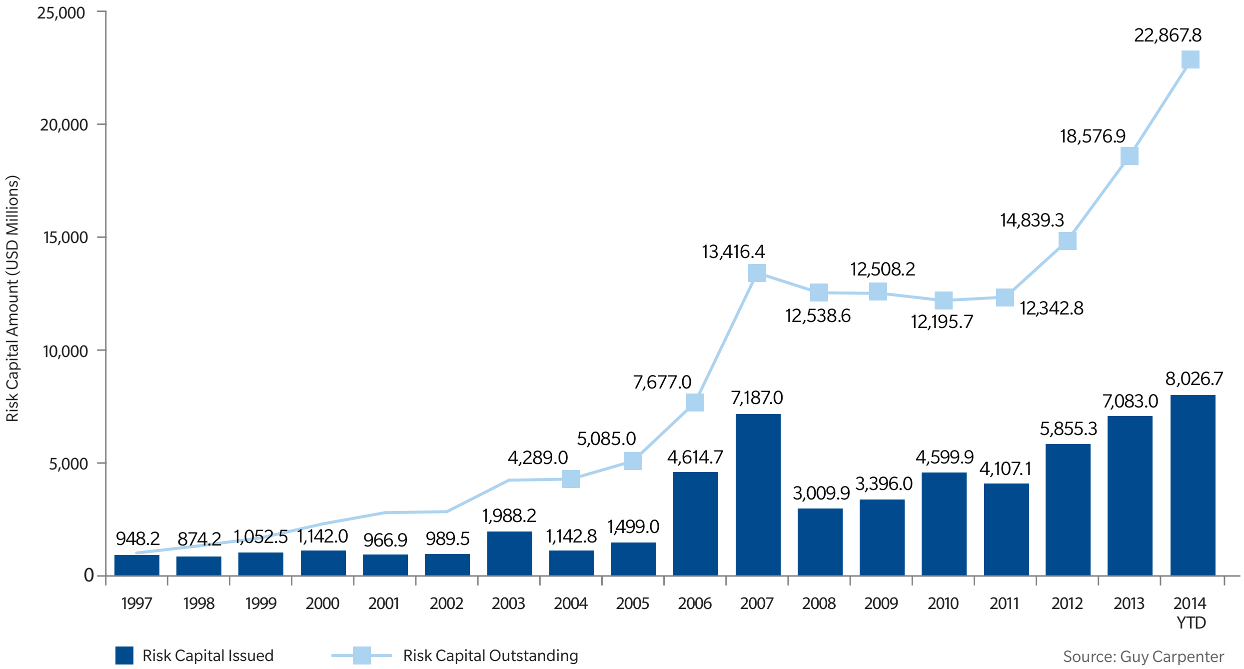
Catastrophe Bond Update: Fourth Quarter 2014

ISSUANCE REACHES INDUSTRY FULL YEAR RECORD

After one of the slowest third quarters to date for 144A property and casualty (P&C) catastrophe bond issuance, the fourth quarter saw a flurry of activity that resulted in full year 144A P&C cat bond issuance exceeding USD8 billion — an industry record. Total risk capital outstanding as of December 31, 2014 equaled USD22.868 billion, the highest level of outstanding risk capital the market has ever supported.

F-1 | 144A P&C CATASTROPHE BOND RISK CAPITAL ISSUED AND OUTSTANDING – 1997 TO YE 2014



Source: Guy Carpenter

Persistent year-on-year growth in issuance and risk capital outstanding indicates that the market is showing signs of maturity and stabilization. Seven new sponsors entered the 144A P&C cat bond market in 2014, issuing ten new tranches of notes. Of the seven, five were insurers, one was a reinsurer and the other a residual markets insurer.

