



# ILS MARKET UPDATE

Q2 2011: The Market Digests a New  
Hurricane Model Amid Light Issuance Volume

WILLIS CAPITAL MARKETS & ADVISORY

July 2011

**Willis**  
Capital Markets & Advisory

## Q2 2011 Cat Bond Market Issuance

The second quarter was a relatively quiet one for new issuance, certainly when compared to Q2 2010. We saw only four new issues brought to market, which added \$592 million of risk capital (2010: eight new deals totaling \$2.1 billion). Issuance activity was muted for several reasons; some potential Q2 issuers came to market in Q4 2010 and the first quarter of 2011 when the market environment was particularly attractive and several of the maturing deals were structures that sponsors chose not to renew for various reasons. In addition, the Q1 loss activity and a new U.S. hurricane model were also factors that influenced the market in the second quarter.

In our view, the market digested the tragic Japanese earthquake event in an orderly fashion, with relatively little disruption. The latest RMS model for U.S. hurricane risk appears to have caused more uncertainty among market participants with the capacity and pricing of Q2 deals influenced to some degree. The Q2 issues are summarized in the table below.

## Q2 2011 NON-LIFE CAT BOND MARKET ISSUANCE

(\$ in millions)

Sponsor	Issuer / Tranche	Issue Date	Term (Yrs)	Amount (\$M)	Risk Premium	Risk
Argo	Loma Re - A	06/15/11	1.5	\$100	9.50%	US HU / EQ, Euro Wind, Japan EQ
USAA	Residential Re - 1	05/31/11	4.0	57	9.00%	US HU / EQ / T-Storm / Winter Storm / Wildfire
USAA	Residential Re - 2	05/31/11	4.0	33	12.00%	US HU / EQ / T-Storm / Winter Storm / Wildfire
USAA	Residential Re - 5	05/31/11	4.0	160	8.75%	US HU / EQ / T-Storm / Winter Storm / Wildfire
Munich Re / NCJUA IUA	Johnston Re 2011 - A	05/17/11	3.0	70	7.60%	North Carolina HU
Munich Re / NCJUA IUA	Johnston Re 2011 - B	05/17/11	3.0	132	6.90%	North Carolina HU
Allianz	Blue Fin Ltd - 4B	04/15/11	2.0	40	8.50%	US HU / EQ
				<b>Total</b>	<b>\$592.0</b>	

Source: WCMA Transaction Database.

Allianz sponsored a fourth takedown from their Blue Fin shelf facility. A single \$40 million tranche was placed providing two-year term aggregate coverage against U.S. hurricanes and earthquakes. The notes use a modeled loss trigger and a treasury money market fund collateral structure. Allianz chose not to seek a rating for this small tranche size.

The North Carolina JUA/IUA returned to the market for the third time with an additional takedown from their Johnston Re vehicle, which provides \$202 million of per occurrence coverage against hurricanes in two tranches. As with the 2010 transaction, Munich Re provides a traditional indemnity cover to the sponsor and retrocedes the risk to the cat bond market. The cat bond features an indemnity trigger and also uses treasury money market funds as collateral.

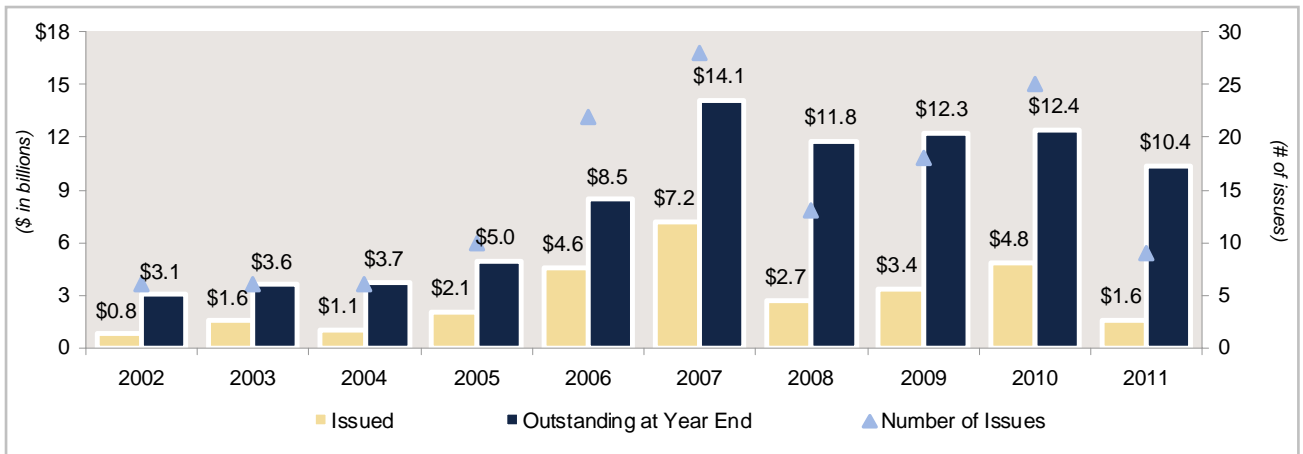
USAA sponsored a catastrophe bond issue for the 15th consecutive year with the Residential Re 2011 transaction. Res Re 2011 provides \$250 million of indemnity-triggered protection against U.S. catastrophe perils including hurricane, earthquake, severe thunderstorm, winterstorm and California wildfire. The \$160 million Class 5 notes provide coverage on an annual aggregate basis, the other tranches on a per occurrence basis. For the first time USAA chose to place this year's transaction for a four-year term. The transaction will reset each year to the latest AIR model.

