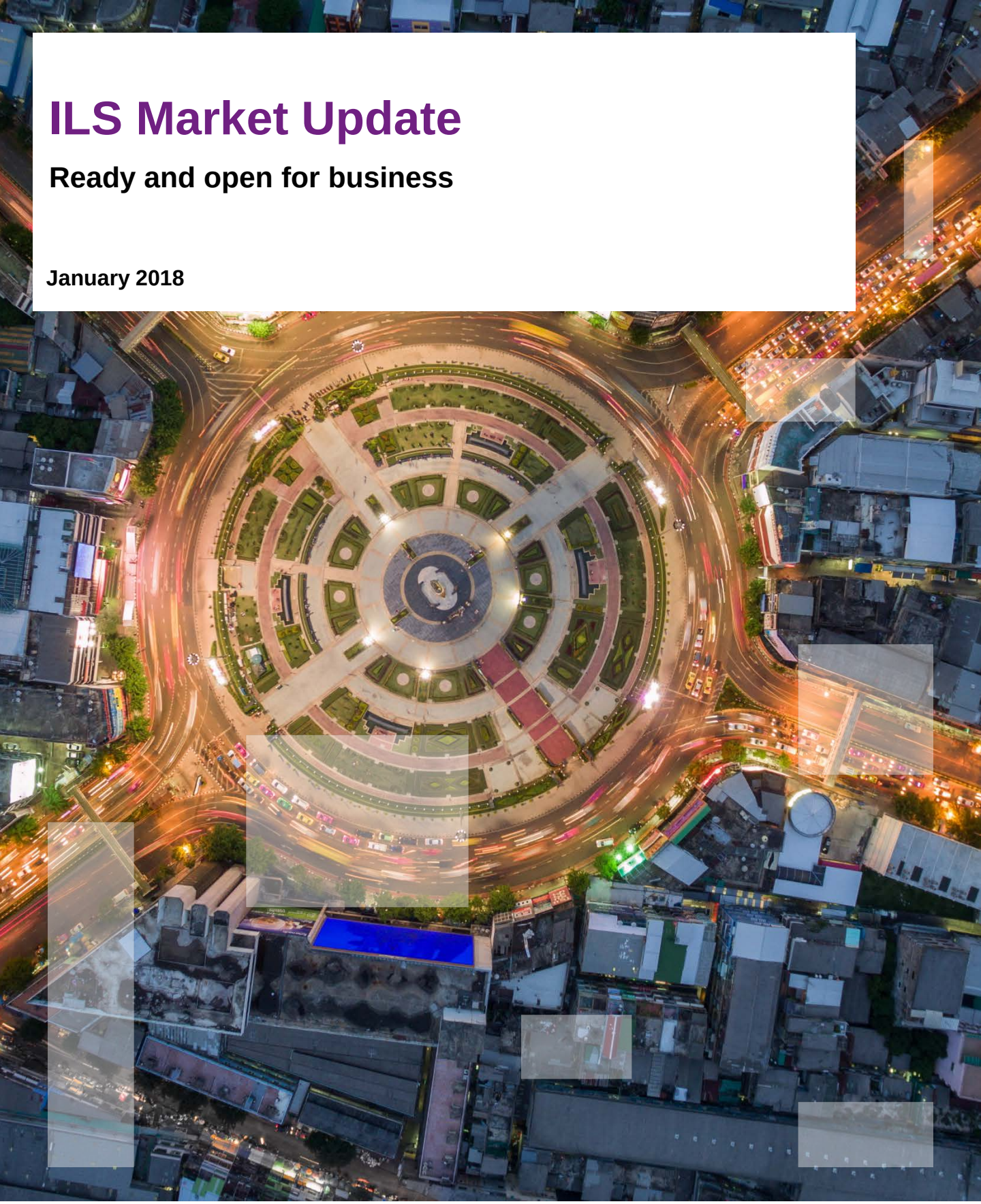
ILS Market Update

Ready and open for business

January 2018



© 2018 Willis Towers Watson. All rights reserved. Proprietary and Confidential.
For Willis Towers Watson and Willis Towers Watson client use only.

