THE DEVELOPING RELATIONSHIP BETWEEN THE CATASTROPHE BOND AND TRADITIONAL REINSURANCE MARKETS

by

Roland C. Goss

April 22, 2013

The past twelve months have seen significant development in both the catastrophe bond and the traditional reinsurance markets. The cat bond market has matured and developed, there has been a $35 billion infusion into the reinsurance market, and price competition has developed between the markets. The recently released analyses on the first quarter of 2013 from three major reinsurance brokers active in these markets, Aon Benfield, Guy Carpenter and Willis Re, along with anecdotal evidence from specific transactions and companies, demonstrates that the markets are having a marked effect on each other, with increased price competition and service that has inured to the benefit of cedents.[1]

I. The Development of the Cat Bond Market

The cat bond market continues to be robust. A large dollar amount of bonds matured during the first quarter of 2013, and all of the new issues during that quarter came from ceding insurers which previously had participated in the cat bond market. Nine cat bonds are reported to have been issued during the first quarter of 2013.[2]

The new cat bond issues reinsured a variety of risks, including medical benefit claims levels, United States hurricane risks, Florida hurricane risks, Louisiana hurricane risks, North Carolina hurricane risks, earthquake risks generally and New Madrid earthquake risks. Some cat bonds have

---

[1] *See* Aon Benfield's , *Executive Summary – Alternative Market Capital Flows and Record Reinsurance Capital Drive Materially Better Terms for Reinsurance Buyers* (April 1, 2013) (available at http://thoughtleadership.aonbenfield.com/Documents/20130402_re_market_outlook_april_1_external.pdf), Guy Carpenter, *April 1 Renewals See Reinsurance Pricing Stabilize Amid Dynamic Capital Growth* (April 9, 2013) (available at http://www.gccapitalideas.com/2013/04/09/april-1-renewals-see-reinsurance-pricing-stabilize-amid-dynamic-capital-growth/), and Willis Re, *1st View* (April 1, 2013) (available at http://www.willisre.com/documents/publications/Reinsurance/Willis_Re_1st_View_April_Renewals_report442013.pdf).

[2] *See* http://www.artemis.bm/deal_directory/. The Artemis alternative risk transfer blog has detailed stories concerning new and outstanding cat bonds, other alternative risk transfer vehicles, their relationship with traditional reinsurance and a comprehensive deal directory.

covered more than one risk. For example, Nationwide Mutual had two bond issues in the first quarter of 2013 that covered both hurricane and earthquake risks, and The Cincinnati Insurance Company ceded both New Madrid earthquake and severe convective storm or tornado risks to a new cat bond.[3] The conventional wisdom is that bonds which have a diversity of risks or risk locations tend to have greater market appeal. However, even most of the new cat bonds with a single insured risk and a narrow geographic territory reportedly have been substantially oversubscribed.

While part of the increased activity in the cat bond market no doubt stems from the increasing understanding and maturity of this market, the increased demand for these collateralized securities also has to do with the low interest rate environment the United States and the rest of the world has been living with over the past five years. Institutions, which are the target market for cat bonds, have been willing to take on more risk in order to achieve a much better return than is available in the investment grade securities market.[4]

The vast majority of the new cat bonds featured indemnity triggers. One cat bond, reinsuring Turkish earthquake risks, was issued with a parametric trigger. While parametric triggers were prevalent in the early years of the cat bond market, their use in cat bonds has become increasingly scarce.

New cat bonds have included new and interesting features, which may increase the risk of loss to bond holders but provide added business flexibility to the ceding insurers. The fact that issues with such new features still are oversubscribed is a testament to the strength of the demand for cat bonds. For example:

- Expansion of the scope of ceded risks: The parametric trigger on the Turkish Catastrophe Insurance Pool multi-year bond, Bosphorus 1 Re, is based upon data from selected geographic points in the risk area. The bond provides the option to increase the number and geographic dispersion of such data points during one of the annual resets, which would effectively expand the geographic scope of the ceded

[3] *See* http://www.artemis.bm/blog/2013/02/12/cincinnati-financial-reveal-details-of-trigger-points-for-skyline-re-cat-bond/, http://www.artemis.bm/deal_directory/skyline-re-ltd-series-20131/, http://www.artemis.bm/deal_directory/caelus-re-2013-ltd-series-20131/, and http://www.artemis.bm/deal_directory/caelus-re-2013-ltd-series-20132/.

[4] Cat bonds frequently are rated by Standard & Poor's. Although such ratings are not always made public, the two tranches of the medical benefit claim bond sponsored by Aetna Life reportedly were rated BB+ and BBB+ (which might be considered a low investment grade), while the hurricane and earthquake risk bonds reportedly were rated at below investment grade, from B to BB+. The Artemis blog's deal directory may include a reference to the bond's rating if the rating is available. *See* http://www.artemis.bm/deal_directory/.

risks.[5] The market's acceptance of the potential expansion of the scope of the insured risks during an annual reset is an interesting development.