T-1 | 2014 NEW MARKET ENTRANTS

Deal	Sponsor	Sponsor Type	USD Notional (Millions)	Covered Perils
Gator Re Ltd. 2014-1	American Strategic Insurance Group	Insurer	200.00	U.S. Named Storm and Severe Thunderstorm
Riverfront Re Ltd. 2014-1	Great American	Insurer	95.00	U.S. & Canada Named Storm, Earthquake, Severe Thunderstorm and Winterstorm
Citrus Re 2014-1	Heritage	Insurer	150.00	Florida Named Storm
Citrus Re 2014-2	Heritage	Insurer	50.00	Florida Named Storm
Lion I Re Limited	Generali	European Insurer	262.20	Europe Windstorm
Kilimanjaro Re 2014-1 Class A	Everest Re	Reinsurer	250.00	U.S. Named Storm
Kilimanjaro Re 2014-1 Class B	Everest Re	Reinsurer	200.00	U.S. Named Storm and Earthquake
Kilimanjaro Re 2014-2	Everest Re	Reinsurer	500.00	U.S. & Canada Eartquake
Aozora Re Series 2014-1	Sompo Japan Nipponkoa	Japanese Insurer	99.50	Japan Typhoon
Alamo Re Ltd. Series 2014-2	TWIA	Residual Market Insurer	400.00	Texas Named Storm

Source: Guy Carpenter

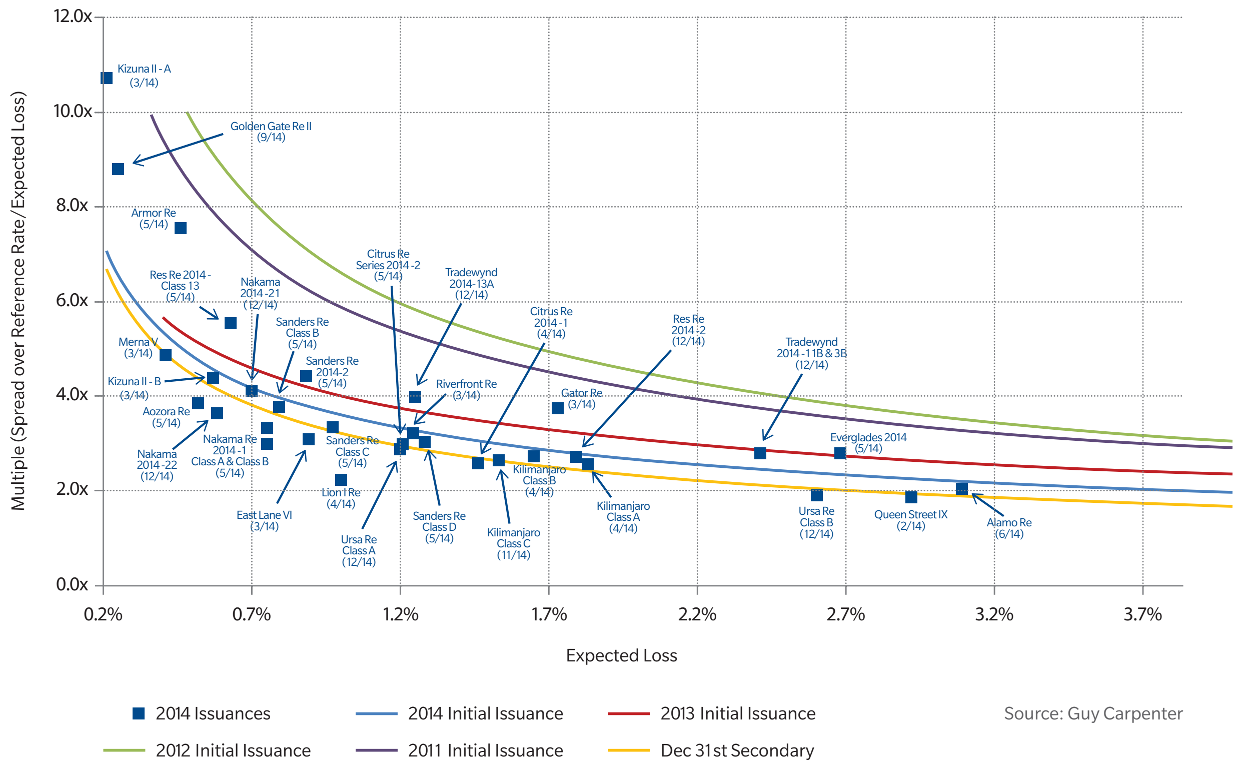
While no first time sponsors issued bonds in the fourth quarter, six repeat issuers placed USD2.075 billion with capital markets investors in 144A cat bond format. The re-entry of sponsors across a range of underlying businesses further indicates that sponsors continued to recognize the value of insurance-linked securities (ILS) as an appropriate risk transfer mechanism. We expect repeat and new sponsors to continue to utilize the ILS market in 2015, as they seek to complement their traditional coverage with proven, efficient and bespoke features that can be sourced via cat bond protection.