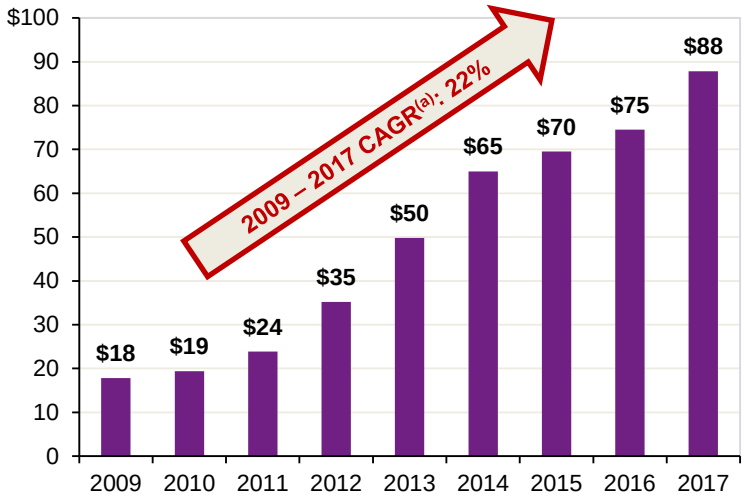
Willis Towers Watson
Securities

ILS Market Update

Q4 2017 market perspective: Fuzzy math and hard numbers

As detailed elsewhere in this report, widely distributed non-life ILS issuance approached $10 billion in 2017, setting a new record. Further, we estimate that non-life ILS capital stood at $88 billion at year-end 2017. This represents a year-on-year increase of 17% over last year's $75 billion, notwithstanding the substantial loss activity in H2 2017. Rather than running away from the losses, ILS capital is running toward both the short-term potential for modestly better risk spreads and the longer term opportunity to partner with reinsurers, insurers and insureds to fuel asset under management (AUM) growth and ultimately make insurance more available and affordable.

Year-end ILS capital outstanding ($bn)



Trapped capital?

"As a reminder, collateral is a feature, not a bug, of most ILS structures."

The trapped capital discussion has suffered from some fuzzy numbers and thinking, and proved substantially overblown. It has not on its own catalyzed a hard market as some protection sellers had prayed. As a reminder, collateral is a feature, not a bug, of most ILS structures. While a reinsurer's promise to pay is forever, the reinsurer itself is not necessarily forever and might not actually pay in all cases (e.g., after a $150 billion Tokyo earthquake coupled with a pandemic or bond market panic). In contrast, ILS collateral is contractually bound to stay in place for the entire risk period and then remain in trust for loss development subject to extension or buffer arrangements and commutation.

"Yes, losses were significant, but the impact of trapped capital over and above the actual losses seems to have primarily impacted the retro market 1/1 renewals."

What people missed is that capital is really only trapped after the end of the contract period and the word "trapped" should only apply to the amount retained above the loss pick. For example, if an insurer doing business in Florida had a contract in place renewing June 1, there is currently no trapped capital from Hurricane Irma as the risk period has not yet ended.

At June 1, the buffer above the loss pick will be limited in part because of claims payments. Further, since buffers above the loss pick decline over time in private transactions, the aggregate buffered amount will also decline given the passage of time since Irma. Yes, losses were significant, but the impact of trapped capital over and above the actual losses seems to have primarily impacted the retro market 1/1 renewals. Even there, investors have reloaded effectively for the most part.

A word of caution: Next time could be different, not only because the collateral contracts are evolving but also because the relationship between renewal dates and the losses will not always be so favorable as it was in 2017. One can imagine a year-end California earthquake as a potential nightmare scenario. Hard thinking around structures can plan for these potential future scenarios.

(a) Compound annual growth rate (CAGR)

© 2018 Willis Towers Watson. All rights reserved. Proprietary and Confidential.
For Willis Towers Watson and Willis Towers Watson client use only.

ILS Market Update

Q4 2017 market perspective: Fuzzy math and hard numbers

Looking forward

"We see no end in sight to ILS growth as a long-term trend. The year 2018 is shaping up to be a brutal battle for market share."

We see no end in sight to ILS growth as a long-term trend. The year 2018 is shaping up to be a brutal battle for market share. On the one hand, incumbent reinsurers and ILS investors are trying to both maintain their positions and exact some rate increases, and on the other hand, other ILS investors and reinsurers are trying to stake a claim to participate in additional risk and grow their risk positions.

Incumbent ILS investors have taken a page from the book of large traditional reinsurers to blunt competition by playing the relationship card and attempting to replace commoditized and easily syndicated covers with bespoke structures that allegedly add value through customization.

Fortunately for the growth of the ILS market, only a portion of cedants are drawn in to this short-sighted approach leading to higher premiums. The customization play also can lead to less resilience following a loss where the relationship hug sometimes turns into a sucker punch when the cedant suddenly has only a few strategic relationships and no one else to stabilize their capacity needs.

"Liquid ILS capacity is plentiful with modest spread changes relative to stickier placements."