- Longer maturity: Previously issued cat bonds typically have two or three year maturities. The new cat bond covering risks ceded by Louisiana Citizens Property Insurance (Pelican Re Ltd. 2013-1) has a longer four year term.[6] Given the almost historically low pricing on the new bonds being issued this year, the business benefit to a cedent of locking in such low pricing for a fully collateralized reinsurance cover for four years is obvious.

- Flexible attachment points: The attachment points of different cat bonds vary widely. For example, Pelican Re Ltd. 2012-1 had a relatively low attachment point of $200 million, but the new 2013 bond reportedly attaches at $389 million.[7] However, the 2013 bond reportedly includes a feature which permits Louisiana Citizens to change the attachment point to facilitate the overall management of its reinsurance facilities, potentially moving the attachment point lower, a feature frequently described in reinsurance parlance as a drop down feature.[8] Everglades Re 2013-1, covering risks ceded by Florida Citizen's Property Insurance, provides Citizens with unusual flexibility in the setting of the attachment point on the second year reset in a narrow band that is not limited by the modeling of the risks, providing Citizens with greater flexibility in constructing its reinsurance layers.[9]

Perhaps the biggest news in the cat bond market in the first quarter of this year has been the dramatic reduction in the cost of new bonds to ceding insurers. When a new cat bond is taken to market, the ceding insurer or sponsor and the selling brokers target a desired size and price for the issue. The new cat bonds issued in the first quarter of 2013 have "upsized," or increased in dollar size from the target size, by an average of 40% over the initial target.[10] At the same time, however, the coupon rate paid to investors has declined by an average of 16%.[11] This combination, along

---

5 *See* http://www.artemis.bm/blog/2013/04/11/bosphorus-1-re-cat-bond-upsizes-to-250m-price-guidance-drops/ and http://www.artemis.bm/deal_directory/bosphorus-1-re-ltd/.

6 *See* http://www.artemis.bm/deal_directory/pelican-re-ltd-series-20131/.

7 *See* http://www.artemis.bm/blog/2013/04/05/pricing-tempts-louisiana-citizens-into-pelican-re-2013-cat-bond/.

8 *See* http://www.artemis.bm/blog/2013/04/11/pelican-re-2013-cat-bond-features-novel-on-request-drop-down/.

9 *See* http://www.artemis.bm/blog/2013/04/02/citizens-hails-40-cost-saving-made-with-everglades-re-2013-cat-bond/ and http://www.artemis.bm/deal_directory/everglades-re-ltd-series-20131/.

10 *See* http://www.artemis.bm/blog/2013/04/09/catastrophe-bonds-upsize-by-40-on-average-so-far-in-2013/.

11 *See* http://www.artemis.bm/blog/2013/04/10/catastrophe-bond-coupons-drop-by-average-16-during-marketing-in-2013/.

with the fact that some new issues have been oversubscribed by 100% or more, reflects the high demand that such bonds continue to have.[12]

There is no doubt that the cat bond market has been developing in ways that are advantageous to ceding insurers, in terms of the size of the risk transfers, pricing, bond features and the number and diversity of bond purchasers. While the ceding insurers in such bonds have to date mostly been large insurers, some commentators are beginning to suggest that due to the reduction of the pricing and the transaction costs of such bonds, this market may begin to see participation by smaller ceding insurers.[13] It has also been suggested that other property and casualty risks may be securitized.[14] Such developments would be a marked change in the cat bond market.

II. The Development of the Traditional Reinsurance Market

Some traditional reinsurers are viewing the development of the cat bond market as a threat to their operations,[15] which is understandable as an increasing number of insurers of cat risks use the capital markets to cover some of their most volatile risks. This area of risk transfer has, for a long time, been dominated by the traditional reinsurers, with occasional forays into the market by hedge funds and other sources of capital that frequently have been limited to short term participations or specialized involvement through side cars or specialty start up reinsurers.

The cat bond market provides ceding insurers with fully collateralized, multi-year risk transfer facilities, which of course is a highly desirable type of cover for a ceding insurer, especially at the same time that revisions to the Credit for Reinsurance Model Act and Regulations likely will result in a decline in the ability of cedents to require fully collateralized traditional reinsurance facilities. Given the very restrictive investments permitted for the funds associated with cat bonds and restrictive reinsurance trust agreements, most, if not all, cat bonds permit the ceding insurer to take full financial statement credit for cessions to the capital markets. The unease of some traditional reinsurers probably is increased by the increased flexibility of cat bonds, the high

---

[12] Ceding insurers renewing their participation in the cat bond market in the first quarter of this year generally experienced risk adjusted price decreases of 20% to 70% for U.S. hurricane and earthquake risks. *See* http://www.artemis.bm/blog/2013/04/03/ils-pricing-drops-by-up-to-70-as-reinsurance-capital-rises-aon-benfield/. For example, Florida Citizens' 2013 Everglades Re cat bond reportedly came in at a final cost to the ceding insurer of 40% less than the prior year's Everglades Re 2012 cat bond, and was two times oversubscribed. *See* http://www.artemis.bm/blog/2013/04/02/citizens-hails-40-cost-saving-made-with-everglades-re-2013-cat-bond/.

