ILS MARKET UPDATE

Breaking Records

WILLIS CAPITAL MARKETS & ADVISORY
July 2014

The Insurance Industry Experts
New York | London | Hong Kong
Q2 2014 broke records and new ground. Not only did we see the largest ever single tranche cat bond in the quarter with the Everglades Re 2014 deal, we also witnessed several other notable achievements including the first indemnity-trigger cat bond for a primary company’s Euro Wind exposure (Generali’s Lion I Re), the first yen-denominated deal (Group Sompo’s Aozora Re), and the fastest takedown ever (Heritage’s Citrus Re 2014-2)… and this is but a partial list.

How can the cat bond market improve on a record setting quarter? Where do we go from here? One place to look is to ask what did not happen in the quarter and why. If the rationales for “no” turn to “yes” that would help the market grow.

First, the quarter notably lacked sponsorship from reinsurers with the exception of Munich Re and Everest Re. Why? Perhaps this is because indemnity retro remains elusive in cat bond form but widely available in the collateralized re market. Another possible reason is that the traditionally most active reinsurers are currently well capitalized and managing their risk in other ways (e.g., contingent capital). Swiss Re, for example, has remained absent from the market since the last Mythen takedown in July 2013. Additionally, given the gradually softening reinsurance market, some reinsurers may be reluctant to lock in multi-year retrocession protection (although an event would make that look shortsighted). Here, the cat bond light approach has promise as it may make single year deals more feasible and we have seen some activity along these lines (primarily for index triggered deals so far). Sidecar and ILS fund capacity along with private quota shares are also important sources of capacity. Unlike XOL cat bonds, they also provide indemnity trigger coverage to reinsurers.

Second, individual insureds (e.g., large corporates) have not yet joined the market to the extent expected following the 2013 MetroCat deal and the declining spreads of the last year. Why? One reason is that risk managers prefer an indemnity trigger, which presents challenges to achieve for an individual insured. Another reason, many risk managers and brokers lack access to the modeling information necessary to provide price indications. In addition, since much cat capacity is provided in all-risk policies, the risk managers are not even sure what they are paying at the moment. Nonetheless, given the continued interest, we still expect some (and perhaps a good number) of these deals to eventually reach the market.

While we expect Q3 to be relatively quiet as investors, sponsors, and even lawyers and arrangiers take vacations while monitoring the Weather Channel and Weather Underground either to monitor hurricane activity or plan beach days, Q4 should round out the year’s activity nicely, potentially with new perils and sponsors complementing repeat issuers. Q4 should be busy even if spreads remain flat or have a slight uptick against the back drop of a loss free Q3 (never a guarantee). Given the spread environment and the busy Q2, we feel optimistic that 2014 will end up as a record setting year for the cat bond market. By year end, we expect from 8 to 9 billion dollars in total issuance for widely distributed nonlife cat bonds.

“We feel optimistic that 2014 will end up as a record setting year for the cat bond market. By year end, we expect from 8 to 9 billion dollars in total issuance for widely distributed nonlife cat bonds”
Q2 set the record as the largest ever issuance quarter in the history of the non-life catastrophe bond market, after an average issuance volume in the first quarter. The second quarter of 2014 saw $4.5 billion of non-life catastrophe bond capacity issued through 17 tranches, compared with $3.3 billion issued through 17 tranches in Q2 2013 and the previous quarterly record of $3.5 billion issued in Q2 2007. Q2’s record issuance volume was driven by two of the largest ever catastrophe bond transactions, Everglades Re 2014 and Sanders Re 2014.

Everglades Re 2014, sponsored by Florida Citizens, was brought to market in part to replace the maturing $750 million Everglades Re 2012 transaction. The transaction was initially marketed with a size of $400 million and a pricing range of 6.50% - 7.75%, while changing the trigger basis from per occurrence to annual aggregate. Citizens chose to upsize the transaction to $1.5 billion, making it the largest single catastrophe bond on record. It had a final issuance spread of 7.50%. In the span of two years, risk-adjusted pricing for the Everglades deals has fallen over 50%, a clear indication of investor demand for paper. The table below summarizes Florida Citizen’s catastrophe bond transactions, highlighting the reduction in spreads that has been seen in the last two years and accelerated in H1 2014.