Do successful computer companies sole source their computer chips? Of course not! In most cases, doing so would be suicidal as the lack of competition would eventually compress margins and even price them out of the end market altogether. The same is true over time with insurance and reinsurance capacity sources, although admittedly, there is currently a lot more fat in the system to erode than in the margins for computers.

Q4 points to the reverse happening with ILS at the moment. Most cedants are not falling for the arguments and siren songs from incumbents. Liquid ILS capacity is plentiful with modest spread changes relative to stickier placements. There are no games, just market clearing prices for widely syndicated placements. We expect more of the same, and until the games on the private side end, widely distributed deals will grow in relative importance versus private ILS deals of all types, especially pure bilateral "collateralized re".

© 2018 Willis Towers Watson. All rights reserved. Proprietary and Confidential.
For Willis Towers Watson and Willis Towers Watson client use only.

ILS Market Update

Q4 2017 ILS market issuance overview

"Two new sponsors: Covea Mutual Insurance Group and Validus Holdings."

The fourth quarter of 2017 saw $1.3 billion of non-life catastrophe bond capacity issued through five cat bonds. In contrast, Q4 2016 saw $2.1 billion issued through five bonds.

New sponsors Covea Mutual Insurance Group and Validus Holdings accessed capacity via Hexagon Re and Tailwind Re 2017-1. Repeat sponsors included XL Bermuda, USAA and the CEA. Covea Mutual Insurance Group was the only non-U.S./Bermudan sponsor.

The first transaction of the quarter was Galileo Re Ltd. Series 2017-1 sponsored by XL Bermuda. This deal provides cover on an industry loss and annual aggregate basis against U.S. named storms and earthquakes, Canada earthquakes, European windstorms, Australian tropical cyclones and earthquakes. The deal is structured in two tranches and each of the two Classes has a three-year duration. During marketing, Class A dropped in size by 25% to $75 million, while pricing at a risk spread of 7.50%, at the lower end of the guidance. Class B upsized in size by 50% to $75 million, while pricing at a risk spread of 17.50%, at the upper end of the guidance.

Non-life Q4 2017 ILS issuance[(a)]

($ in millions)

Sponsor	Issuer/Tranche	Issue	Maturity	Amount	EL	Spread	Basis	Risk	Trigger
Validus	Tailwind Re 2017-1 A	Dec-17	Jan-22	$150	3.79%	7.25%	AGG	Peak Multiperil	Industry Index
Validus	Tailwind Re 2017-1 B	Dec-17	Jan-22	$150	4.94%	9.00%	AGG	Peak Multiperil	Industry Index
Validus	Tailwind Re 2017-1 C	Dec-17	Jan-22	$100	6.29%	11.00%	AGG	Peak Multiperil	Industry Index
Covea	Hexagon Re A	Dec-17	Jan-22	$38	6.75%	8.00%	AGG	France Windstorm	Indemnity
Covea	Hexagon Re B	Dec-17	Jan-22	$38	5.52%	6.50%	AGG	France Windstorm	Indemnity
USAA	Residential Re 2017-2 1	Dec-17	Dec-18	$55	17.35%	zero	OCC	Peak Multiperil	Indemnity
USAA	Residential Re 2017-2 2	Dec-17	Dec-21	$110	8.35%	12.50%	OCC	Peak Multiperil	Indemnity
USAA	Residential Re 2017-2 3	Dec-17	Dec-21	$130	3.24%	5.50%	OCC	Peak Multiperil	Indemnity
CEA	Ursa Re 2017-2 C	Nov-17	Dec-20	$200	1.32%	4.00%	AGG	U.S. Quake	Indemnity
CEA	Ursa Re 2017-2 D	Nov-17	Dec-20	$200	2.79%	5.25%	AGG	U.S. Quake	Indemnity
XL	Galileo Re 2017-1 A	Nov-17	Nov-20	$75	3.68%	7.50%	AGG	Peak Multiperil	Industry Index
XL	Galileo Re 2017-1 B	Nov-17	Nov-20	$75	10.66%	17.50%	AGG	Peak Multiperil	Industry Index
		Q4'17 Total:		**$1,322**					

Source: Willis Towers Watson Securities Transaction Database as of 12/31/2017. Aggregate data exclude most private ILS deals.
(a) All issuance amounts reported in or converted to USD on date of issuance. EL for HU deals is based on WSST conditioned catalog for AIR and medium-term catalog for RMS.

© 2018 Willis Towers Watson. All rights reserved. Proprietary and Confidential.
For Willis Towers Watson and Willis Towers Watson client use only.

ILS Market Update

Q4 2017 ILS market issuance overview

"USAA sponsored Residential Re 2017-2, its 30th ILS securitization."