The attraction to non-correlative property catastrophe risk resulted in third party capital continuing to be deployed into the ILS sector. Sponsors took advantage of strong investor demand as more than 70 percent of deals coming to market in 2014 settled at greater notional value than initially expected. In the fourth quarter alone, of the six new deals that came to market, four closed at higher notional limits (44 percent higher on average).

The continued influx of third party capital from new and existing market participants also favorably impacted ILS pricing for protection buyers. The continued low interest rate environment encouraged institutional investors (such as pension funds and hedge funds) to seek the higher yields offered by natural cat risk notes. As a result, sponsors took advantage of the opportunity to lock in attractive rate on line and essentially, hedge rate volatility.

Throughout the first quarter of 2014 final pricing of cat bonds was, on average, 10 percent lower from the midpoint of initial indicative spread pricing guidance, the likely result of sponsors' conservative pricing in the first half of the year. As declining rates persisted, the differential of cat bond spreads from initial price guidance to final pricing narrowed, reflecting sponsors' increasing aggressiveness toward pricing expectations. In the fourth quarter, the differential of cat bond spreads from initial price guidance to final pricing normalized as many issuances settled at the midpoint of initial expectations.

F-2 | 2011-2014 144A CAT BOND PRICING (MULTIPLE VS. EXPECTED LOSS)

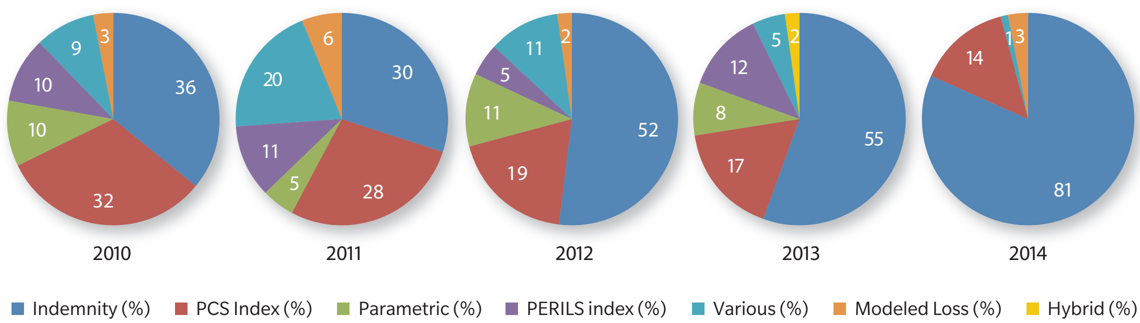


The soft rate environment, combined with the presence of "accommodating" investors, allowed cedents to place more innovative, flexible and bespoke transactions. By the end of the fourth quarter several key structural features emerged and became more prevalent as the terms and conditions of cat bonds and traditional reinsurance continued to converge.

INDEMNITY TRIGGER

Eighty-one percent of the P&C risk capital (based only on 144A cat bond transactions) was structured with an indemnity trigger on either a per-occurrence, annual aggregate or multi-year aggregate basis. The use of indemnity triggers increased steadily from a low of 30 percent in 2011 to 55 percent in 2013.

F-3 | TRIGGER TYPE 2010-2014



Source: Guy Carpenter

As cat bond structures become more aligned with traditional (re)insurance contracts, the indemnity trigger has become a viable option particularly as investors become increasingly sophisticated and sponsors more transparent.

