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2014 Global Insurance-Linked Securities (ILS): Two Steps Forward, One Step Back?

By Charles Tsai

In June 2014, Warren Buffet said that “Berkshire Hathaway Inc. is avoiding writing hurricane insurance in Florida because premiums have been pushed too low.”[1] Grey swan events are no longer within some insurers’ risk appetites. However, capital markets seemed to have more tolerance than Warren Buffet as they invested in these certain mysterious creatures called insurance-linked securities (ILS). Such behavior and trend emerged against the backdrop of quantitative easing (QE) followed by tapering. Speculations of the ILS market’s performance in a post-QE era require some historical review. The subsequent discussion is a hand-waving overview of global ILS-related events in 2014.

Insurance-linked securities are insurers’ instruments for transferring non-market risks to the capital markets. In essence, it is a form of securitization that (ideally) transfers risks from insurers to the capital markets. Investors put their chips in 1) the prediction that non-market risks are not as ‘bearish’ as sponsors’/cedents’ expectations, and 2) the hypothesis that non-market risks are not closely related to market risks. In the life insurance industry, the prominent transactions are longevity swaps, where investors bet that people do not live as long as the sponsors projected. In the property & casualty (non-life) industry, investors bet that environmental black swan events will not evolve into grey swan events as cedents modeled. Furthermore, investors assume that events such as aviation tragedies and terrorism are not correlated with oil prices and other economic indicators.

The low number of players in the insurance securitization market has even kept its reporting standards in an early stage. In November 2014,[2] the IFRS Interpretations Committee (IFRIC) discussed the measurement of longevity swaps for defined benefit pension plans. The two major measurements approaches regard a longevity swap as either 1) a single instrument to be measured at its fair value, or 2) a combination of two components (variable and fixed legs) subject to another basis of measurement. Different paragraphs of IAS 19, Employee Benefits, cover these two approaches. IFRIC made two conclusions. First, entities can tentatively measure longevity swaps “at fair value as part of plan assets, applying IAS 19 and IFRS 13.”[3] Second, IFRIC will not add such issue to its agenda because “it is not currently widespread and material diversity in practice is not observed.”[2] Therefore, it is unclear whether standard will adapt in the near future should ILS become more prevalent. The option of the investment method (as for life settlements under FASB Staff Position 85-4-1[4]) may be unlikely, but at least there will be clarifications.

The following brief case studies will explore those minority pioneers that have been involved in ILS

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transactions in 2014. The *raison d'être* for these transactions can be sourced from the parties' strategic initiatives. Swiss Re's 2006 Sigma report[5] and past SOA exams[6] have been inspirational introductions to the opportunities and challenges in such transactions.

BT PENSION SCHEME, PRUDENTIAL FINANCIAL (US), AND BRITISH LONGEVITY RISKS

According to United Kingdom's Office for National Statistics,[7] a newborn baby girl in 1998 had a life expectancy of 80 years and a newborn baby boy 75 years. A decade later in 2008, the respective life expectancies are 82 years and 78 years. In Queen Elizabeth II's 2013 speech, she noted "the legislation will increase the state retirement age to 67 between 2026 and 2028."[8]

Given such evident longevity risks, British multinational BT Group's BT Pension Scheme entered into a GBP 16 billion longevity swap (advised by Aon Hewitt) with the American insurer Prudential Financial in July 2014.[9] It "matched the total volume of longevity risk activity in 2013, and was double that of the UK over the same period."[10] It covers more than a quarter[9] of the pension scheme's longevity exposures. Unlike some transactions that involved investment banks (such as JP Morgan in 2011[11]), it involves "a wholly owned (by BT) captive insurance vehicle in Guernsey that traded with the scheme on one side and Prudential as reinsurer on the other."[10] Such structures decreased fees and counterparty risks.

DELTA LLOYD GROUP, RGA INC., AND DUTCH LONGEVITY RISKS

According to a 2010 report by Leyden Academy, "Japan has the highest life expectancy at birth...at approximately 79 years for men and 86 years for women."[12] The same report notes that the corresponding figures for the Netherlands are 77 and 81 years. Using data from 1850 to 2010, the report also highlights that Dutch "life expectancy has increased by almost 2.5 years per decade and that there is no indication yet that the increase in life expectancy is levelling off."

Delta Lloyd Group is a Dutch insurer with significant exposure to such longevity risk. In both of its ORSA report and its 2013 annual report, it identified longevity risk as one of its five major risks.[13] It had EUR 1.8 billion set aside as additional longevity provisions by the end of 2013, and it "does not yet use reinsurance for longevity risk."[13] However, the 2013 report also noted that the Group is "expecting decrease in mortality rates for the next 50 years," and was "considering various forms of longevity hedges and transfers."

