



# Q1 2016 Catastrophe Bond & ILS Market Report

Another record first-quarter

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# INTRO

This report reviews the catastrophe bond and insurance-linked securities (ILS) market at the end of the first-quarter of 2016, looking at new risk capital issued and the composition of transactions completed during the quarter.

For the first time in its history the catastrophe bond and ILS market has ended a quarter with more than \$26 billion of outstanding market capacity, driven by a record-breaking start to the year that saw \$2.215 billion of new risk capital issued from ten transactions, lifting the outstanding market to \$26.516 billion at the end of March 2016.

The first-quarter is often a busy period for the sector as renewal deals come to market. An impressive \$800 million of deals were issued during January, the second strongest January issuance volume ever recorded by Artemis, but more than \$1.4 billion of new deals in February and March helped the market achieve outright growth once again.

Despite a substantial lack of privately placed deal issuance (or disclosure) in Q1 2016, particularly when compared to a year earlier when almost half of new deals issued were considered private, sponsor and investor appetite clearly remained strong during the quarter keeping the market on its impressive growth path.

Artemis is the leading, freely accessible source of timely, relevant and authoritative news, analysis, insight and data on the insurance-linked securities, catastrophe bond, alternative reinsurance capital and related risk transfer markets. The Artemis Deal Directory is the leading, freely available source of information, data and analysis on issued catastrophe bond and insurance-linked securitization transactions.

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# Transaction Recap

The first quarter of 2016 saw a diverse range of perils come to market from ten deals, consisting of 15 tranches of notes amounting to \$2.215 billion of new risk capital issued.

While no new sponsors came to market during Q1, the Catlin and XL Group M&A meant the Galileo Re issuance came under a new name, in XL Insurance (Bermuda) Ltd., bringing \$300 million of international multi-peril diversification to investors.

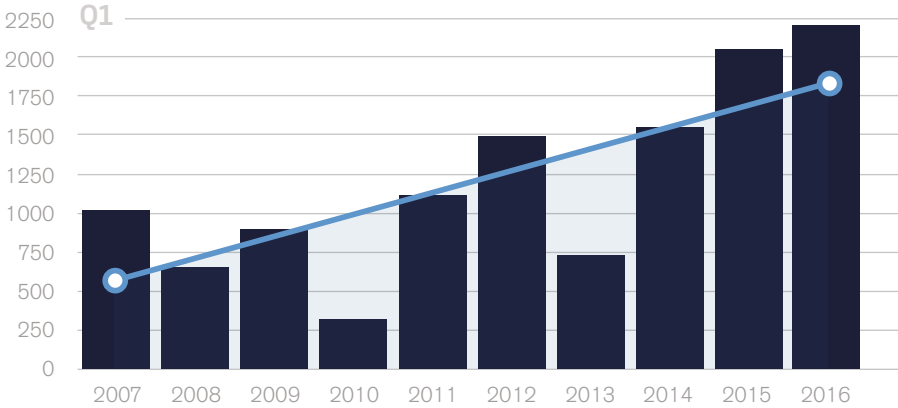
Prolific cat bond sponsor USAA returned to the market in Q1 with a new issuance vehicle in Espada Reinsurance Limited, protecting it against multiple U.S. perils through a club-type deal. Akibare Re and Aozora Re from returning Japanese sponsors brought welcomed Japan typhoon diversification to investors. State Farm returned in Q1 with its latest Merna Re transaction, protecting the sponsor against U.S. earthquake risk.

Aetna's latest \$200 million Vitality Re deal added some medical benefit claims level diversification to the market, while SCOR returned to renew its Q1 2015 issuance, doubling the size of its Atlas IX Capital issuance to \$300 million. Heritage and Safepoint brought a combined \$345 million of U.S. named storm and hurricane risk to the market, with the remaining \$300 million coming from Nationwide Mutual and its Caelus Re vehicle.