The final new issue of the quarter was from a new sponsor, Argo Re. Loma Re provides \$100 million of second event coverage over an 18 month term on a per occurrence basis for any combination of U.S. hurricanes and earthquakes, European windstorms and Japanese earthquakes. The transaction uses modified PCS and PERILS triggers for the U.S. and European risks respectively and a modeled loss trigger for Japanese earthquakes. The collateral is invested in a tri-party repo structure with Goldman Sachs acting as the repurchase counterparty.

During the second quarter, \$2.1 billion of catastrophe bonds matured (year-to-date maturities for 2011 are now \$3.3 billion). In addition, the \$300 million Muteki transaction that was due to mature in June is a total loss for investors as a result of the Tohoku earthquake in March. Outstanding catastrophe bond capacity has therefore reduced by a net \$2 billion in 2011 to date, as maturing bond limits have outstripped new issuance. Investors have cash to invest and remain keen on risk in cat bond form, but are somewhat starved of new issuance, particularly non-U.S. wind exposed deals.

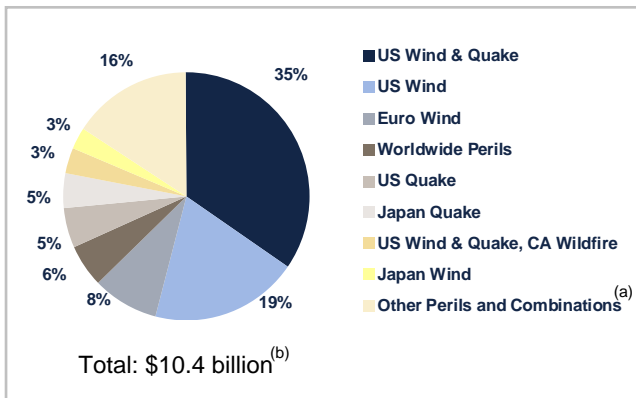
As with the first quarter of 2011, all the new issuance in the second quarter is exposed to U.S. hurricane risk. As our chart on page 2 shows, ~71% of outstanding cat bond limit is exposed to U.S. hurricane risk of some form.

## CAPACITY ISSUED AND OUTSTANDING BY YEAR



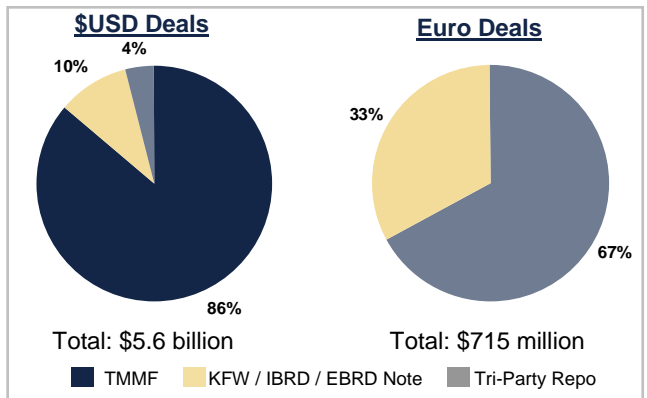
Source: WCMA Transaction Database.

