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# CAPITAL MARKETS: THE REINSURANCE EVOLUTION CONTINUES

CAPITAL MARKETS REPORT SEPTEMBER 2014



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## I. EXECUTIVE SUMMARY

AS THE QUALITY OF CATASTROPHE MODELING CONTINUES TO INCREASE AND AS CAPITAL MARKETS INVESTORS BECOME MORE COMFORTABLE WITH INNOVATIVE TERMS AND CONDITIONS, MORE FORMS OF RISK MAY DIRECTLY ACCESS THE CAPITAL MARKETS IN ILS FORM.



During the past twelve months, capital has continued to flow into the reinsurance markets in the form of both insurance-linked securities (ILS) and collateralized reinsurance transactions. This report examines the growth in the ILS market during the past year and some of the important evolutionary elements of catastrophe bond structure and risk transfer. We also explore how the use of capital markets-based capacity provides cost savings for public entities by helping them build surplus, reduce public debt and limit the risk that natural perils can pose to the state's balance sheet. As collateralized markets continue to increase in importance as an alternative to both traditional reinsurance and ILS, Guy Carpenter has taken an active role in analyzing counterparty risk and developing specific structures and strategies to manage this risk. This report also provides an overview of the manner in which Guy Carpenter assists its clients in managing counterparty risk and limiting credit exposure.

One common theme in the development of both ILS and collateralized markets is the change in the location of where the capital to back insurance claims is held. In the case of traditional reinsurance, using a rated carrier, premiums are paid by a cedent to a reinsurance company, then the reinsurer will pay any claims out of its capital base after the insured or the cedent has made a claim. In the case of ILS structures, the insured or the cedent holds the proceeds of the security until either the equivalent of claim has occurred or the proceeds are returned to the investor when the security matures. Simplistically, in the case of reinsurance using a rated carrier, the reinsurer holds the money – in the case of ILS and collateralized markets, the insured holds the money or it is held in trust for the insured.





This major structural difference between rated and collateralized markets has given rise to well-defined structures and verifiable parameters as alternatives to the traditional claims process. The continued development of these structures and parameters will provide for further risk transfer to the collateralized markets. Also, as the ILS and collateralized markets continue to innovate in these areas, rated reinsurance markets will utilize some of these same triggers and techniques, creating another form of convergence between the rated and collateralized markets.

As discussed further in this report, one major innovation that occurred in the past year is the transfer of risk directly from the risk-bearing entity to the capital markets, without an intervening insurance company. With the issuance of its MetroCat Re Ltd. (MetroCat) bond, the Metropolitan Transportation Authority (MTA) transferred the risk associated with storm surges and flooding directly to capital markets investors without an insurance company acting as an intermediary.

As the quality of catastrophe modeling continues to increase and as capital markets investors become more comfortable with innovative terms and conditions, more forms of risk may directly access the capital markets in ILS form.

In the case of collateralized markets, the theme of where the capital to pay claims is held has created a new form of risk analysis. Rather than focusing on traditional credit analysis, cedents rely on trust structures and agreements and the quantity and quality of available collateral as security against claims. This report looks to these elements in the development of collateralized market security and the role that Guy Carpenter plays in assisting its clients in the formation of effective collateralized reinsurance structures.



# II. CAPITAL MARKETS CAPACITY

AS PUBLIC ENTITIES STRIVE TO REDUCE PUBLIC DEBT, THERE IS A CLEAR BENEFIT DERIVED FROM LIMITING THE RISK THAT NATURAL PERILS CAN POSE TO A STATE'S BALANCE SHEET. AT THE TIME OF LOSS, GOVERNMENTS MAY BE SPARED THESE ENORMOUS COSTS AND THEY MAY HAVE ENHANCED FLEXIBILITY TO FINANCE ECONOMIC AND SOCIAL DEVELOPMENT OR REDUCE TAXATION.



### **GROWTH DOMINATES IN 2014**

# The influx of new capital into the reinsurance industry constitutes the largest change to the sector's capital structure in recent memory.