BOND TENOR

Eighty-nine percent of P&C risk capital (based only on 144A cat bond transactions) had a bond tenor of either three or four years in 2014, a decrease from 93 percent in 2013. This was due to increased usage of risk periods longer than four years. This was largely influenced by Sanders Re 2014-1, a USD300 million five year transaction benefiting Allstate (Q2) and Kilimanjaro Re 2014-2, a USD500 million five year transaction benefiting Everest Re (Q4). Investors were receptive to longer-term transactions (a position we expect will continue into 2015) as both deals were oversubscribed. However, such deals closed either above or at the midpoint of initial price guidance, indicating that investors required additional compensation for risk periods longer than four years. Sponsors continued to express interest in bonds with risk periods beyond five years, which we expect will persist through 2015 and beyond.

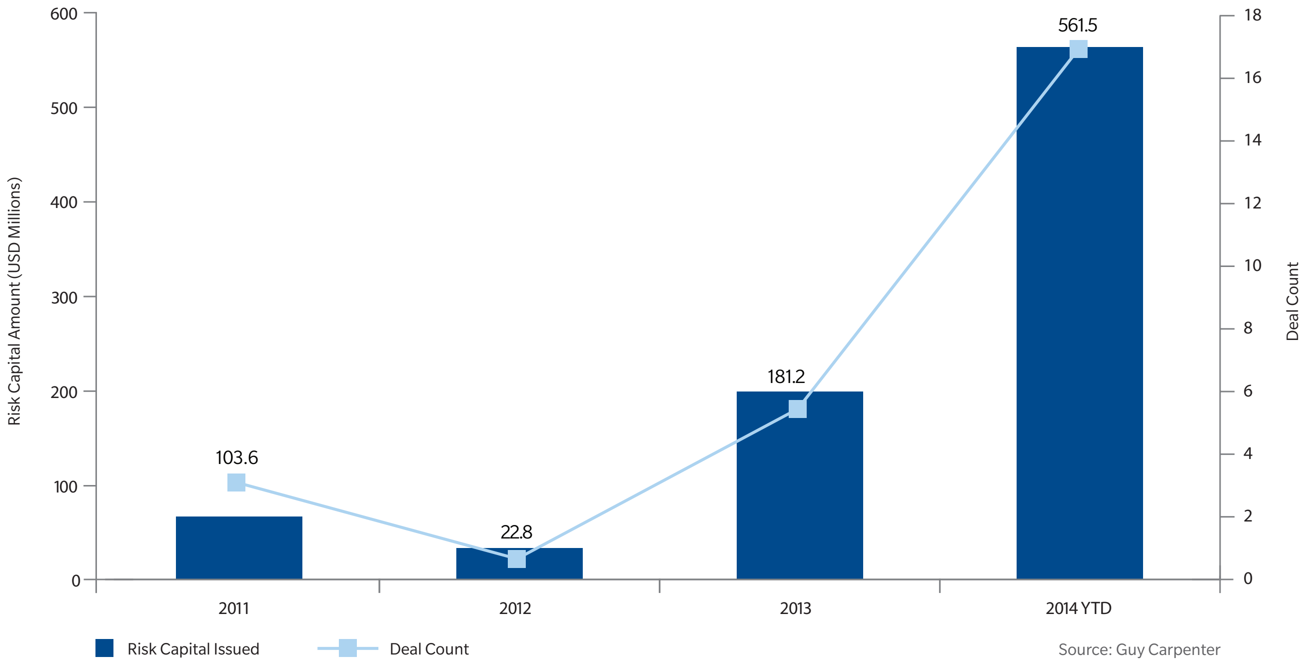
T-2 | 2014 RISK PERIOD GREATER THAN 4 YEARS

Deal	Sponsor	Closing Date	Trigger	Peril(s) / Region(s)	Expected Loss	Risk Period	Notional $M [Initial] = > Final	Risk Spread [Initial] = > Final	Risk Spread Tightening (Final / Initial Mid-Point)
Sanders Re 2014-1	Allstate	5/22/14	PCS IndexPer Occurrence	US HU (excluding Florida)/ US EQ	Class D: 1.28% (AIR WSST)	Class D: 5 years	Class D: $[250] => 305	Class D: [3.50-4.00%] => 3.9%	Class D: 4.00%
Kilimanjaro Re 2014-2	Everest Re	11/18/14	PCS Index	US & Canada EQ	1.46% (AIR)	~5 years	$[350] => 500	[3.50-4.00%] => 3.75%	0%