ISSUER / TRANCHE	SPONSOR	PERILS	SIZE (\$M)	DATE
Merna Re Ltd. (Series 2016-1)	State Farm	U.S. earthquake (New Madrid region)	300	Mar
Aozora Re Ltd. (Series 2016-1)	Sompo Japan and Nipponkoa Insurance Company	Japan typhoon	220	Mar
Akibare Re Ltd. (Series 2016-1)	Mitsui Sumitomo Insurance Co. Ltd.	Japan typhoon	200	Mar
Manatee Re Ltd. (Series 2016-1)	Safepoint Insurance Company	U.S. named storm (Florida & Louisiana initially)	95	Mar
Espada Reinsurance Limited (Series 2016-1)	USAA	U.S. multi-peril	50	Mar
Caelus Re IV Ltd. (Series 2016-1)	Nationwide Mutual Insurance Co.	U.S. multi-peril	300	Feb
Citrus Re Ltd. (Series 2016-1)	Heritage Property and Casualty Insurance Co. & Zephyr Insurance Co. Inc.	U.S. named storms (Florida & Hawaii only initially)	250	Feb
Vitality Re VII Ltd. (Series 2016-1)	Aetna	Medical benefit claims levels	200	Jan
Galileo Re Ltd. (Series 2016-1)	XL Insurance (Bermuda) Ltd.	International multi-peril	300	Jan
Atlas IX Capital DAC (Series 2016-1)	SCOR Global P&C SE	International multi-peril	300	Jan

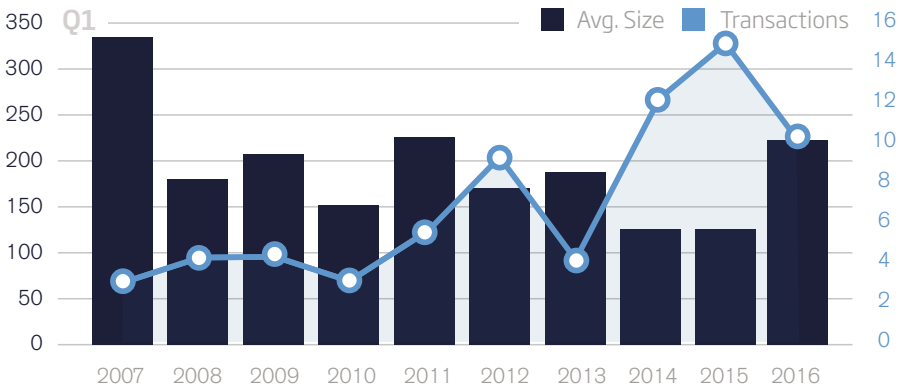
## Q1 ILS issuance by year (\$M)

For the third consecutive year catastrophe bond and ILS issuance broke records in the first quarter of 2016, with an impressive \$2.215 billion of new risk capital brought to market. The Artemis Deal Directory shows that this is the second time in the market's history that Q1 issuance has exceeded the \$2 billion mark, after the \$2.06 billion seen last year.



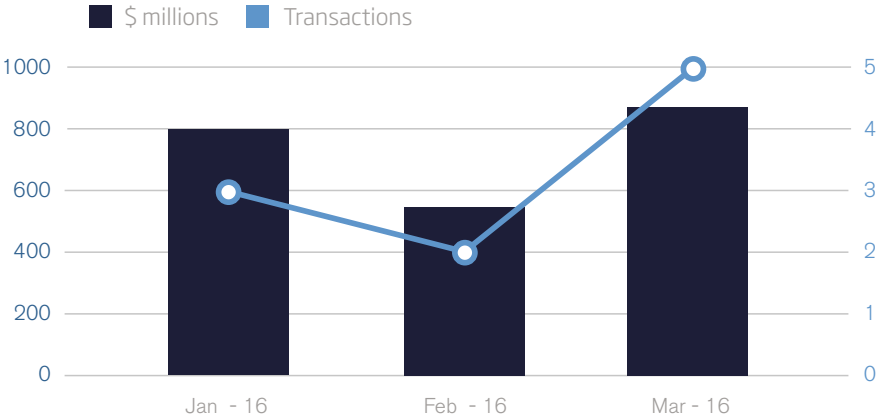
## ILS average transaction size & number of transactions by year (\$M)

The average transaction size during Q1 2016 was \$221.5 million from ten deals, roughly \$29 million above the ten-year (2007-2016) average for volume, and 3.1 above the average number of transactions. In more recent years Q1 issuance has been bolstered by a host of smaller, private cat bond issuances, however, during the first quarter of 2016 there was a noticeable lack of cat bond lite issuance, and/or disclosure.



