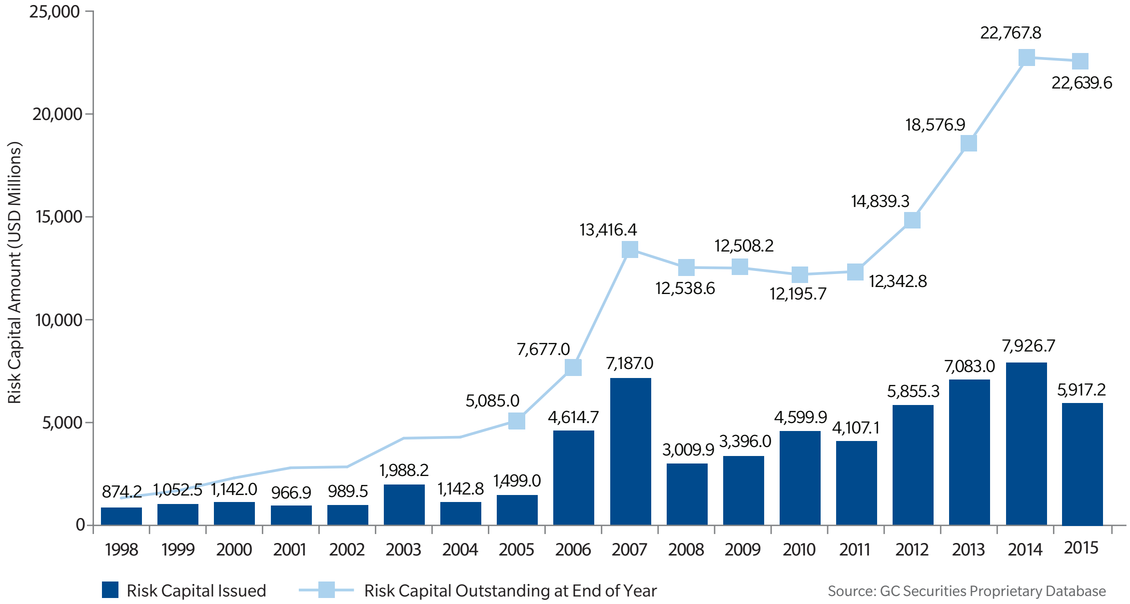
GUY CARPENTER

CATASTROPHE BOND UPDATE: FOURTH QUARTER AND FULL YEAR 2015

144A property and casualty (P&C) catastrophe bond primary issuance levels were uncharacteristically low in the fourth quarter with an aggregate notional of USD 1.425 billion of 144A P&C catastrophe bonds issued benefiting five sponsors. The 2015 full year primary issuance of 144A P&C catastrophe bonds totaled USD 5.917 billion from 25 transactions benefiting 24 sponsors. 144A P&C risk capital outstanding as of December 31, 2015 totaled USD 22.640 billion, which is 0.56 percent lower than 2014's all-time high in the 144A P&C catastrophe bond market.

MARSH & McLENNAN COMPANIES

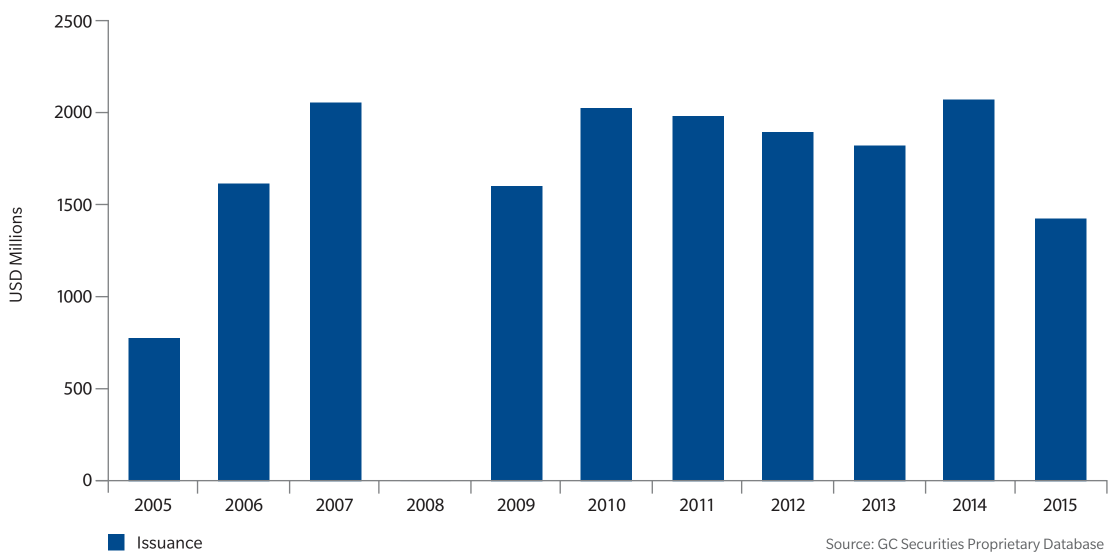
F-1 | 144A P&C CATASTROPHE BOND RISK CAPITAL ISSUED AND OUTSTANDING