<table>
<thead>
<tr>
<th>Issuer</th>
<th>Size</th>
<th>Expected Loss</th>
<th>Coupon</th>
<th>Trigger</th>
<th>Trigger Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Everglades Re 2014</td>
<td>$1,500</td>
<td>2.68%</td>
<td>7.50%</td>
<td>Indemnity</td>
<td>Ann. Agg.</td>
</tr>
<tr>
<td>Everglades Re 2013</td>
<td>250</td>
<td>3.18%</td>
<td>10.00%</td>
<td>Indemnity</td>
<td>Occ</td>
</tr>
<tr>
<td>Everglades Re 2012</td>
<td>750</td>
<td>2.89%</td>
<td>17.75%</td>
<td>Indemnity</td>
<td>Occ</td>
</tr>
</tbody>
</table>

Allstate secured $950 million of catastrophe bond limit through Sanders Re 2014. Sanders Re 2014-1 initially launched with three classes of notes covering U.S. Named Storms (excluding Florida) and U.S. Earthquake on a per occurrence industry index basis. The transaction was launched with an aggregate size of $600 million and upsized to $750 million with pricing at the midpoint or near the top of each of the announced pricing ranges. The risk spread for each of the three transactions ranged between 3.00% and 3.90%. Notwithstanding this pricing on the 2014-1 notes, Allstate immediately thereafter sponsored an additional 2014-2 takedown, securing protection for Allstate’s Florida subsidiaries. The 2014-2 transaction, which covers Named Storms, Earthquakes and Severe Thunderstorms in Florida on an indemnity basis, upsized from $150 million to $200 million. Pricing settled at 3.90%, which was also at the upper end of the initial pricing range.

“Q2’s record issuance volume was driven by two of the largest ever catastrophe bond transactions”
2014 continues to see growth in first time sponsors as well, a sign of more flexible terms & conditions and reduced pricing that is allowing a broader base of sponsors to examine cat bonds as part of their risk transfer programs. Four first time sponsors came to market in Q2 after two new sponsors accessed the market in Q1. The first transaction of the quarter came from Heritage P&C through Citrus Re. Through two series of notes – 2014-1 & 2014-2 – Heritage was able to secure $200 million of limit for Named Storms in Florida on an indemnity basis. The structure was flexible enough to accommodate Heritage’s growth plans by allowing Heritage to provide projected exposure data and an expanded updated covered area upon reset.

Everest Re was a new reinsurer to the market in the 2nd quarter, with the $450 million Kilimanjaro Re 2014-1 transaction through two classes of notes. Notable about Kilimanjaro Re is that Everest Re has been just the second reinsurer (in addition to Munich Re’s Queen Street IX in February) to sponsor a cat bond in the first half of 2014.

($ in millions)
Two sponsors also brought well received diversifying perils in Q2, incorporating new structural features and pushing the lower boundaries of the margin cat bond investors require. Generali sponsored the first indemnity triggered European Wind transaction since 2008 through Lion I Re, securing €190 million of protection at 2.25% for a layer with 1.00% expected loss as modeled by RMS. Group Sompo followed by issuing the first ever Yen denominated transaction, purchasing ¥10.125B ($99.3M) of protection at 2.00% for a layer with 0.52% expected loss as modeled by AIR. This was Group Sompo’s first indemnity deal since 1998’s Pacific Re. These diversifying transactions, along with Nakama Re sponsored by Zenkyoren covering Japan EQ, were sought out by investors for portfolio diversification during an otherwise U.S. peril-centric issuance period.

The Texas Windstorm Insurance Association (TWIA) became the latest residual market entity to issue catastrophe bonds. TWIA has followed the precedent set by the most recent state residual market transactions from the Florida and North Carolina by using an indemnity trigger on an annual aggregate basis. The transaction will use Hannover Re as the transforming reinsurer. Alamo Re upsized from $300 million to $400 million with a final spread below the initial price guidance range at 6.35%.