## ON-RISK CAPACITY BY PERIL (June 30, 2011)



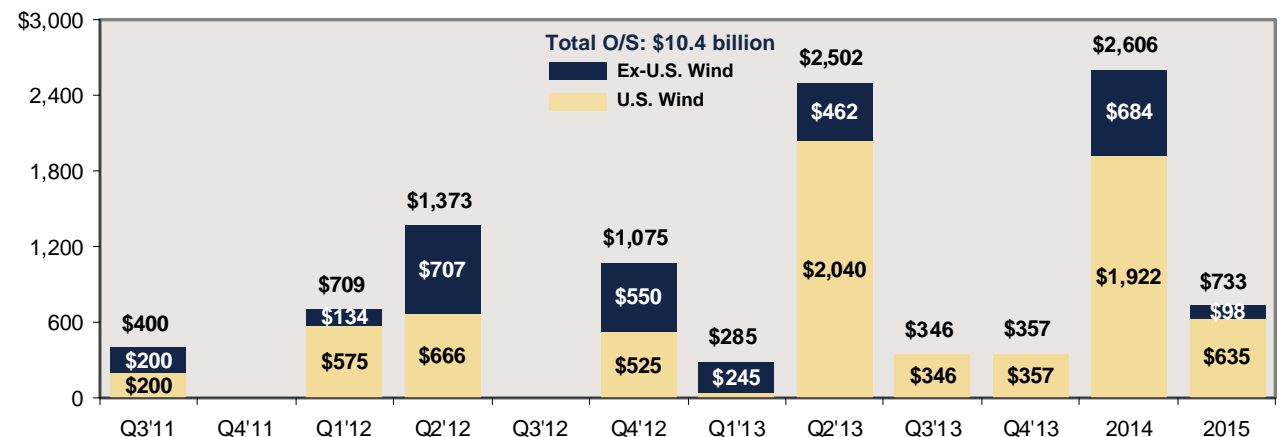
(a) 8% of "Other" category has exposure to U.S. Wind.  
 (b) In aggregate, ~71% of all capacity outstanding exposed to U.S. Wind.  
 Source: WCMA Transaction Database.

## 2010 & 2011 Issuance by Collateral Type



Source: WCMA Transaction Database.

## ON-RISK CAPACITY BY MATURITY DATE (\$ in millions)



Source: WCMA Transaction Database.

## Secondary Market Environment

The pendulum of market sentiment seems to have taken a swing in the second quarter. The first quarter brought record pricing volume and there was some optimism and swagger about the market, despite the international losses which could have tempered the atmosphere.

The devastating Tohoku earthquake coupled with the general feeling that we are coming out of a relatively soft property catastrophe market, could have encouraged sponsors to lock-in multi year rates, but so far at least, we have seen muted activity in the primary and secondary markets for investors.

As the secondary market took orderly markdowns of bonds impacted by the Tohoku event and S&P sparked some market chatter as they posted lists of bonds on credit watch or downgrades due to the Tohoku event, investors were anxious for up to date price discovery, but the primary market offered relatively few data points. The new RMS model for U.S. hurricane risk was the major issue to digest in the quarter. Investors, who historically were satisfied with a single model, are now discussing multi model approaches to risk. The art of cat bond underwriting is evolving.

Overall secondary trading activity was light. Maturing bonds and additional investor inflows have resulted in most players finishing the quarter eager to put money to work. Investors remain very keen to add diversifiers to their portfolios and most recently the general tone of the market has been "better bid", as we move into another hurricane season.

## Reinsurance Broker Perspective: James Kent Interview



James was appointed as President of Willis Re North America in 2010, where his responsibilities include driving the growth of Willis' Property, Casualty and Specialty operations throughout North America.

Prior to his appointment as President of Willis Re North America, James ran the reinsurance operations for Willis Re Bermuda where he was responsible for developing new reinsurance business from Bermuda-domiciled companies and for managing inward business into the Bermuda reinsurance market. James was instrumental in establishing Willis Re's unique Bermuda platform and ensuring that the Bermuda operation became fully aligned with Willis' worldwide network of offices, thus allowing global clients to receive local representation when dealing with the Bermuda reinsurance market. James joined Willis in 2004.

### **How do you think catastrophe reinsurance brokers' view of the cat bond market has changed in the last 5 years?**

The ILS market is now considered an established, vibrant and committed sector of the catastrophe reinsurance market. Many insurance companies are sophisticated buyers of catastrophe protection and want to investigate the various coverages available to them to transfer risk.