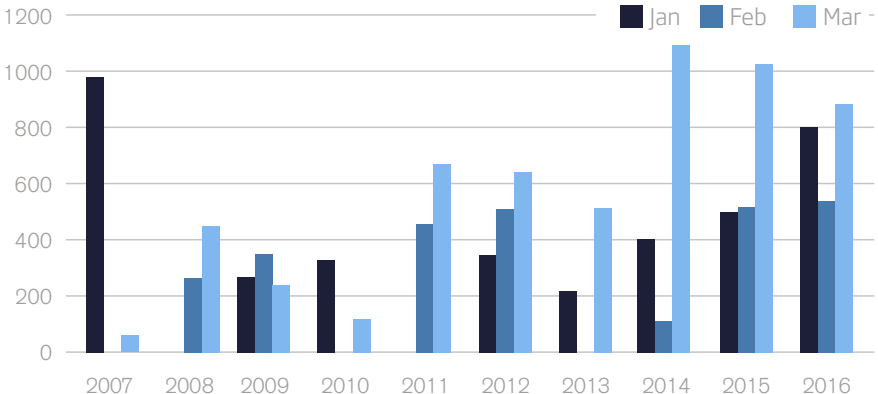
## Number of transactions and volume issued by month (\$M)

Unlike the first quarter of both 2014 and 2015, catastrophe bond issuance in March failed to reach the \$1 billion mark, with \$865 million of new risk capital brought to market from five transactions. The busiest January since 2010, in terms of new risk capital issued, helped the market again surpass \$2 billion of issuance at the end of Q1 2016.



## Q1 issuance by month & year

Despite catastrophe bond and ILS issuance in March declining when compared with the past two years, the \$865 million of new risk capital issued is actually the third highest ever seen in the month, as recorded by the Artemis Deal Directory. Furthermore, data from Artemis reveals that the \$800 million of issuance in January is actually the second highest seen in the opening month of any year on record.



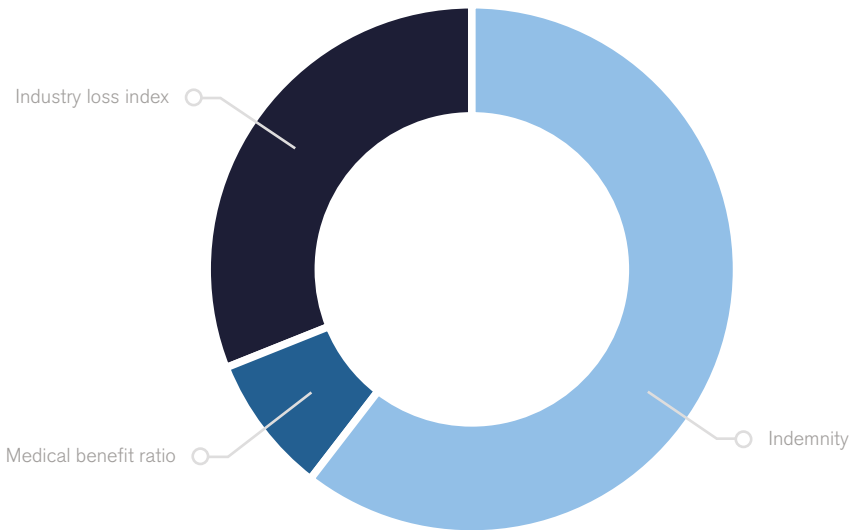


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## Q1 2016 ILS issuance by trigger type

The first quarter of 2016 saw more than \$1.4 billion of indemnity protection secured by sponsors, accounting for 64% of the total risk capital issued during the period. Other triggers featuring in the quarter were industry loss index and medical benefit ratio.