### Historical Capacity Issued and Deals – First-time vs. Repeat Sponsors

- **New Sponsor**: $3.0 billion
- **Repeat Sponsor**: $3.0 billion
- **# New Sponsor Deals**: 6
- **# Repeat Sponsor Deals**: 18
- **Total Capacity Issued**: $6.0 billion

### 2013-2014 Q2 First-time Sponsors by Type

- **Gov’t**: 34%
- **Primary**: 39%
- **Reinsurer**: 27%

**Total: $3.0 billion**
“Diversifying bonds were more likely to experience favorable price and size changes”

The first six months of 2014 saw 50% of transactions price below the initial guidance range, a drop year-over-year as more than 60% of transactions in the first half of 2013 priced below the initially provided range. In the same vein, 21% of this year’s transactions priced above the midpoint of initial guidance (and one deal – Munich Re’s Queen Street X – was pulled altogether). During the first two quarters of 2013, only 5% of transactions saw final pricing above the midpoint.

We can interpret this trend in many ways, including but not limited to overly aggressive initial ranges, disparity in the number of transactions and capacity issued between the two periods, pushback from investors to ever-compressing risk spreads and dampened investor demand in the wake of the $1.5 billion Everglades deal.

Sponsors upsized a greater percentage of transactions brought to market thus far in 2014. 75% of 2014’s transactions were upsized, compared to 63% for the first half of 2013. The change might reflect – among other factors – the diversity of deals brought to market this year and new capital and participants on the investor side.

Diversifying bonds were more likely to experience favorable price and size changes, as witnessed by the Lion I and Kizuna deals.
Par Outstanding by Risk Peril

<table>
<thead>
<tr>
<th>Risk Peril</th>
<th>Q2'13</th>
<th>Q2'14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total: $16.2 billion(a)</td>
<td>36%</td>
<td>33%</td>
</tr>
<tr>
<td>U.S. Wind &amp; Quake</td>
<td>26%</td>
<td>27%</td>
</tr>
<tr>
<td>U.S. Wind</td>
<td>9%</td>
<td>10%</td>
</tr>
<tr>
<td>Other (incl. U.S. Wind)</td>
<td>7%</td>
<td>4%</td>
</tr>
<tr>
<td>Euro Wind</td>
<td>4%</td>
<td>6%</td>
</tr>
<tr>
<td>Japanese Perils</td>
<td>4%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Par Outstanding by Expected Loss at Issuance

<table>
<thead>
<tr>
<th>Loss Category</th>
<th>Q2'13</th>
<th>Q2'14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total: $16.2 billion(a)</td>
<td>27%</td>
<td>27%</td>
</tr>
<tr>
<td>1.51% - 2.50%</td>
<td>11%</td>
<td>12%</td>
</tr>
<tr>
<td>0.76% - 1.50%</td>
<td>32%</td>
<td>32%</td>
</tr>
<tr>
<td>2.51% - 4.50%</td>
<td>10%</td>
<td>6%</td>
</tr>
<tr>
<td>&lt;0.75%</td>
<td>6%</td>
<td>3%</td>
</tr>
<tr>
<td>&gt;4.51%</td>
<td>1%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Source: WCMA Transaction Database as of 6/30/2014.

(a) In aggregate, 73% of all capacity outstanding exposed to U.S. Wind.
(b) In aggregate, 69% of all capacity outstanding exposed to U.S. Wind.

Non-Life Cat Bond Issuance by Quarter (2009 – 2014) (c)

($ in millions)

<table>
<thead>
<tr>
<th>Quarter</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>$1,015</td>
<td>$1,343</td>
<td>$1,210</td>
<td>$1,175</td>
<td>$1,070</td>
</tr>
<tr>
<td>Q2</td>
<td>$2,300</td>
<td>$3,303</td>
<td>$2,095</td>
<td>$1,445</td>
<td>$2,019</td>
</tr>
<tr>
<td>Q3</td>
<td>$4,491</td>
<td>$5,000</td>
<td>$5,000</td>
<td>$5,000</td>
<td>$5,000</td>
</tr>
<tr>
<td>Q4</td>
<td>$2,300</td>
<td>$676</td>
<td>$525</td>
<td>$1,889</td>
<td>$1,820</td>
</tr>
</tbody>
</table>