In August 2014, Delta Lloyd Group signed a EUR 12 billion longevity swap directly with the Reinsurance Group of America (RGA Inc.).[14] The transaction spans six years,[14] an advantage over short-term coverages of reinsurance contracts. According to a RGA Managing Director, it is a "first-of-a-kind index based transaction in the EMEA region."[14] Delta Lloyd Group's CEO highlighted the transaction's benefits in maintaining the Group's ratings and compliance with regulatory requirements (such as its IGD ratio).[14]

AVIVA, SWISS RE, SCOR, AND BRITISH LONGEVITY RISKS

Aviva is one of the leading British insurance companies in the world. In Aviva's 2013 annual report,[15] there is a summary stressing the sensitivity of Aviva's global Market Consistent Embedded Value (MCEV) and Value of New Business (VNB) to a 5 percent decrease in mortality/morbidity rates in its annuity business. MCEV plummeted from the 2013 reported value of GBP 14,990 MM to a projection of GBP -405 MM. VNB fell from the 2013 reported value of GBP 593 MM to a projection of GBP -16 MM. The same report noted that Aviva was already utilizing reinsurance to mitigate and transfer such longevity risks.

In March 2014, Aviva completed a GBP 5 billion longevity swap with Swiss Re and SCOR.[16] It covers 19,000 members under the Aviva Staff Pension Scheme.[16] Swiss Re's Global Head of Longevity Solutions shared that the transaction will bring diversification benefits to its mortality business, and transfer relevant assets and liabilities from Aviva's to Swiss Re's balance sheets.[16]

ZENKYOREN, NAKAMA RE LTD., AND JAPANESE EARTHQUAKES

In March 2011, a 9.0-magnitude earthquake ("Great East Japan Earthquake") shattered Japan.[17]. Zenkyoren (National Mutual Insurance Federation of Agricultural Cooperatives) was one of Japan's non-life insurers impacted by the catastrophe. According to its 2013 annual report,[18] Zenkyoren paid JPY 904 billion in building endowment insurance claims as of March 2013. In the same report, Zenkyoren noted that it has "secured sufficient collateral for payments...through reinsurance coverage and reserve provisions."

In May 2014, Nakama Re Ltd. issued a catastrophe bond that allows Zenkyoren to cede USD 300 MM of fully-collateralized Japanese earthquake reinsurance provision.[19] Aon Benfield Securities is the structuring agent, and the bond matures four years later in March 2018.[19] The bond covers homeowners and buildings in Zenkyoren's personal lines.[19]

ASSICURAZIONI GENERALI S.P.A., LION I RE LTD., AND EUROPEAN WINDSTORMS

Assicurazioni Generali S.p.A. is a major Italian insurer with significant operations in Europe and Asia. In April 2014, it sponsored a EUR 190 MM catastrophe bond as protection against European windstorms.[20] A special purpose vehicle in Ireland named Lion I Re Ltd. issued the bond and will cover the risks for three years.[20] Fitch highlighted that "over 80 percent of the catastrophe bond's exposure is located in three countries: Germany, France, and Austria."[20] According to GC Securities' Global Head of ILS Structuring, "Lion I Re pioneers a new methodology to allow cedents to access the capital markets at any point the during calendar year but only pay an annual premium rate that adjusts to reflect the commensurate amount of risk contributed for such portion of a partial calendar year period."[20]

CCRIF, WORLD BANK, AND CARIBBEAN HURRICANES AND EARTHQUAKES

The Caribbean Catastrophe Risk Insurance Facility (CCRIF)[21] is a segregated portfolio company that funds Caribbean governments should they be hit by hurricanes and earthquakes. In June 2014, the World Bank issued its first catastrophe bond that protects CCRIF's 16 member islands over three years.[22] Such unconventional deal was not issued via special purpose insurers. According to disclosures, "the notes will pay investors a coupon of LIBOR plus 6.3% to 6.5%."[22]

NEW YEAR, NEW STRUCTURES?

The ILS market seems to still be in its baby steps. As more mortality figures and catastrophe statistics emerge, it appears that the more we learn, the more uncertain we are about what we are going to experience. It is always easier to have the benefit of hindsight five years later when these ILS transactions have matured. A more practical goal (than speculating the market to dry up) is to monitor whether such risks will give birth to new ILS structures by the end of 2015. If so, perhaps IFRS and other reporting standards will evolve and adapt with Mother Nature. □

ENDNOTES

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