Source: Guy Carpenter

FOURTH QUARTER – PRIVATE CAT BOND PLACEMENTS

F-4 | PRIVATE CATASTROPHE BOND ISSUANCE 2011 – 2014



Source: Guy Carpenter

In addition to 144A transactions, the fourth quarter was an active one for the private cat bond market (Regulation D, Regulation S and Rule (4(2)) securities offerings). The terms and conditions of such securities are typically confidential due to the private nature of the issuance, unless the sponsors or the placement agents publicize information about the transactions. As of December 31, 2014 approximately USD561.5 million of limit was transferred to the capital markets via 17 transactions. These figures represent a 210 percent increase in the notional amount of limit placed year-over-year, and a 183 percent increase in the number of transactions year-over-year.

A notable transaction in 2014 was the CHF70 million Regulation S placement of notes through Kaith Re Ltd. to benefit Gebäudeversicherung Bern (GVB) and provide protection against Swiss natural peril. This particular transaction was unique because it was the first-ever Swiss franc-denominated cat bond and in essence achieved the same coverage terms as the traditional reinsurance used by GVB. The Kaith Re Ltd. vehicle was used on two other occasions in the fourth quarter to issue two separate series of notes.

T-3 | PRIVATE NOTES ISSUED VIA KAITH RE LTD.

Deal	Notional USD (M)	Notes
Li Re Series 2014-1	10.37	Covering property cat risk
Li Re Series 2014-2	5	Covering property cat risk
Kaith Re Ltd	71	First ever Swiss-franc denominated bond providing GVB protection against Swiss natural peril. Structured and placed by GC Securities

Source: Guy Carpenter

FOURTH QUARTER – KEY INDUSTRY DEVELOPMENT

On December 18, 2014 the U.S. Commodity Futures Trading Commission (CFTC) provided conditional relief to certain ILS/cat bond issuers from having to register as Commodity Pool Operators (CPOs).

Prior to 2010, ILS issuers that utilized derivative contracts as the form of protection between the sponsor and the cat bond issuer were exempt from registration as CPOs. However, as a result of Congress enacting the Commodity Exchange Act and adoption of the Dodd Frank Act, the definition of commodity interest was expanded to include swaps/derivatives. As a result, certain vehicles participating in ILS transactions were deemed to constitute commodity pools.

After successful lobbying by the Securities Industry and Financial Markets Association, the CFTC declared that the risk transfer contract in the form of a swap/derivative between the sponsor and the issuer of securities "serves merely as a conduit to transmit the insurance-related risks of the protection buyer through the ILS issuer and to the investors purchasing bonds from the ILS issuer." As a result, catastrophe bonds will gain relief from having to register with the CFTC as CPOs. However, several conditions need to be met for the exemption.

The conditions for exemption include:

1. The ILS issuer meets the conditions for an exemption from CPO registration.
2. The ILS issuer files a notice of eligibility.
3. The ILS issuer is operated in a way whereby there is no active management of assets or liabilities and there are strict collateral rules, as defined by the CFTC.