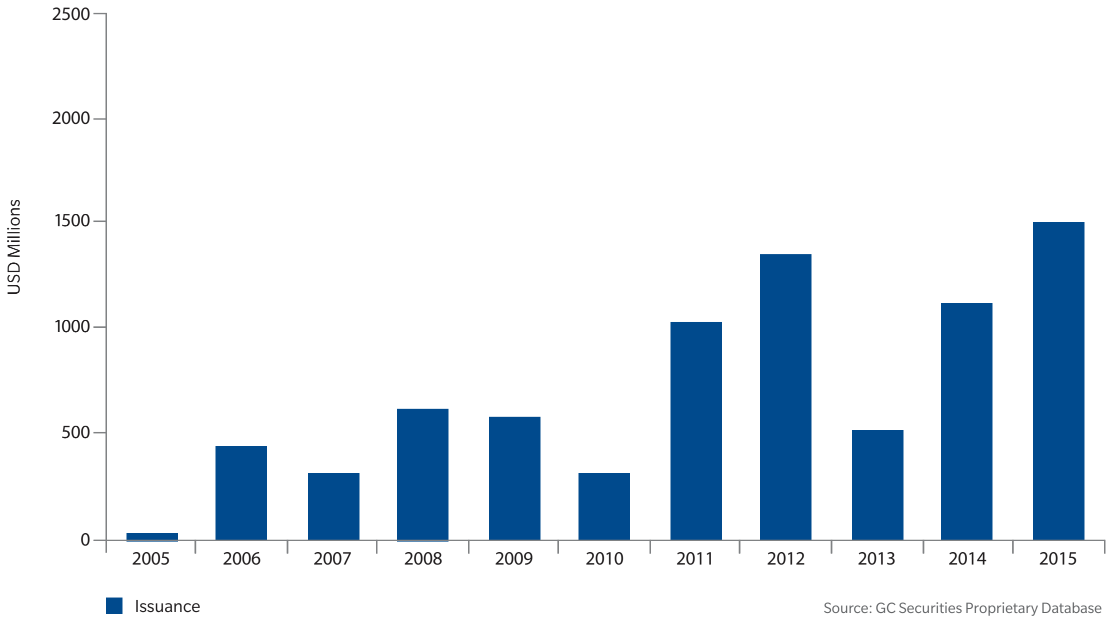
FOURTH QUARTER PRIMARY ISSUANCE

After 2015 began with record historical issuance levels in the first quarter, the fourth quarter of 2015 was dramatically different as only USD 1.425 billion of 144A P&C catastrophe bonds benefiting five sponsors were completed. This represented the second lowest level since 2005 and the lowest level since 2009. One explanation for this development may be that sponsors who would ordinarily have been willing to issue in the fourth quarter of the calendar year may have had the flexibility to delay their issuance to the following first quarter in order to obtain best execution and/or avoid transaction crowding. We view sponsors' willingness to focus on best execution rather than specific renewal dates (while still important for overall capital planning purposes) as a further sign of the maturity of the insurance-linked securities (ILS) space. The ILS space is perceived as performing in a manner similar to the broader capital markets with their availability of capital throughout the calendar year.

F-2 | FOURTH QUARTER 144A P&C CATASTROPHE BOND HISTORICAL PRIMARY ISSUANCE



F-3 | FIRST QUARTER 144A P&C CATASTROPHE BOND HISTORICAL PRIMARY ISSUANCE



Source: GC Securities Proprietary Database

Despite a limited amount of capital placed in the quarter, one new sponsor (and the second corporate of the year), Amtrak's captive Passenger Railroad Insurance Ltd. and four repeat sponsors (Everest Re, Munich Re, USAA and Zenkyoren) accessed the 144A catastrophe bond market.