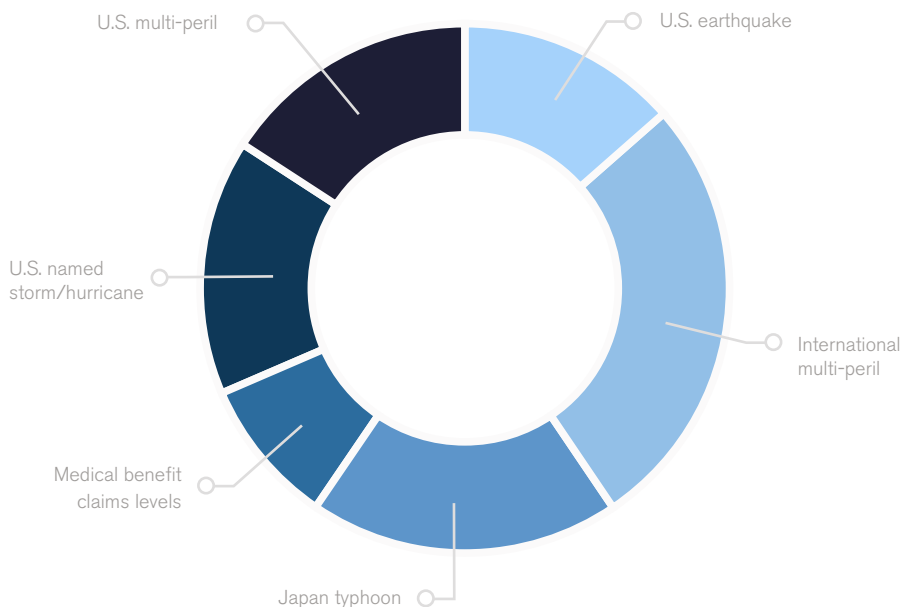


As in Q1 2015, Aetna's Vitality Re issuance platform brought some trigger diversification to the market with its medical benefit ratio structure, totalling \$200 million, or 9% of the total risk capital issued during Q1. XL and SCOR brought a combined \$600 million, or 27% of industry loss index protection to investors. Indemnity protection was utilised by seven of the ten transactions issued in the quarter, a dominating trend that is typical of a Q1. As in Q1 2014 and 2015, no deals issued in the quarter used a parametric trigger.



## Q1 2016 ILS issuance by peril

No one peril significantly dominated cat bond and ILS issuance in Q1 2016, as a varied mix enabled investors to take advantage of diversification opportunities. International multi-peril, which this quarter featured the U.S., Canada, and Europe, claimed the largest slice of issuance in Q1 at \$600 million, or 27% of total risk capital issued.



Japan domiciled Sampo Japan and Nipponkoa Insurance Company, and Mitsui Sumitomo Insurance Co. Ltd. returned to the space in Q1 2016, bringing a combined \$420 million of Japan typhoon risk to the market. While \$300 million of U.S. earthquake risk diversification came from State Farm's Merna Re deal.

Further diversification came from Aetna and its latest Vitality Re deal, which offered investors \$200 million of protection against medical benefit claims levels. \$345 million of total first quarter issuance covered U.S. named storms and hurricanes, making up 16% of total risk capital issued. The remaining \$350 million of issuance witnessed in Q1 covers multiple U.S. perils, including less typical exposures like volcanic eruption and meteorite impact.

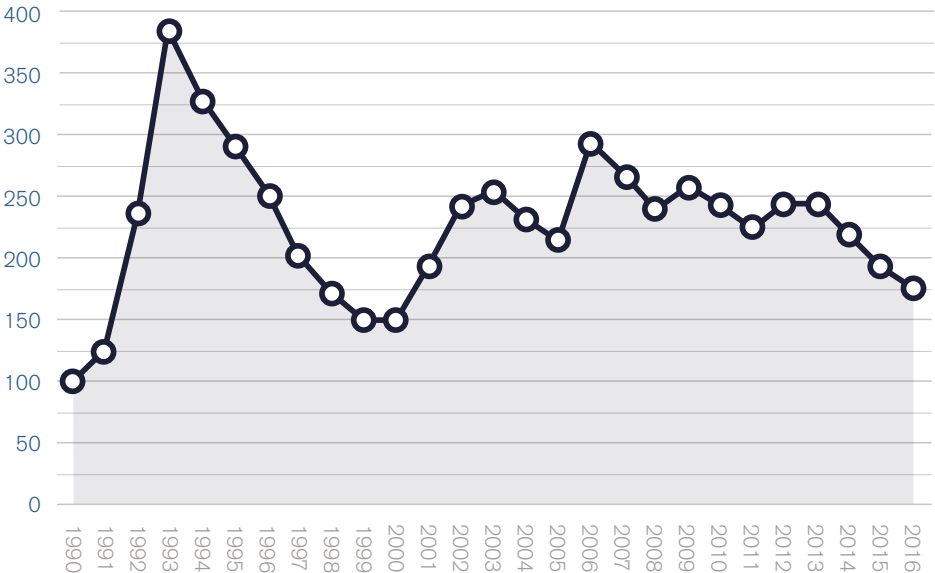
## Global Property Catastrophe Pricing Trends

The continued scarcity of costly catastrophe losses and more than adequate capacity led to reinsurance pricing reductions at the January 1, 2016 renewals. Pricing declined for most lines of business and geographies but the rate of decline moderated, particularly in US property catastrophe. This trend was largely influenced by two prior years of steep declines and a larger increase in demand in property and certain other lines that began in 2015.