Over the past 24 months, approximately USD20 billion of new capital has entered the market through investments in ILS, funds and sidecars as well as the formation of hedge fund-related reinsurance companies and collateralized reinsurance vehicles.

The amount of limit placed utilizing ILS and collateralized products continues to grow and some markets are broadening the line of business and product focus.

Utilization of capital markets capacity in the first six months of 2014 saw a continuation of the growth trends seen in 2013. Revealing a widening of application, capital markets investors continue to be drawn to the (re)insurance space primarily due to the advantages it offers as a non-correlating asset class. Also, the recent availability of meaningful risk opportunities continues to drive investors to focus on the insurance-linked security space.

The performance of capital markets-based risk transfer capacity relative to traditional asset classes through different financial market cycles (including interest rate cycles) demonstrates the value of this asset class and its non-correlative basis. Figure 1 shows the cumulative return profile of 144A catastrophe bonds (as a proxy for all capital markets-based risk transfer capacity) versus various other capital market asset classes.





Source: Bloomberg

Note: 144A catastrophe bonds are a proxy for all capital markets-based risk transfer capacity.



Capacity outstanding and size of the overall global property catastrophe limit continued to expand for all forms of capital markets capacity (144A catastrophe bonds, private catastrophe bonds, collateralized reinsurance and sidecars).

However, as capital continues to inflow from an ever broadening investor base, including pension funds, endowments, sovereign wealth funds and asset managers, the most notable development in 2014 is the expansion and diversification of how this capital is sourcing the (re)insurance risk.

The highest six month issuance of 144A catastrophe bonds occurred in the first half of 2014, setting a record of USD5.7 billion, while the risk capital outstanding grew to an unprecedented approximately USD20 billion. Figure 2 tracks this dynamic growth. These trends are expected to continue for the full year 2014. Additionally, the outstanding amount of capacity (as of August 8, 2014) provided in 144A catastrophe bonds has reached a record high. In sum, the 144A catastrophe bond market, mirroring the other types of capital markets-based risk transfer capacity, continues remarkable overall growth.



#### F2 | 144A CATASTROPHE BONDS





## PRIVATE CATASTROPHE BONDS

The growth in the utilization of private catastrophe bonds continues at similar rates. Private catastrophe bonds provide the same benefits as 144A catastrophe bonds, including fully collateralized, multi-year protection, but private bonds are more cost-effective and allow for more streamlined documentation given the typically smaller limit size of each transaction. Figure 3 shows the evolution of private catastrophe bonds based both on deal count and total aggregate limit placed. In an environment of growing demand for capital markets capacity, GC Securities\*, a division of MMC Securities Corp., a US registered broker-dealer and member FINRA/NFA/SIPC, formulized its private catastrophe bond approach in June 2013 with development of the Tensai private catastrophe bond program in conjunction with Tokio Millenium Solutions' Shima Re Ltd. facility.



#### F3 | PRIVATE CATASTROPHE BONDS



#### **NEW CEDENTS**

New cedents continued to enter the catastrophe bond space in 2014. Seven new sponsors (American Strategic Insurance Group, Everest Re, Generali, Great American, Heritage, Sompo Japan Nipponkoa and Texas Windstorm Insurance Association) utilized the 144A catastrophe bond market for the first time in the first half of 2014. Additionally, several new sponsors entered the private catastrophe bond market. They included, but were not limited to, the Caribbean Catastrophe Risk Insurance Facility (CCRIF) and Achmea.

#### Cedents are increasingly attracted to capital markets capacity because of its competitive pricing and broadening indemnity coverage (with increasing inclusion of non-modeled perils).

As the focus grows on increased integration and consistency in coverage provided across products, GC Securities has seen a growing request for incorporating certain terms and conditions, for example, hours clauses and definitions of named storms, from capital markets structures into traditional reinsurance placements. Historically, capital markets-based risk transfer structures have been pushed to mirror traditional reinsurance terms. The decoupling of pricing and terms and conditions is a key attribute of capital markets-based risk transfer capacity relative to traditional reinsurance.