Everest Re successfully issued two tranches of Kilimanjaro Re Ltd. Series 2015-1 Notes representing an aggregate principal amount of USD 625 million. The catastrophe bonds provide Everest Re Group, Ltd. with protection against U.S. earthquake and named storm events on a per-occurrence, PCS-reported industry insured index-derived basis. The Class D Notes carry a one-year expected loss of 5.25 percent, based on AIR's WSST catalog and investors receive an initial interest spread of 9.25 percent per annum (initial price guidance was quoted as 9.00 percent to 9.75 percent). The Class E Notes carry a one-year expected loss of 3.00 percent, based on AIR's WSST catalog, with investors receiving an initial interest spread of 6.75 percent per annum (initial price guidance was quoted as 6.50 percent to 7.00 percent). The Series 2015-1 Notes represent the third time Everest Re has accessed the capital markets since 2014 with USD 1.575 billion aggregate limit currently outstanding.

USAA has accessed over USD 6.0 billion of cumulative limit from ILS investors since 1997 through 25 separate catastrophe bond offerings. The latest USAA-sponsored catastrophe bond issuance (Series 2015-2 Class 3 Notes) completed in December 2015 provides USD 125 million of per occurrence, indemnity triggered multi-peril protection. The Series 2015-2 Notes carry a one-year expected loss of 3.26 percent as modeled by AIR's WSST catalog, with investors initially receiving a risk interest spread of 7.25 percent per annum (initial price guidance was quoted as 7.00 percent to 7.75 percent).

Zenkyoren obtained USD 300 million of protection against Japanese earthquake via the existing Nakama Re Ltd. vehicle. Nakama Re Ltd. issued USD 100 million of Class 1 Notes that trigger on an indemnity, per occurrence basis, and issued USD 200 million of Class 2 Notes that trigger on an indemnity, three year aggregate basis. The Class 1 Notes provide investors with an initial risk interest spread of 2.875 percent per annum (initial price guidance was quoted as 2.75 percent to 2.875 percent) corresponding to a one year expected loss of 1.16 percent. The Class 2 Notes provide investors with an initial interest spread of 3.25 percent per annum (initial price guidance was quoted as 2.875 percent to 3.25 percent) corresponding to a three year expected loss of 2.59 percent (or 0.86 percent on an annualized basis). Zenkyoren has now sourced USD 2.345 billion of cumulative limit from ILS investors since 2003 through seven separate catastrophe bond offerings.

Munich Re also obtained incremental protection on a per occurrence basis against U.S. Hurricane and Australia Tropical Cyclone via the Queen Street XI Re DAC vehicle. Queen Street XI Re issued USD 100 million of Series 2015-1 Notes that triggers with the use of a PCS-reported industry insured index-derived basis for U.S. Hurricanes and modeled losses for Australia Tropical Cyclone. Munich Re has raised USD 1.1 billion of protection via the Queen Street vehicles since 2008. The Series 2015-1 Notes provide investors with an initial interest spread of 6.15 percent per annum (initial price guidance was quoted as 5.75 percent to 6.15 percent) corresponding to a one-year expected loss of 2.86 percent based on AIR's WSST catalog.

The most significant transaction of the fourth quarter was the successful placement of USD 275 million of Principal At-Risk Variable Rate Notes issued from the newly formed PennUnion Re Ltd. special purpose reinsurer in order to provide reinsurance protection to corporate sponsor Amtrak's captive, Passenger Railroad Insurance, Ltd. The Series 2015-1 Notes provide per occurrence, parametric triggered protection from storm surge and wind resulting from Named Storms as well as earthquakes affecting the Northeast region of the United States for a period of approximately 3.17 years. The transaction is triggered based on key intensity measurements of the physical parameters for each respective peril captured at specified measurement locations. Depending upon the peril, the measurements are taken from both inland and offshore locations ranging from the Washington, D.C. to Providence, Rhode Island regions. Storm surge water height measurements are captured at seven tidal gauge stations in the Long Island Sound, East River, Lower New York Bay and Delaware River. Wind measurements are captured and interpolated for 60 ZIP codes along Amtrak's Northeast Corridor railways from Washington, D.C. to near Providence. Earthquake intensity is interpolated to 21 ZIP codes within the states of Delaware, New Jersey, New York, Pennsylvania and Rhode Island. The underlying exposure was modeled by RMS and the Series 2015-1 Notes carry a one-year expected loss of 1.97 percent, corresponding to an interest spread of 4.50 percent per annum (which was the low end of an initial price guidance quoted as 4.50 percent to 5.00 percent).