While there was some slight variation between major regions tracked in the Property Catastrophe Rate on Line (ROL) index, all experienced decreases of between seven percent and 10 percent, with international regions experiencing greater reductions in the index than the United States at the January 1 renewals. Individual renewals experienced a wide range of outcomes dependent on loss activity, type of structure, geographic concentrations, past renewal experience and other company specific features.

Global property catastrophe ROL Index - 1990 to 2016

■ ROL Index



## Dedicated Reinsurance Sector Capital

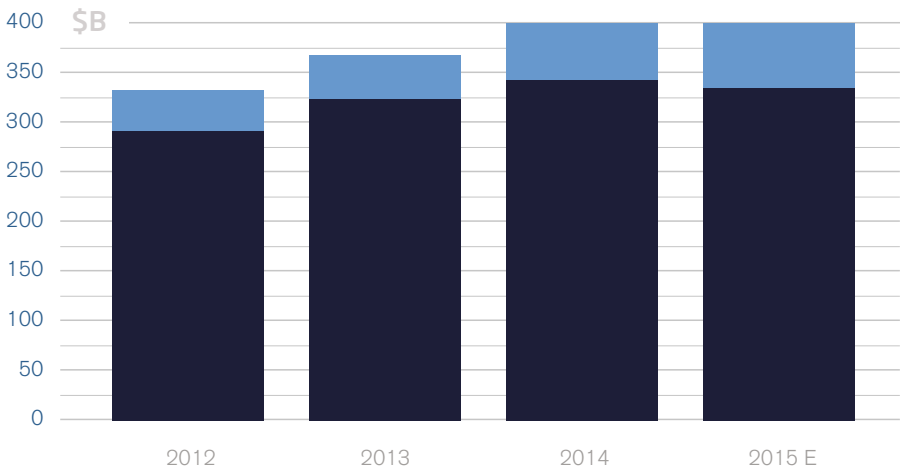
Capital levels dedicated to reinsurance at the January 1 renewals have stabilized, showing no growth for the first time in several years as companies assessed broader opportunities and the rate of incoming capital slowed. Overall, the industry experienced an estimated two to three percent decline in the amount of capital dedicated to writing reinsurance by rated markets however, this was offset by an equal increase in convergence (ILS) capital. The decline in rated capital was driven in large part by the rate environment, which caused capital to shift slightly toward insurance lines and away from reinsurance lines.

While incoming capital has stabilized, capacity remains plentiful. Buyers' recognition that they were faced with the unique opportunity of continued abundant capacity combined with cumulative decreases in pricing, led to an increase in limits purchased over the past 12 months. These purchases included first time buyers, attracted to a market that evolved into a mechanism to manage risk they previously viewed as better addressed elsewhere.

At year-end, total capital dedicated to reinsurance was approximately USD 400 billion, unchanged from the previous year. Convergence capital amounted to USD 68 billion, up 13 percent from year-end 2014.

Estimated dedicated reinsurance sector capital

■ Traditional ■ Convergence



## 2016 Outlook

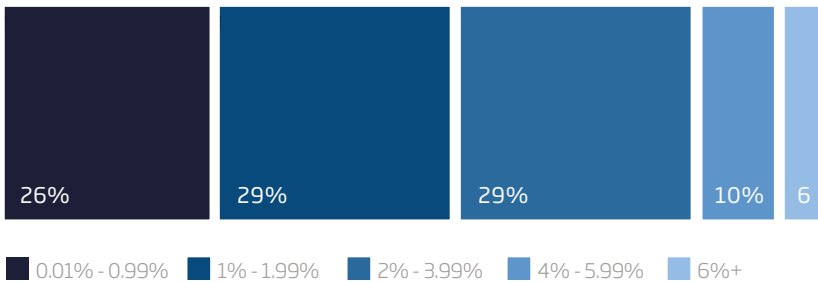
As the pricing environment showed signs of stabilization across both the insurance-linked securities (ILS) and traditional markets, accessing multi-year capacity at pre-agreed static rates is a focus for many cedents.