Capacity Issued and Outstanding by Year

($) in billions

<table>
<thead>
<tr>
<th>Year</th>
<th>Issued Capacity</th>
<th>Outstanding at YE</th>
<th># Deals</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>$1.1</td>
<td>$3.7</td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>$2.1</td>
<td>$5.0</td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>$3.7</td>
<td>$8.4</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>$5.0</td>
<td>$7.2</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>$7.2</td>
<td>$14.1</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>$11.8</td>
<td>$11.8</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>$12.3</td>
<td>$12.3</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>$12.4</td>
<td>$12.4</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>$12.7</td>
<td>$15.2</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>$15.2</td>
<td>$18.7</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>$18.7</td>
<td>$21.0</td>
<td></td>
</tr>
</tbody>
</table>

(c) All issuance amounts reported in or converted to USD.
Source: WCMA Transaction Database as of 6/30/2014.
"Investors seemed to have taken their fill of lower yielders and Florida risk, and finished the quarter still looking to round out their portfolios with diversifiers."

The quarter started off with strong primary issuance, and diverse offerings, which gave an opportunity for many managers to rebalance their portfolios. The firm bids did not last too long. There was a slight softening of the market as would be expected in the seasonality cycle. Investors seemed to have taken their fill of lower yielders and Florida risk, and finished the quarter still looking to round out their portfolios with diversifiers.

As we head into wind season, we will be interested to see how investor sentiment evolves.

There is still meaningful demand and interest to access risk. The desk fields weekly calls from investors interested in the next risk profile that will be offered in cat bond form.

Source: WCMA Transaction Database as of 6/30/2014.
LTM = Last twelve months. Data is for primary issuance and does not reflect secondary trading.
WCMA Interview: Todor Todorov

Todor Todorov is an Investment Consultant for Hedge Funds Research at Towers Watson

How did you come into your current role at Towers Watson? How have your responsibilities changed with the growth and development of the ILS market?

I joined Towers Watson (at the time Watson Wyatt) almost 6 years ago in the London office. Before that I spent some time at a small currency shop over in the Netherlands. I am now based in the New York office.

We started actively looking at the ILS space in 2008 and ended up seeing it as slightly different, almost as an asset class of its own. Our clients are predominantly pensions. We investigate and recommend asset managers (hedge funds) to our clients, according to conviction and circumstance. Generally when we work with our clients we are trying to get them a sound portfolio. We have always recognized that insurance risk premium could potentially be accessed by our clients but historically we found it difficult to access in an easy manner.

It was difficult prior to 2008 to identify institutional-quality investment products in this space. Around 2008 we revisited ILS and interviewed a number of managers, reinsurance companies, and brokers. We came to the conclusion that the industry was probably ready to be considered by institutional investors. We pushed forward with our efforts to talk to our clients about the space. Clearly it has been a learning experience as it was a new asset class, despite Towers being a firm with much actuarial experience.

Many ILS deals no longer have ratings but most still have third party modeling. What are your thoughts on this development?

Our clients generally access the space through dedicated managers that offer a commingled product. Not all clients invest directly into deals, they lean on the expertise of the managers they hire. In that regard, our research efforts have been more focused on the sound practices and repeatable investment processes of the investment manager.

I find the ratings issue to be interesting. It is a step removed from our clients but I would generally highlight to those thinking about this asset class that they shouldn’t necessarily think about it as a traditional fixed income investment. The underlying risk is very different than traditional credit risk. The return distribution is somewhat different than what you see with traditional credit instruments. It’s positive in that it brings diversity and sophistication to portfolios.

What trends have you seen regarding pension funds’ interest & perception of the ILS space? Do you foresee any significant changes to pension funds’ line of thought in the near future?

Gaining access to diversifying insurance risk premium in the purest form, which pensions historically lacked, is very attractive to add to a portfolio. The key attraction of ILS is its diversifying property, as long as the collateral is kept to basic money market instruments. The way we look at the managers is for them to do their own work and analysis. We value managers who add something extra on top of what is readily available.

On a standalone basis, given rate compression, the asset class is not as attractive as it was 18-24 months ago. It still has a role to play in one’s portfolio, but we must be careful not to overweight allocation to this asset class and to monitor exposures very carefully. Generally while the premium is positive ILS will probably have a strategic role to play in our clients’ portfolios. The pure return is very important but should be considered relative to what other asset classes have to offer.

Do you believe it would take a hardening market to attract significantly more capital from pension funds into the ILS space, or do you foresee interest continuing to grow regardless of returns?