MATURITIES

Three 144A P&C catastrophe bonds were scheduled to mature in the fourth quarter, representing USD 595 million of risk capital being returned to investors. Of the USD 595 million, USD 100 million of MultiCat Mexico Limited Class C Notes have been extended past the scheduled redemption date of December 4, 2015 as a result of Hurricane Patricia's impact on the Pacific coast of Mexico in late October 2015. The Class C Notes, which are parametrically triggered based on central pressure observed or interpolated on or within a defined area, are currently awaiting the release of the National Hurricane Center's Tropical Cyclone Report in order to determine the principal reduction for the Class C Notes. However, the Class A and Class B Notes from MultiCat Mexico Limited did mature at their scheduled redemption date of December 4, 2015.

T-1 | FOURTH QUARTER 2015 MATURITIES

Deal	Maturity	Sponsor	Trigger	Peril(s)	Initial Expected Loss	Notional $M	Risk Spread at Issuance
Successor X Ltd. 2011-3 - Class V-F4	11/10/15	Swiss Re	PCS Index Per Occurrence	US Hurricane	7.50%	$80	16.25%
Successor X Ltd. 2011-3 - Class V-X4	11/10/15	Swiss Re	PCS/PERILS Index Per Occurrence	US Hurricane Europe Windstorm	3.99%	$50	11.25%
MultiCat Mexico Limited - Class A	12/4/15	FONDEN (Mexico)	Parametric	Mexico Earthquake	4.40%	$140	8.00%
MultiCat Mexico Limited - Class B	12/4/15	FONDEN (Mexico)	Parametric	Mexico Hurricane (Atlantic)	2.73%	$75	7.75%
Residential Re 2011-II - Class 1	12/6/15	USAA	Indemnity Per Occurrence	U.S. HU EQ ST WS WF	1.88%	$100	8.90%
Residential Re 2011-II - Class 2	12/6/15	USAA	Indemnity Per Occurrence	U.S. HU EQ ST WS WF	3.77%	$50	13.25%

GC Securities Proprietary Database

With respect to upcoming maturities in the first quarter of 2016, USD 1.268 billion of 144A catastrophe bonds are scheduled to mature (absent any triggering event). It is noted that SCOR has replaced the maturing Atlas Reinsurance VII Ltd. 2012-1 with the issuance of USD 300 million of Atlas IX Capital DAC Class A Notes, which closed on January 12, 2016.

T-2 | FIRST QUARTER 2016 MATURITIES

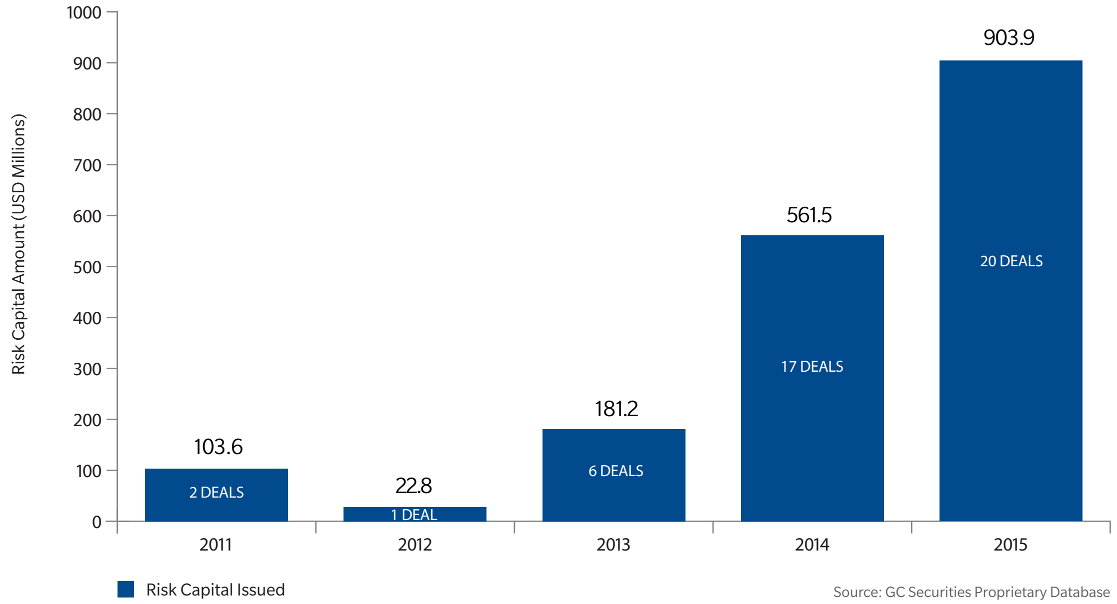
Deal	Maturity	Sponsor	Trigger	Peril(s)	Initial Expected Loss	Notional $M	Risk Spread at Issuance
Atlas Reinsurance VII Ltd. 2012-1	1/7/16	SCOR	Class A: PCS Index Class B: PERILS Index	Class A: U.S. HU and EQ Class B: Europe Windstorm	Class A: 1.89% Class B: 1.40%	Class A: $60 Class B: $168.2	Class A: 8.00% Class B: 3.65%
Lakeside Re Ltd. III	1/8/16	Zurich	Indemnity Annual Aggregate	U.S. EQ and Canada EQ	2.09%	$270	8.00%
Tradewynd Re Ltd. 2014-1 Class 1-B	1/8/16	AIG	Indemnity Per Occurrence	U.S. EQ and Canada EQ U.S. HU and Caribbean HU	2.41%	$100	6.75%
Caelus Re Ltd. 2013-1	3/7/16	Nationwide	Indemnity; Annual Aggregate	U.S. HU and EQ	1.46%	$270	5.25%
East Lane Re Ltd. 2012-1	3/16/16	Chubb	Indemnity: Per Occurrence	Gulf and SE U.S. Hurricane and Severe Thunderstorm	Class A: 1.54% Class B: 2.13%	Class A: $75 Class B: $75	Class A: 9.00% Class B: 10.75%
Everglades Re Ltd. 2013-1	3/28/16	Florida Citizens	Indemnity; Per Occurrence	Florida Hurricane	3.18%	$250	10.00%