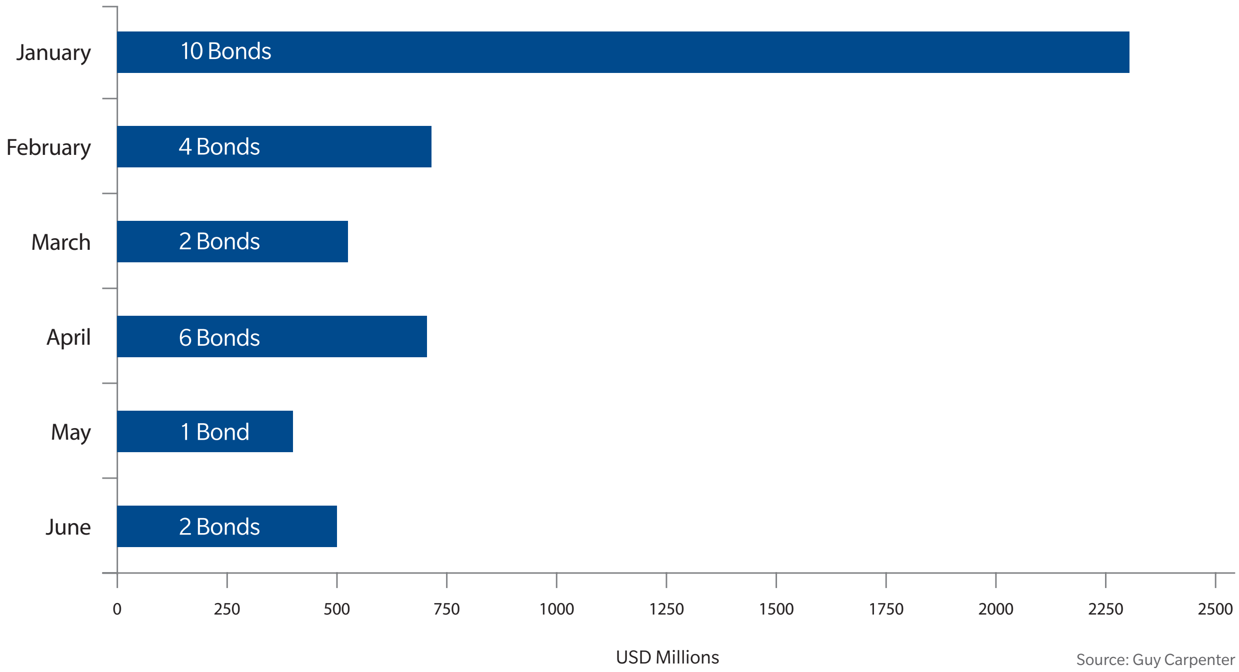
As a result of the relief, catastrophe bond transactions using swaps/derivatives as the form of insurance risk transfer between the sponsor and the ILS issuer will continue to be flexible, efficient and innovative risk transfer tools.

Also, in December of 2014, President Obama signed into law P.L. 113-295, The Tax Increase Prevention Act of 2014 ("Act"). Section 132(a) of the Act changed the key date in Section 871(k)(1)(C)(v) of the Internal Revenue Code from December 31, 2013 to December 31, 2014. The section provides an exemption from withholding on "interest-related dividends" for U.S. money market funds. The section expired under the prior law, which meant that withholding tax was incurred on dividends on money market funds for taxable years beginning after December 31, 2013. The new law changes the termination date of the exemption to December 31, 2014. Changing the termination date retroactively changed the law with respect to withholding tax on dividends from U.S. money market funds. Now, the 2014 dividends from calendar year money market funds are exempt from such withholding tax. Since many U.S. dollar-denominated cat bonds utilize U.S. money market funds, the withholding tax would have affected the yield received on money market funds that are a component of those cat bonds whose coupon would have been paid at the end of their fiscal year that occurred after December 31, 2013.

FIRST QUARTER 2015 AND POTENTIAL 2015 TRENDS

Pricing levels for first quarter 2015 deals will be influenced by the number of bonds maturing during the period. January alone will see USD2.3 billion of principal returned to investors as ten transactions have or are set to mature (absent any triggering event). Additionally, another USD1.24 billion of capital will be returned to investors in February and March, taking the total notional value of first quarter 2015 maturities to USD3.54 billion. Such maturities in the ILS space in the first half of 2015, which has the highest percentage of outstanding cat bonds as of the end of the preceding year since 2011, is expected to provide further pressure to lower ILS pricing.

F-5 | MATURING BONDS (USD MILLIONS) JANUARY-JUNE 2015



Source: Guy Carpenter

In 2015, it is likely that the market will continue to see more innovative and bespoke structured catastrophe bonds issued. The structural features that investors may continue to accept on a larger scale include:

- Non-modeled natural perils such as meteorite impact, wildfire and volcanic eruption.
- Man-made perils (including terrorism).
- Longer duration bonds (greater than five years).
- Increased usage of ILS by corporate sponsors.

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