# PUBLIC ENTITIES, INSURERS OF LAST RESORT AND COMPULSORY CAT POOLS AND DISASTER FACILITIES

The use of capital markets-based risk transfer capacity by public entities, insurers of last resort, and compulsory catastrophe pools and disaster facilities continues to expand.

These deals included Turkey's Turkish Catastrophe Insurance Pool, Mexico's FONDEN and New Zealand's EQC. Most large U.S. insurers of last resort, such as CEA, Citizens (FL), Citizens (LA), North Carolina Joint Underwriting Association and the North Carolina Insurance Underwriting Association (NCJUA/NCIUA), and Texas Windstorm Insurance Association, are utilizing capital markets capacity including collateralized reinsurance and catastrophe bonds.

Given GC Securities' leadership in placing capital markets-based solutions for public entities, insurers of last resort, and compulsory pools and disaster facilities, we have seen that the use of capital markets-based capacity has been instrumental in many ways. It provides cost savings to these entities allowing them to utilize such savings to build surplus or buy needed additional coverage; it improves coverage terms (transforming programs from per occurrence to annual aggregate responses) and it provides leverage to keep traditional capacity sources honest and to facilitate their willingness to adjust coverage terms that may not have been feasible without the use of capital markets-based risk transfer capacity.





Also, as public entities strive to reduce public debt, there is a clear benefit derived from limiting the risk that natural perils can pose to a state's balance sheet. At the time of loss, governments may be spared these enormous costs and they may have enhanced flexibility to finance economic and social development or reduce taxation.

Because entities such as windpools tend to be limited in geographic scope and/or peril, with more of an affinity for single limit/aggregate coverage, they present an attractive profile to collateralized reinsurers and catastrophe bond investors. Competition and excess capacity for this business has significantly reduced price and in just the past year, the growth in both limit purchased by these entities and share of overall limit placed into the collateralized market has been significant. As an example, profiling limits purchased by U.S. windpools in 2014 compared to 2013, catastrophe bond limits increased by almost 50 percent while rated and collateralized reinsurance limit purchased grew by approximately 30 percent, leading to a total growth in coverage of roughly 35 percent. In addition, the collateralized market share of the limit purchased has outpaced the growth in rated carriers' increased participations as detailed in Figure 4 below.

#### F4 | RATED AND COLLATERALIZED MARKET PARTICIPATION PERCENTAGE OF SIGNED LIMIT





Note: Does not include catastrophe bonds. Source: Based on Proprietary Guy Carpenter Database



### **DEVELOPING TRENDS**

Capital markets capacity continues to innovate as highlighted by the recent issuance of a catastrophe bond by the MTA. This issue, MetroCat, which came to market in July 2013, demonstrated the willingness of capital markets investors to assume storm surge and flood risk from named storms in a cost effective manner.

Additionally, GC Securities' recent private catastrophe placement from the World Bank's new catastrophe note facility for the CCRIF shows the application for those sovereigns that need to protect against natural risks but whose limit needs may be more modest. The CCRIF private placement also highlights the willingness of investors to evaluate and assume risk based on alternative models as opposed to only the large vendor models. We believe this development will open up further opportunities for both perils and geographic regions where large vendor models are not available.

# Following the success of MetroCat, the application of capital markets capacity to corporate clients has emerged as a growing trend.

In the wake of Superstorm Sandy, many corporate clients faced difficult post-event renewal cycles for storm surge risks, as well as business interruption and contingent business interruption-type losses. Many of these clients also came to the realization that they were exposed and retained significant unreinsured risks. Companies in this situation are increasingly evaluating and utilizing capital markets-based risk transfer solutions, including catastrophe bonds and collateralized reinsurance, given their increasing cost-effectiveness and simplified processes. GC Securities expects substantial growth and activity in this area through 2015.

Finally, there is a growing message from insurers and reinsurers regarding how capital markets-based risk transfer capacity can be utilized to segment certain risks that are best suited for the capital markets. There is also interest in how they can utilize and rely upon this form of capital on a longer-term basis as a substitute for equity capital.