USAA sponsored Residential Re 2017-2, its 30th ILS securitization. This transaction secured $295 million of indemnity cover on a per-occurrence basis. The transaction provides coverage against U.S. tropical cyclones, earthquakes, severe thunderstorms, winter storms, wildfires, volcanic eruptions, meteorite impacts and all other events classified as natural disaster or severe weather. Whereas Class 2 and Class 3 have a four-year term, Class 1 is the only tranche with a one-year term and is structured as a zero-coupon bond. With an expected loss of 17.35%, it priced at 79.00 while upsizing by 10% to $55 million. Class 2, with an expected loss of 8.35%, priced at a risk spread of 12.50%, while upsizing by 10% to $110 million. Class 3, with an expected loss of 3.24%, priced at a risk spread of 5.50%, while upsizing by 73% to $130 million.

Ursa Re 2017-2 provides the CEA with $400 million of capacity against California earthquakes for a three-year term. The deal has two tranches, each using an indemnity trigger on an annual aggregate basis. The Class C tranche with a 1.32% expected loss priced at a risk spread of 4.00%. The Class D tranche with a 2.79% expected loss priced at a risk spread of 5.25%.

"Hexagon Re is the first European cat bond supporting capacity at the bottom of a traditional reinsurance program."

Hexagon Reinsurance DAC issued a €90 million cat bond providing Covea, a first-time sponsor, with two €45 million tranches of fully collateralized cover against windstorm risk in France for a four-year period. The structure features an indemnity trigger on an annual aggregate basis. A number of firsts were reached with this cat bond as Hexagon Re is the first European cat bond supporting capacity at the bottom of a traditional reinsurance program and the first European indemnity-trigger cat bond placed on an annual aggregate basis. Class A, with an expected loss of 6.75%, priced at a risk spread of 8.00%, while Class B, with an expected loss of 5.52%, priced at a risk spread of 6.50%. Both Class A and Class B priced below the bottom end of the initial guidance.

The last issuance of the quarter was Tailwind Re 2017-1, sponsored by Validus Holdings. This transaction secured $400 million of cover on an annual aggregate basis and with an industry loss index trigger. The transaction provides coverage against North America named storms and earthquakes for a four-year period. All its three tranches priced at the bottom end of the reduced price guidance range. Class A, with an expected loss of 3.79%, priced at a risk spread of 7.25%, while upsizing by 20% to $150 million. Class B, with an expected loss of 4.94%, priced at a risk spread of 9.00%, while upsizing by 20% to $150 million. Class C, with an expected loss of 6.29%, priced at a risk spread of 11.00%, while upsizing by 33% to $125 million.

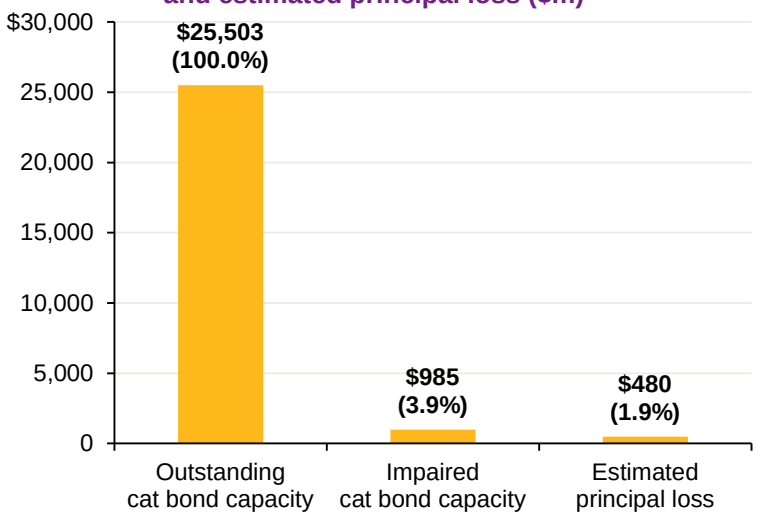
© 2018 Willis Towers Watson. All rights reserved. Proprietary and Confidential.
For Willis Towers Watson and Willis Towers Watson client use only.

ILS Market Update

2017 U.S. loss activity

2017 was a year to remember for our industry. The 2017 hyperactive hurricane season produced a total of 17 named storms including Harvey and Irma, the first two major hurricanes to hit continental U.S. since Wilma in 2005, and Maria, the worst natural disaster on record in Dominica and Puerto Rico. Harvey, Irma and Maria (HIM) combined for an industry loss that could be around $75 billion without including losses to the National Flood Insurance Program (NFIP). In addition, 250 wildfires started burning across Northern California in October while 29 wildfires ignited across Southern California in December. The California wildfire losses may add up to almost $10 billion in industry losses. Many were saying that 2017 would be the first real test of the ILS market.