There is clear convergence among the different sectors of the catastrophe reinsurance market. Many traditional reinsurance companies are reviewing and in some cases investing in risk in catastrophe bond form, while also evaluating whether a catastrophe bond makes sense for them as part of their outwards catastrophe protection programs. We have a product neutral approach at Willis and want to present all options to our clients without any bias as to which forms of protection should be used to help them maximize their return on capital.

The large brokers have all invested substantially in providing capital markets capabilities in response to demand from client buyers to review these alternatives. It has become a standard part of the dialogue when reviewing the larger catastrophe reinsurance programs.

### **While based in Bermuda in 2002 through 2010 you witnessed explosive growth in collateralized reinsurance limits - do you think the future for the insurance risk asset class lies in private deals with investors or securities such as cat bonds, or both?**

Definitely both; one of the most stimulating periods of my career was being in Bermuda in the wake of major market events in 2001 and 2005, and seeing how established reinsurers, together with new entrants and non-traditional investor markets, created much needed capacity. It represented all that is best about the Bermuda reinsurance market; innovation and the ability to move the reinsurance market forward after a major loss event.

## Reinsurance Broker Perspective: James Kent Interview

### Do reinsurance / retro buyers value collateralization, multi-year covers and new alternative sources of capacity?

The multi-year nature of the product and the collateralized protection are clearly viewed as a plus by buyers for the certainty this product can bring in terms of very strong security and coverage across 2 or 3 years, although some buyers understandably will not utilize collateralized markets who seek to apply commutation language. We will often recommend to clients that they consider hedging potential reinsurance price volatility by placing some proportion of the program limit on a multi-year basis, particularly in market conditions where reinsurers are offering competitive pricing due to benign loss activity, and this capacity can often be offered by all sectors of the market.

### How do you think buyers and brokers view cat bond pricing generally?

Generally the product is perceived as more expensive when comparing the risk premium plus transaction expenses of a cat bond relative to the gross rates on line paid for indemnity triggered reinsurance, although we are seeing evidence that cat bond pricing can be more competitive than retrocessional pricing at the top end of programs following price increases in the retrocessional market in Q1. The view of overall costs will depend on the value that buyers place on features like the collateral and multi-year coverage, and whether they are prepared to buy protection on a non-indemnity basis.

### What would reinsurance buyers and brokers like to see from the cat bond product that is different from now?

#### How would you like to see the market develop over the next 5 years?

Basis risk remains an issue for the product where non-indemnity triggers are used. This can create uncertainty for buyers relative to the clarity of traditional indemnity reinsurance protection.

I would like to see the cat bond market learn some lessons from the ILW and retro markets and offer some capacity at higher expected loss levels and smaller limit sizes. There is lots of buyer demand for ILWs in the \$5 - \$25 million capacity range. I appreciate that transaction expenses are an impediment to this happening at present, but perhaps structures can develop to bridge this gap. This would also open up the regional market space where many single state companies do not need to buy significant levels of cat capacity.

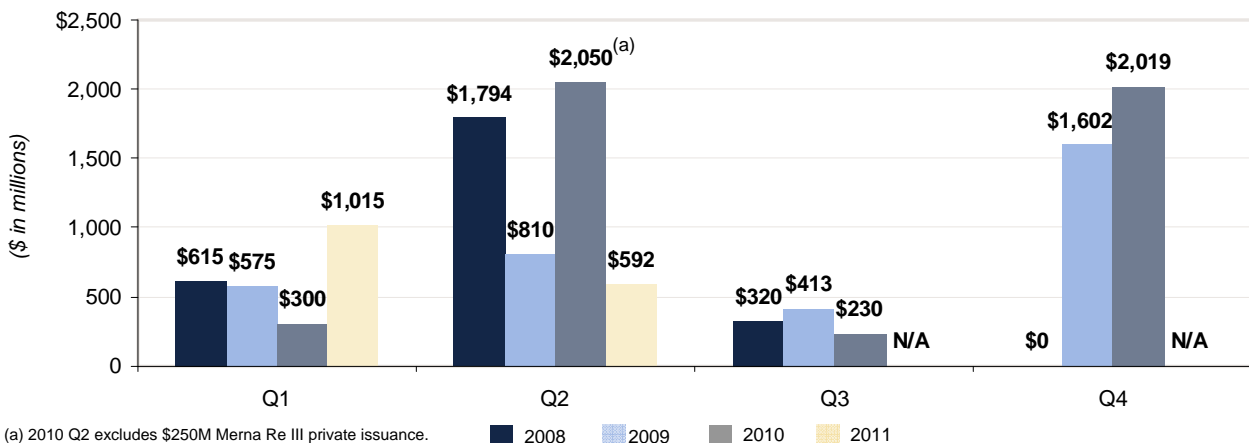
I also think it would add real value to the market if there was more indemnity and / or aggregate capacity available in cat bond form, as there is demand from buyers of both reinsurance and retrocessional protection for this type of capacity.