A significant and growing number of property programs were placed at least partially on a multi-year basis at January 1 and notably, multi-year options are beginning to emerge in some casualty sectors, where they have not been available in the past.

The capital markets are also in a strong position to provide multi-year capacity, and 2016 is expected to bring new opportunities in the ILS space for public sector entities, corporates, insurers and reinsurers.

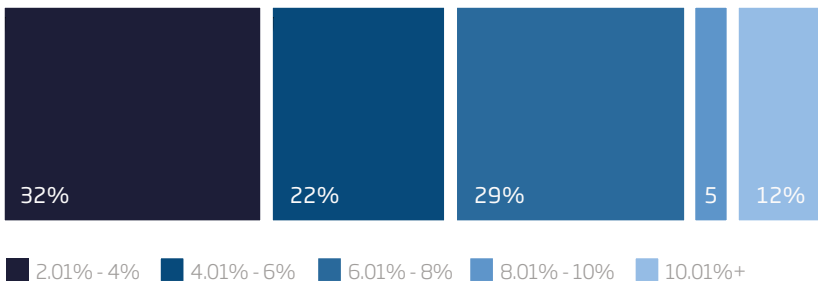
## Q1 2016 ILS issuance by expected loss

In terms of deal volume, the majority of issuance in Q1 had an expected loss of below 2%, totalling \$1.045 billion or 54.6% of total risk capital issued. Half of the tranches of notes issued during the quarter actually had an expected loss of more than 2%, but the size of these deals failed to exceed \$1 billion, at \$870 million. Three tranches had an expected loss of below 1% during the quarter, with the lowest coming from the \$140 million Class A tranche of Vitality Re notes from Aetna, which had an expected loss of just 0.01%. Of particular note is the Class A tranche of notes from XL with Galileo Re and the Class C tranche in Manatee Re from Safepoint Insurance, which both had an expected loss of above 8%.



## Q1 2016 ILS issuance by coupon pricing

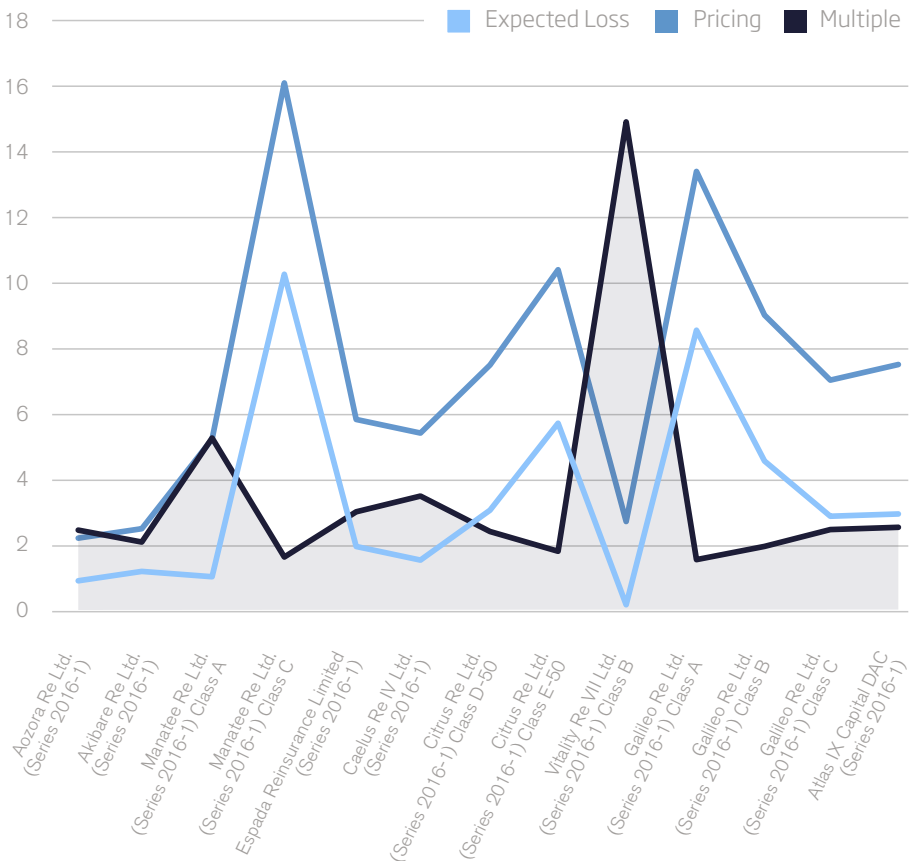
With the majority of ILS and cat bond deals, in terms of volume, having an expected loss of below 2% it's not surprising that yields on offer followed a similar trend in Q1. \$1.045 billion, or 55% of total risk capital issued offered investors a coupon of below 6%, of which \$620 million had a coupon below 4%. Unsurprisingly, owing to its high expected loss, the Class C tranche of Manatee Re notes offered the highest coupon in the quarter, at 16.25%. In terms of deal volume, 45% offered investors a coupon of above 6%, a significant change from a year earlier when only 35% of deals paid investors above the 6% mark.