Impaired cat bond capacity and estimated principal loss ($m)



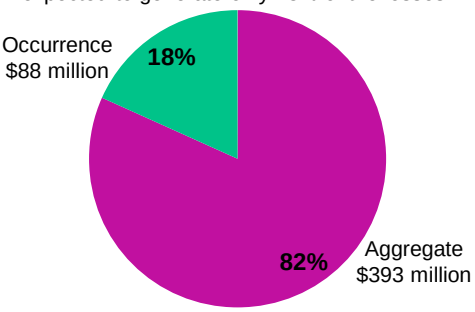
We attempted to quantify the impaired cat bond capacity and the relative principal loss. We consider in our analysis only widely distributed cat bonds whose secondary market price was lower than 85.00 as of December 31, 2017. Accordingly, we can observe that 13 transactions are likely to be severely affected. We estimate that total impaired cat bond capacity is $985 million while the estimated principal loss is $480 million. This means that only slightly less than 4% of the outstanding widely distributed cat bond capacity is likely to suffer significant losses from HIM hurricanes and California wildfires while the estimated principal loss is less than 2% of the outstanding widely distributed cat bond capacity. It looks like the ILS market passed the test.

Beyond widely distributed ILS, ILS loss activity was directionally similar (aggregates more exposed) but more severe and uncertain. This makes sense since private ILS tends to have a more "near the money" risk-return profile than most widely distributed ILS.

"Less than 4% of the outstanding cat bond capacity is likely to suffer significant losses from HIM hurricanes and California wildfires".

Loss breakdown by trigger type

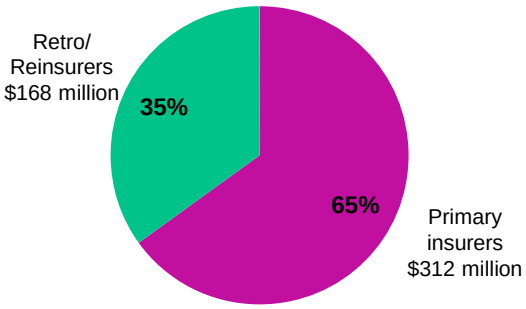
Despite accounting for 48% of the total U.S. cat bond capacity, per-occurrence bonds are expected to generate only 18% of the losses



Estimated principal losses: $480m

Loss breakdown by sponsor type

Both primary and retro / reinsurance sponsors will be able to recover from 2017 cat loss events



Estimated principal losses: $480m

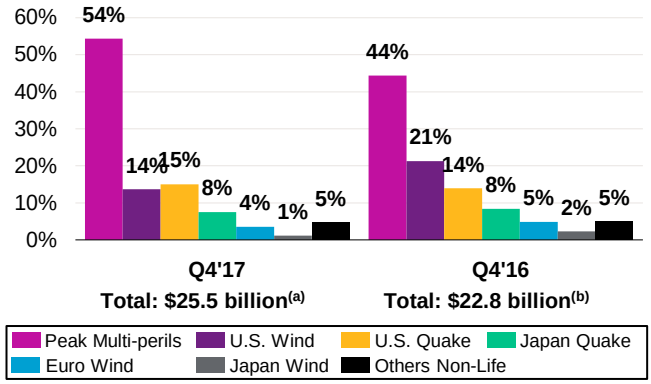
IBRD CAR 113, the Gov't of Mexico sponsored cat bond that triggered and was exhausted due to a 2017 Mexican earthquake, is not included in the analysis. This would have added an additional $150 million to the estimated principal loss for a total of $630 million.

© 2018 Willis Towers Watson. All rights reserved. Proprietary and Confidential.
For Willis Towers Watson and Willis Towers Watson client use only.