In terms of developing the covered perils, I think that more could be done around tornado / hail risk in the U.S., particularly if sold on an aggregate basis, and global flood risks. Terrorism protection would be good as well, although I recognize there are modelling issues that make it difficult to put that into cat bond form.

## Market Outlook

Thus far 2011 has run counter to longer term cat bond market trends with a busy Q1 followed by a muted Q2. We may see this contrarian pattern continue through the second half of the year to a lesser degree.

Cat Bond Issuance by Quarter (Q1 2008 – Q2 2011)



## Market Outlook (cont'd)

Q3 could benefit from some of the same forces that curtailed issuance in Q2. First, uncertainty from both sponsors and investors as to how the new RMS hurricane model will affect pricing will likely yield to more crystallized views. Further, the uptick in ex-U.S. catastrophe reinsurance pricing may naturally lead to more ex-U.S. deals in Q3 and beyond. This all assumes a relatively benign U.S. hurricane season. If we see a large U.S. loss, all bets are off. While it seems clear that reinsurers will likely seek sidacar capacity following such an event, the impact on the cat bond market and broader ILS markets is far from clear.

On the structuring side, we see several key trends to watch. First, will collateral terms continue to loosen in the minority of deals that use higher yielding assets? The temptation to sponsor and invest in deals with even weaker collateral conditions will increase as the memories of Lehman fade and we enter a higher interest rate environment. Second, as suggested in the interview with James Kent, can the market translate some of the lessons learned from private transactions to make rated ILS transactions more efficient so that incremental deals make it to the market?

Finally, as dedicated investors continue to gather assets to deploy across the range of insurance risk opportunities including collateralized reinsurance, ILWs, and cat bonds, we believe that cat bonds will represent a healthy percentage of new investments through the remainder of 2011. The exact deployment of these assets from dedicated investors between cat bonds and various alternatives remains unclear. If generalist investors such as pension funds and multi-sector fixed income asset managers become more active, the pendulum will naturally shift back toward rated cat bond issuance.

## CONTACTS

<b>Bill Dubinsky</b> <i>Head of ILS</i>	+1 212 915 7770 william.dubinsky@willis.com	<b>Adam Beatty</b> <i>Executive Vice President</i>	+1 212 915 7905 adam.beatty@willis.com
--	--	---	---

<b>Howard Bruch</b> <i>Executive Vice President</i>	+1 212 915 8407 howard.bruch@willis.com
--	--

## DISCLAIMER

Willis Capital Markets and Advisory ("WCMA") is a marketing name used by Willis Securities, Inc., a licensed broker dealer authorized and regulated by FINRA and a member of SIPC ("WSI"), and Willis Structured Financial Solutions Limited, an investment business authorized and regulated by the UK Financial Services Authority ("WSFSL"). Both WSI and WSFSL are Willis Group companies. Securities products are offered through WSI and WSFSL. Reinsurance products are placed through Willis Re Inc. in the United States and through Willis Limited in the UK, both also Willis Group companies. These materials have been prepared by WCMA based upon information from public or other sources. WCMA 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, WCMA 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. Readers should not place any reliance on any forward-looking statements, noted by such words as "should", "may", "expect" and "believe" contained herein. 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. Nothing in this communication constitutes an offer or solicitation to sell or purchase any securities and is not a commitment by WCMA (or any affiliate) to provide or arrange any financing for any transaction or to purchase any security in connection therewith. WCMA 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 WCMA. Information contained within this communication may not reflect information known to other employees in any other business areas of Willis Group and its affiliates. WCMA and / or its affiliates may have business relationships with, and may have been, or in the future may be compensated for services provided to, companies mentioned herein.