## Pricing multiples of Q1 2016 issuance

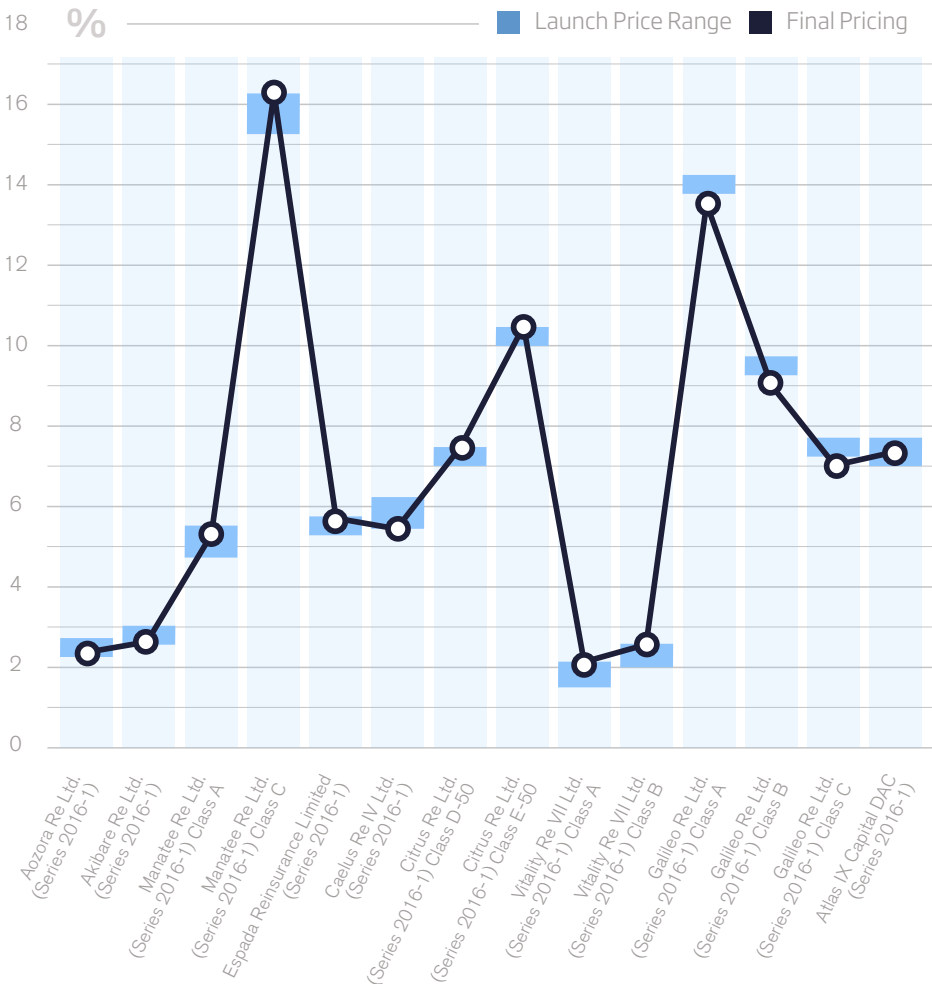
The average multiple (price coupon divided by expected loss) during Q1 was 2.12, excluding the Class A tranche of Vitality Re notes that has a particularly high multiple, and one deal for which we have no data. This represents a decline from the previous and prior year quarter. The fact that the average multiple has continued to decline through Q1 is perhaps a sign of the competitive and challenging landscape, possibly leading investors to accept more risk at a lower return.