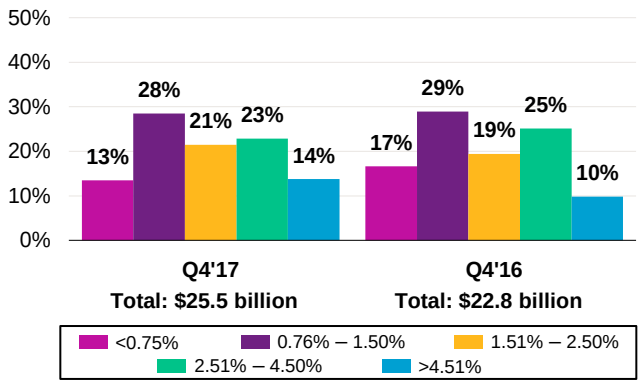
ILS Market Update

Q4 2017 ILS market statistics

Par outstanding by risk peril

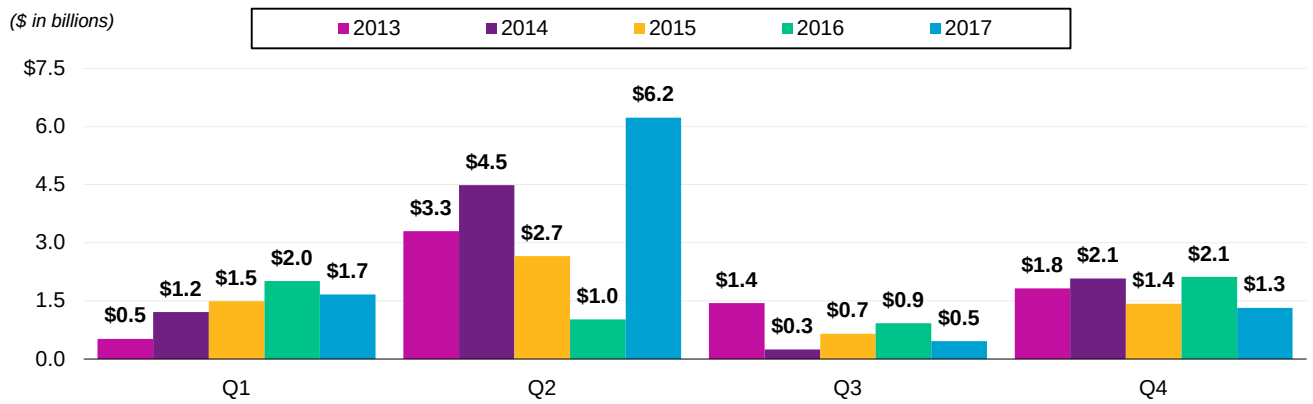


Par outstanding by expected loss at issuance

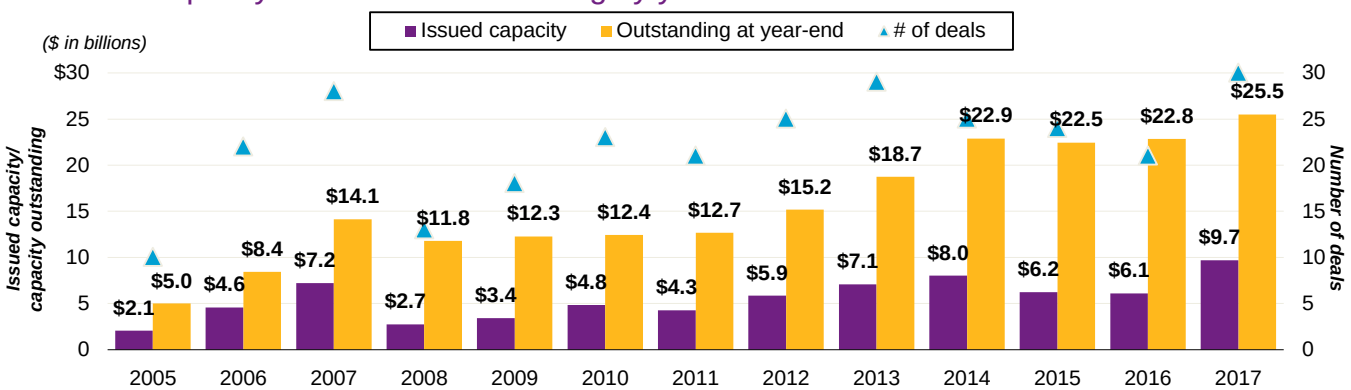


Source: Willis Towers Watson Securities Transaction Database as of 12/31/2017.
(a) In aggregate, 68% of all capacity outstanding exposed to U.S. Wind.
(b) In aggregate, 66% of all capacity outstanding exposed to U.S. Wind.

Non-life ILS issuance by quarter (2013 – 2017)(c)



Non-life capacity issued and outstanding by year(c)



Source: Willis Towers Watson Securities Transaction Database as of 12/31/2017. Aggregate data excludes private ILS deals.
(c) All issuance amounts reported in or converted to USD on date of issuance. Outstanding amounts adjusted for actual principal losses.