Up to this point insurers and reinsurers have relied upon capital markets-based capacity primarily for property catastrophe risks (either for existing business or for growth into new areas). Moving forward, there is a question of the degree of expansion into longer tail, less volatile insurer lines given the growing prevalence of hedge-fund backed reinsurers seeking to reinsure asset intensive long-tail liabilities. With the dialogue just beginning at the C-suite level, further innovations are a matter of when...not if.



# III. MANAGING COUNTERPARTY RISK



Guy Carpenter helps our clients manage the specific counterparty risk elements associated with collateralized markets. The credit analysis of collateralized markets is different than the analysis of a traditional reinsurer.

The issue of counterparty risk has several components: ability to pay, willingness to pay and concentration of source.

The ability to pay is typically attempted to be captured by ratings methodology and protocols. This focuses primarily on financial condition of the other party. In normal market conditions a snapshot of financial condition is useful. However in distressed market conditions ratings tend not to capture rapid deterioration in a timely fashion, as evidenced by the 2008 financial crisis. The snapshot approach is not well suited to cover the "cliff risk" of a highly rated entity dropping below investment grade in a single step.

The willingness to pay is a more difficult challenge, whereby the party may have the financial ability to perform but chooses not to fulfill obligations and/or challenges contract terms. This is an aspect of reinsurance recoverables that can often increase upon severe loss events. Due to the often short form nature of reinsurance documentation, these challenges are subject to market standards, the courts or relationships to remediate.

Concentration of sourcing is always a concern for enterprise risk. In the context of reinsurance, the over reliance on rated capacity (unsecured promises to pay) can become a capital sufficiency problem in a catastrophic event scenario.

How then do we mitigate these risks? We use ratings to assess ability to pay. Market conditions and convention often determine if we price differentially for ratings strength. The capital markets use collateral/security to mitigate willingness to pay, by gaining a priority claim on a source of repayment instead of joining the pool of all payees.

Controlling concentrations of counterparty types is critical to managing enterprise risk.

In the context of reinsurance programs, introducing collateralized capacity in the form of collateralized reinsurance or catastrophe bonds is a sound plan to balance the inherent risks of a program comprised solely of unsecured promises to pay from rated entities.



### FEATURES OF COLLATERAL STRUCTURES

A collateralized reinsurance transaction is one in which a market creates a trust account at the inception of the contract term and funds the account in an amount equal to the contract limit (less certain deductions). This funding mechanism provides the client with readily accessible funds in the event of a loss that are segregated from the other assets of the market and remains available even if the market becomes insolvent. A collateralized reinsurance transaction also requires a pre-negotiated release of assets in the trust fund back to the market if there are no losses or if loss development is less than the contract limit.

At the time of contract inception, the collateralized market will appoint a bank as trustee to establish a trust account funded to equal the limit of reinsurance coverage or an amount negotiated and agreed to by the collateralized market and the client. These trust agreements are negotiated between the bank, the collateralized market and the client, and must be compliant with local regulations to ensure clients can take proper credit for reinsurance. This process can take time to draft, review and finalize for signature. Guy Carpenter's vast experience in structuring such trust accounts can help to streamline the process of establishing a trust account and negotiating a trust agreement with the bank trustee. Occasionally there may be a dual trust requirement on the placement, which may require a separate Collateral Holding Agreement for the collateralized market. The Guy Carpenter broker will verify that the necessary wording and documents are in place in relation to the reinsurance placement, the trustees and any state-specific mandates. Guy Carpenter's extensive experience in structuring collateralized transactions can help to guide clients and streamline the process.







# IV. CONCLUSION





### **IV. CONCLUSION**

Although the future direction of capital flows and (re)insurance pricing in the years ahead is impossible to predict, the new formats and structures for risk transfer created by the ILS and collateralized reinsurance markets have become well-established elements of the risk transfer landscape. Guy Carpenter and GC Securities are committed to assisting our clients in navigating and understanding these innovative forms of risk transfer and to finding the optimal form of risk mitigation from the vast array of potential solutions across all markets.

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