Perhaps a sign of investor discipline, more than half of the deals that came to market during the quarter priced above the mid-point of initial price guidance. However, final pricing on certain deals did come in substantially lower than the mid-point of initial price guidance, suggesting the market is still attempting to establish a pricing floor for certain risks.



## Cat bond and ILS price changes during Q1 2016 issuance

The average price change during the first-quarter of 2016 was 0.60%, so a positive change from the -0.66% average price change reported in the final quarter of 2015, and the -3.59% in Q3 2015. Eight of the fourteen tranches of notes issued during Q1 priced above the mid-point of initial price guidance, supporting signs of some price stabilisation in the market. The Class A tranche of Vitality Re notes from Aetna experienced the most dramatic price increase in the quarter, increasing by 17.8% while marketing. On the other end of the spectrum, the \$220 million Aozora Re deal experienced the most significant price decline while marketing, of -10.2%.

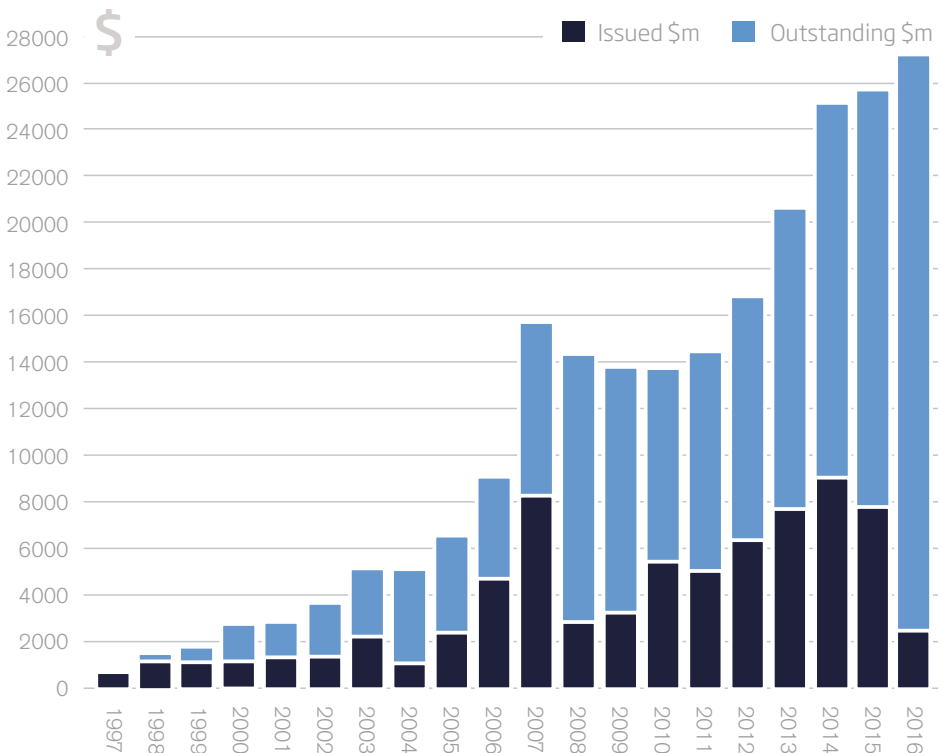


## Issued / Outstanding

Catastrophe bond and ILS issuance in the first quarter of 2016 was very impressive with \$2.215 billion of issuance, the second time issuance volume in the quarter, as recorded by the Artemis Deal Directory, has surpassed \$2 billion. Despite a notable lack of privately placed deals during the period, continued investor appetite for diversified ILS offerings ensured the overall outstanding market exceeded the \$26 billion mark at the end of the quarter, a first for the ILS and cat bond sector.

Approximately \$1.66 billion of maturities occurred in Q1 2016, helping the market achieve outright growth of \$555.1 million, ending Q1 2016 with an impressive \$26.516 billion of outstanding market capacity.

The Artemis Deal directory reveals that just over \$2 billion worth of transactions are scheduled to mature in the second quarter of this year, but should sponsor and investor appetite stay in line with previous Q2 issuances, which has averaged \$2.6 billion over the last ten years, then it wouldn't be too surprising if the market continued to grow at mid-year 2016.



If you want to see full details of every catastrophe bond and ILS transaction included in the data in this report please visit [www.artemis.bm/deal\\_directory/](http://www.artemis.bm/deal_directory/)





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