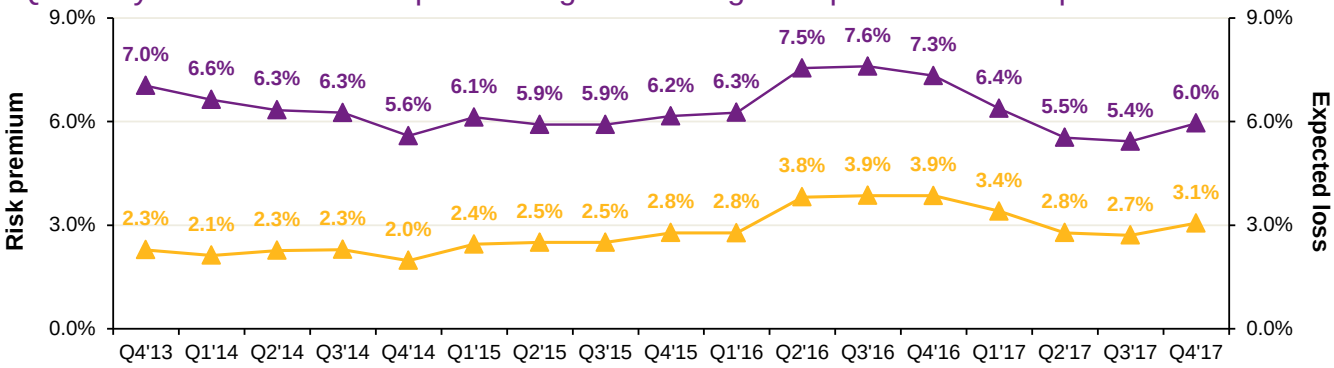
© 2018 Willis Towers Watson. All rights reserved. Proprietary and Confidential.
For Willis Towers Watson and Willis Towers Watson client use only.

Willis Towers Watson Securities

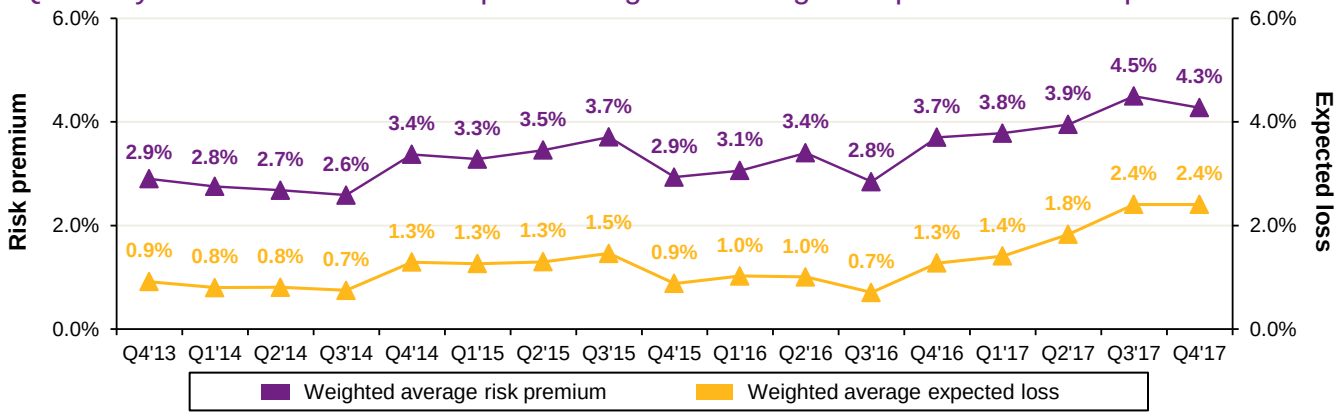
ILS Market Update

Q4 2017 ILS market statistics

Quarterly LTM U.S. Wind exposed weighted average risk premium and expected loss



Quarterly LTM non-U.S. Wind exposed weighted average risk premium and expected loss



Source: Willis Towers Watson Securities Transaction Database as of 12/31/2017. Aggregate data excludes private ILS deals.
LTM = Last 12 months. Aggregate data are for primary issuance and do not reflect secondary trading.

Secondary market trading overview

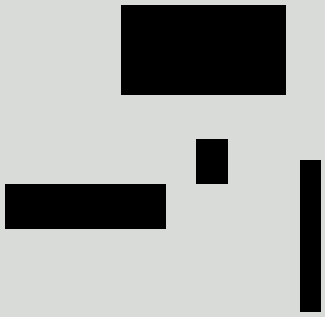
"There should be no room for confusion; the ILS community is signaling that it is ready and open for business. It is going to be a very robust issuance season."

