, PCS Turkey issues a catastrophe designation bulletin — with versions in Turkish and English.

Entities reporting data to PCS Turkey use a web-based encrypted portal system, with contributed data handled in accordance with PCS confidentiality and document destruction policies. Following event designation, PCS and IUC review the submitted data to develop catastrophe loss estimates, which are communicated through bulletins — similar to the process PCS uses in the United States and Canada. PCS Turkey considers an event closed when loss development has stabilized and no significant unknowns exist that could substantially affect the overall insured loss.

Alternative Risk Transfer

PCS Turkey can support risk transfer through industry loss warranties, collateralized reinsurance, and catastrophe bonds — including cat bond lite.

ILWs: Use of PCS Turkey catastrophe loss estimates is the same as for ILWs with exposure to the United States and Canada. Cedents can develop ILWs by loss category (motor, residential, commercial) and CRESTA zone.

Collateralized reinsurance: Catastrophe designation can provide clearer definitions for catastrophe losses in collateralized reinsurance (and indemnity-triggered catastrophe bonds) using the same approach already at work in U.S.–exposed programs. Only losses from PCS Turkey–designated events would be covered by the collateralized reinsurance program.

Catastrophe bonds and cat bond lite: The PCS Turkey Catastrophe Loss Index provides a robust alternative to parametric triggers in Turkish catastrophe bonds, reducing basis risk and providing an objective third-party source of catastrophe loss estimates.

For more information about PCS Turkey, please contact Tom Johansmeyer at +1 201 469 3140 or tjohansmeyer@iso.com.

TREND TRACKING

The ongoing shift in underlying market trends over the past year shows how dynamic the catastrophe bond sector has become. Innovation, expanded geographical reach, and increases in market participation continue to shape the catastrophe bond market, opening more opportunities to both sponsors and investors.

The five key trends in the catastrophe bond market right now indicate increased flexibility and a strong foundation for future market growth:

1. A break from records: Record-setting issuance activity became the norm for a while, a trend that ended in the second quarter of 2015. Whether this is a brief break or a shift in how insurers and reinsurers use ILS capital remains to be seen. Rapid growth in collateralized reinsurance and cat bond lite appears to have stolen some of the catastrophe bond market's momentum, but that's indicative of a market still maturing and finding the most effective tools to use in managing risk and capital. The third quarter is unlikely to bring a sense of resolution to this trend because issuance activity historically has been thin. Last year, no property catastrophe transactions were completed (the one bond that came to market was for workers compensation), so we'll probably have to wait for the fourth quarter to get a better sense of where the catastrophe bond market is headed.

2. Keeping it private: Private transactions — including cat bond lite — continue their rapid ascent. Publicly revealed cat bond lite activity reached \$400 million in the first half of 2015, putting it at close to twice the full-year 2014 total. Significant potential for increased adoption remains, particularly given the recent lift in inquiries to PCS from parties that have not yet tried cat bond lite. Further, new regions could affect future cat bond lite use. Stand-alone transactions covering Canadian and Turkish risks may fit well with the cat bond lite structure.

3. Representing the public: Publicly managed entities are no strangers to the catastrophe bond market, but the high concentration of them in second-quarter issuance is profound. Capital raised through catastrophe bonds for this sector accounted for a third of the first-half 2015 market total and more than half of the second quarter's activity. And this comes in an "off" year for Everglades Re, which tends to complete a large catastrophe bond every other year; last year's was \$1.5 billion, the largest catastrophe bond ever completed. Further, publicly managed entities have a history of big issuances. In addition to the large totals achieved by Everglades Re, the most recent Alamo Re catastrophe bond reached \$700 million, and the 2013 Tar Heel Re transaction reached \$500 million.

4. A place for old pros: Veteran sponsors continued to dominate issuance activity this year. Only two catastrophe bonds came from first-time sponsors, and much of the first half's activity came from sponsors that have several deals under their belts already. Yet this behavior follows chatter in the market about the need to include new risk areas and lines of business. It seems as though soft market conditions are refocusing the industry's use of catastrophe bonds until more alternatives become available. The launch of PCS Turkey shows a step in the right direction, as do our current efforts to develop index tools for global energy and marine (physical damage only). It's clear that new indexes will be crucial to unlocking ILS market expansion opportunities.

5. Competition from alternatives: Cat bond lite isn't the only alternative available to insurers and reinsurers. Collateralized reinsurance has grown rapidly over the past six years. According to an Artemis report, this structure has swelled from \$7.7 billion in 2009 to \$36 billion at the end of the second quarter of 2014.⁵ And traditional reinsurers have also become more competitive as they seek to protect and grow their share of the market. What the market will need to figure out going forward is the best use for each form of capital in managing risk most effectively.

5. <http://www.artemis.bm/blog/2014/12/15/records-growth-for-ils-collateralized-reinsurance-market-in-2014-aon/>



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