[13] *See* http://www.artemis.bm/blog/2013/04/03/ils-pricing-drops-by-up-to-70-as-reinsurance-capital-rises-aon-benfield/.

[14] Aon Benfield, *Reinsurance Market Outlook* (April 1, 2013) at 1 (available at http://www.aon.com/reinsurance/).

[15] *See* http://www.artemis.bm/blog/2013/04/02/emerging-model-of-fast-capital-threatens-traditional-reinsurers-willis-re/.

demand for such bonds, and the example of Allstate Insurance stating that it was reducing its traditional reinsurance in favor of increased participation in the cat bond market.

The traditional reinsurance market has not been static, however. Analyses by reinsurance brokers report that there has been an infusion of approximately $35 billion into the traditional reinsurance market.[16] Total capital of reinsurers was reported to be $505 billion as of December 31, 2012, the highest level ever reported.[17] With substantial risks being shifted to the capital markets, however, reinsurers face questions of how to put their capital to effective use.

One result of these changes has been a soft reinsurance market, with significant downward pressure on reinsurance rates, at least in the United States.[18] Some reinsurers reportedly have altered their business models, providing services as fund managers, deploying third-party capital through side cars and other vehicles or sponsoring cat bonds themselves.[19] For example, Munich Re offers "risk trading" services through insurance linked securities issuance and trading consulting services to compliment its traditional reinsurance solutions.[20] Munich Re, Swiss Re and Zurich American sponsored at least six cat bonds between July 2012 and December 2012.[21] This is not a new development. In the early years of the cat bond market reinsurers sponsored many of the issues to obtain retrocessional coverage. It is ironic that a capital market that some reinsurers helped to develop has become a source of serious competition for reinsurers.

III. The Cat Bond And Traditional Reinsurance Markets Are Increasingly Competitive

In its "Reinsurance Market Outlook" after the end of the first quarter of 2013, reinsurance broker Aon Benfield stated that "it is now clear that the ILS and collateralized markets can be competitive with traditional reinsurance in peak zones."[22]

---

16 *See* Willis Re, *1st View* (April 1, 2013) at 3 (available at http://www.willisre.com/documents/Media_Room/Publication/Willis_Re_1st_View_April_Renewals_report442013.pdf) and http://www.artemis.bm/blog/2013/04/02/emerging-model-of-fast-capital-threatens-traditional-reinsurers-willis-re/.

17 Aon Benfield, *Reinsurance Market Outlook* (April 1, 2013) at 2 (available at http://www.aon.com/reinsurance/).

18 *See* broker Guy Carpenter's analysis of the market at http://www.gccapitalideas.com/2013/04/09/april-1-renewals-see-reinsurance-pricing-stabilize-amid-dynamic-capital-growth/.

19 *See* Willis Re, *1st View* (April 1, 2013) at 3 (available at http://www.willisre.com/documents/Media_Room/Publication/Willis_Re_1st_View_April_Renewals_report442013.pdf) and http://www.artemis.bm/blog/2013/04/09/ability-to-attract-deploy-third-party-capital-important-for-reinsurers-aon-benfield/.

20 *See* http://www.munichre.com/en/reinsurance/business/non-life/risk_trading/default.aspx.

21 *See* http://www.artemis.bm/deal_directory/.

22 Aon Benfield, *Reinsurance Market Outlook* (April 1, 2013) at 1 (available at http://www.aon.com/reinsurance/).

Ceding insurers which have participated in both the cat bond market and the traditional reinsurance market are finding that the markets are increasingly competitive, which may be one reason that the effective rate on line being paid by ceding insurers in both markets has been declining significantly. One broker has concluded that the cat bond market has consistently offered more aggressive rates than the traditional reinsurance market.[23] Anecdotal evidence has been seen of ceding insurers shifting risk transfers from one market to the other, while at the same time participating in both to maintain relationships and market access and foster competition between the two markets.

The most recent developments of the cat bond market have occurred during years in which there has been a relatively low level of losses from hurricanes and other events covered by cat bonds and low returns for investment grade investments. It remains to be seen how the cat bond and reinsurance markets will fare when there are heavy reinsured losses or returns on investment grade investments increase.

****

This article does not constitute legal or other professional advice or service by JORDEN BURT LLP and/or its attorneys.

Roland Goss is a partner with Jorden Burt LLP, resident in its Washington, DC office.

[23] Aon Benfield, *Reinsurance Market Outlook* (April 1, 2013) at 6 (available at http://www.aon.com/reinsurance/).