Generally we believe that ILS still has a place in a well-diversified portfolio. In that regard, clients who do not have any exposure are still considering and potentially will continue to allocate to the space. People who already have some exposure are unlikely to add to it. The decision to enter or add to presence in the space has become more difficult as premiums have come down, whereas a few years back, generally a lot of institutional investors found it fairly easy to make a decision. Now these conversations take a bit longer.
In the ILS space, do you think clients should pursue more an alpha or a beta strategy?

The way we see the space is that it is both alpha and beta. Generally what we find very attractive is the pure risk premium. It’s not quite as straightforward to get exposure to this market as it is to equity markets, and it is a complex market. You do need expertise, you do need ability to source business and you need the experience to price risk correctly. These are obviously elements of skill (i.e. alpha) and as such we will still be focusing on, recommending and rating only the best-in-class managers out there.

In terms of how our clients see ILS within their portfolio, generally we think of it not as opportunistic but as an asset class on its own. This has been a noticeable change over the last 5 years or so, and I believe it’s probably a structural change that’s here to stay.

How do you feel about the tradeoff between liquidity / NAV transparency and returns among the various products (i.e., cat bonds vs. collateralized re)?

With regard to NAV transparency, these transactions are “private” and there is no real secondary market for them. As such, pricing is a bit more complicated than an instrument that does trade actively in a secondary market. But I don’t think this is necessarily something new. A lot of institutional investors already have exposure to managers who invest in other illiquid asset classes – complex credit, distressed situations, etc.

There are other ways to deal with the pricing and NAV. It’s important to note that pension funds have a long-term horizon and hence can generally take on that lack of liquidity. We find there is more value in allowing the manager flexibility so that he can go for the most attractive investments he can source, rather than limiting him to a certain type of instrument.

Do you see existing managers continuing to improve from an operational perspective? What more would you like to see them doing?

There has definitely been a lot of improvement from an operational standpoint since we started looking at the space – we see more commonly accepted standardized best practices. I suppose some of the challenges are that the asset class is still relatively new and somewhat different than what institutional investors are used to. There are definitely ways around it – for example, we’ve seen improvement in the valuation practices with regards to the less liquid instruments. Nowadays we also see more independent third party pricing and auditing. I think that these are some of the things that the institutional investors are looking for. We have seen improvement and would like this trend to continue as the market matures.

What are three things you would like to change about the ILS market if you could wave a magic wand and change them overnight?

Generally with every new developing market, and with ILS in particular, there are a lot of ways to standardize across the board. Transparency and the way managers report risk is a focal point – we’d like to see the entire space more transparent. That’s not to say managers aren’t putting in the effort, there are simply some aspects of the industry that are a bit more difficult to access. You can’t always get all of the data.

I’m not exactly saying that I hope for all transactions to be standardized, because the differences among them are part of the attraction. Rather I think we would benefit from greater transparency as to what the process looks like in its entirety. The private cat bond market is an example, as are other less liquid parts of the asset class.

Do you think that rates will basically stay compressed? Do you expect to see a rate hike?

I think generally the market will retain some of its cyclical behavior but I agree that the cyclicality would be somewhat dampened. Generally the institutional investors that we work with see this as a long-term investment and the way they gear their portfolio they are expecting to top up if there is a significant event. If there is a big loss and investors flee the space I do think that this would move the market. If institutional investors are here to stay for the long term, which is our belief, I would expect this cyclicality to be different than what we’ve seen in the past 10 years or so.

Note: Todor Todorov is an Investment Consultant for Hedge Funds Research at Towers Watson and is not affiliated with Willis Capital Markets & Advisory or its affiliates. The views expressed herein by Mr. Todorov are his personally and do not reflect the views of Towers Watson or Willis Capital Markets & Advisory or its affiliates.
WCMA Leadership

Antonio (Tony) Ursano Jr.
Chief Executive Officer
+1 (212) 915-7986
tony.ursano@willis.com

William Dubinsky
Managing Director & Head of ILS
+1 (212) 915-7770
william.dubinsky@willis.com

Howard Bruch
Managing Director & Head of S&T
+1 (212) 915-8407
howard.bruch@willis.com

Brad Livingston
Vice President
+1 (212) 915-8134
bradley.livingston@willis.com

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

The Insurance Industry Experts
New York | London | Hong Kong

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