GC Securities Proprietary Database

2015 PRIVATE CAT BOND PLACEMENTS

The private market saw 20 private cat bond transactions in 2015 representing USD 903.94 million of risk capital transferred to capital market investors.

F-4 | PRIVATE CATASTROPHE BONDS: RISK CAPITAL ISSUED



Note: Private catastrophe bonds as of December 31, 2015 excluding deals currently being marketed.

PRICING

Pricing dynamics in the fourth quarter of 2015 were mixed, with bonds trading in different directions based on the risk level, peril exposure and relative market size rather than the market shifting categorically in one direction across all names. The typical fourth quarter "Dead Cat" market (in which bonds prior to their scheduled redemption date that have little to no remaining modeled risk exposure are still paying their full scheduled coupon) was active. Notably however, the required return for Dead Cat liquidity providers in the fourth quarter of 2015 averaged 255 basis points per annum, whereas in the fourth quarter of 2014 the required return was averaged closer to 220 basis points.

As was the case throughout 2015, and particularly the second half of the year, continuing rate compression and sponsors bringing top (remote) layer transactions prompted some investors, on the margin, to rotate their investment portfolios towards higher risk, higher return positions. Importantly, market discipline remained intact as was demonstrated in November/December with Everest Re's Kilimanjaro Re Series 2015-1 Notes and SCOR's Atlas IX Series 2016-1 Notes. The 144A catastrophe bond investor base's willingness and interest in adding risk in exchange for more yield is worth noting as it presents an interesting value proposition to sponsors. Long-term market constituents (across the full spectrum of sponsors, dealers, investment managers and ultimate capital providers) should take comfort that pricing and capacity dynamics indicate additional risk is being added where additional compensation is deemed adequate and not at any price. The willingness of the investors to sensibly price and deliver capacity on more junior layers represents a healthy and productive broadening of 144A markets risk appetite, in other words, they incent incremental additional capacity from cedents. This occurs instead of a secular and sustained shift away from low risk transactions towards higher risk transactions.

Looking towards 2016, absent a major market disruption, our expectation is that risk spreads in the 144A P&C catastrophe bond and private cat bond marketplace will remain flat to slightly down depending on investors' perception of available forward supply of investment opportunities relative to the market's redemption schedule. We expect the 144A P&C catastrophe bond market issuance to be similar to the last several years with further growth in the private cat bond market (relative to 2015) as new sponsors incorporate alternative capital. In addition, particularly in a compressed rate environment where the margin for error is low, investors will likely look to overweight their books toward higher "quality" risks, all else equal. This preference set is relevant for indemnity trigger transactions, for which we would expect a widening of the pricing gap between offerings for portfolios deemed to have a high degree of data capture, transparent modeling and established performance track records relative to those with a less verifiable exposure set. The composition of risk metrics rather than the risk metrics themselves will become all the more relevant to investor decision making. Overall, we view these patterns as a long-term net positive for the stability and reliability of the 144A and private cat bond marketplaces.

CONTRIBUTORS

Jordan Brown
Analyst
GC Securities*

Cory Anger
Global Head of ILS Structuring
GC Securities*

Ryan Clarke
Senior Vice President
GC Securities*

Sung Yim
Senior Vice President
GC Securities*

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