And what a fourth quarter it was! Interestingly, while the press focused on trapped capital and losses that would surely test the new ILS players, the funds were prepared for this scenario and diligently reached out to their investors and risk partners ensuring an orderly and supportive environment. Impaired bonds got marked down only to drift up as positive loss development information worked into the market. Buyers continued to look for all bonds not affected by recent events, and caution was the key for all others. Some investors sensed a misalignment of available loss information and as a consequence stayed away from loss-affected bonds in the secondary market.

Investors spent much of the quarter bantering about all the extra perils that have drifted into cat bond structures, and the need to specifically recalibrate the wildfire modeling going forward. That peril alone has added much excitement to aggregate bonds!

Going forward investors are anxious to access new, clean risk. Many have started the year with inflows and are buying dead and almost dead cats to bide their time. The assumption that ILS players will only be able to reload with increased rates has been tested and found wanting. There should be no room for confusion; the ILS community is signaling that it is ready and open for business. It is going to be a very robust issuance season.

© 2018 Willis Towers Watson. All rights reserved. Proprietary and Confidential.
For Willis Towers Watson and Willis Towers Watson client use only.



About Willis Towers Watson

Willis Towers Watson (NASDAQ: WLTW) is a leading global advisory, broking and solutions company that helps clients around the world turn risk into a path for growth. With roots dating to 1828, Willis Towers Watson has 40,000 employees serving more than 140 countries. We design and deliver solutions that manage risk, optimize benefits, cultivate talent, and expand the power of capital to protect and strengthen institutions and individuals. Our unique perspective allows us to see the critical intersections between talent, assets and ideas — the dynamic formula that drives business performance. Together, we unlock potential. Learn more at willistowerswatson.com.

Willis Towers Watson Securities contacts

William Dubinsky
Managing Director and Head of ILS
+1 212 915 7770
william.dubinsky@willistowerswatson.com

Howard Bruch
Managing Director and Head of Sales and Trading
+1 212 915 8407
howard.bruch@willistowerswatson.com

Quentin Perrot
Vice President
+44 20 3124 6499
quentin.perrot@willistowerswatson.com

Willis Towers Watson Securities ("Willis Towers Watson Securities") is a trade name used by Willis Securities, Inc., a licensed broker dealer authorized and regulated by FINRA and a member of SIPC ("WSI"), Willis Towers Watson Securities Europe Limited (Registered number 2908053 and ARBN number 604 264 557), an investment business authorized and regulated by the UK Financial Conduct Authority and exempt from the requirement to hold an Australian Financial Services License under ASIC Class Order [03/1099] ("Willis Towers Watson Securities Europe") and Willis Towers Watson Securities (Hong Kong) Limited, a corporation licensed and regulated by the Hong Kong Securities and Futures Commission ("Willis Towers Watson Securities (HK)"). Each of WSI, Willis Towers Watson Securities Europe and Willis Towers Watson Securities (HK) are Willis Towers Watson companies. Securities products and services are offered through WSI, Willis Towers Watson Securities Europe and Willis Towers Watson Securities (HK). Reinsurance products are placed through Willis Re Inc. in the United States and through Willis Limited in the UK, both also Willis Towers Watson companies.

These materials have been prepared by WTW Securities based upon information from public or other sources. WTW Securities assumes no responsibility for independent investigation or verification of such information and has relied on such information being complete and accurate in all material respects. To the extent such information includes estimates and forecasts of future financial performance obtained from public sources, WTW Securities has assumed that such estimates and forecasts have been reasonably prepared on bases reflecting the best currently available estimates. No representation or warranty, express or implied, is made as to the accuracy or completeness of such information and nothing contained herein is, or shall be relied upon as, a representation, whether as to the past, the present or the future. The information contained herein is not intended to provide the sole basis for evaluating, and should not be considered a recommendation with respect to, any transaction or other matter. WTW Securities is not providing any advice on tax, legal or accounting matters and the recipient should seek the advice of its own professional advisors for such matters. Nothing in this communication constitutes an offer or solicitation to sell or purchase any securities and is not a commitment by WTW Securities (or any affiliate) to provide or arrange any financing for any transaction or to purchase any security in connection therewith. WTW Securities assumes no obligation to update or otherwise revise these materials. This communication has not been prepared with a view towards public disclosure under any securities laws and may not be reproduced, disseminated, quoted or referred to, in whole or in part, without the prior written consent of WTW Securities. Information contained within this communication may not reflect information known to other employees in any other business areas of Willis Towers Watson and its affiliates.

© 2018 Willis Towers Watson. All rights reserved. Proprietary and Confidential.
For Willis Towers Watson and Willis Towers Watson client use only.

Willis Towers Watson
Securities