

Insurance linked securities

Showcasing the convergence of traditional reinsurance with capital markets

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Historically, there has been a symbiotic relationship between capital markets and the insurance industry, with the insurance company seeking good investment managers to help boost profits and the investment manager considering large reinsurance companies with their excess investable capital as much sought-after customers.

While these relationships continue to this day, there have also been recent developments which make these relationships more complicated and potentially more profitable for both groups. It is also fair to say that many of these developments have been concentrated in a few select jurisdictions that cater to both the capital markets and the reinsurance industry.

In the past, an investor's ability to participate in the insurance or reinsurance business was limited to buying shares in a publicly traded insurance or reinsurance company. There is undoubtedly overlap in the insurance and reinsurance business, with some insurers writing both insurance and reinsurance business. In the context

of this article, let us consider a reinsurance company as simply one insurance company that provides insurance to another insurance company. Also, it is common practice for reinsurance companies to be set up in jurisdictions with favourable tax rates and efficient regulatory environments, such as Bermuda and the Cayman Islands, to provide the most cost-effective use of capital. Bermuda in particular will also have a high level of quality service providers familiar with the very specific operating requirements common in the reinsurance markets. In recent years, there have been a number of developments in investment products that have enabled investors to invest directly in the underlying risks inherent in an insurance contract.



This has also served to transfer risk away from the insurance companies into the capital markets; which one could argue is a positive development and a more efficient use of capital given the relative size and ability of the capital markets to absorb losses when a major catastrophic event such as a hurricane or earthquake occurs.

Insurance-linked securities

As residents of Florida were cleaning up the aftermath of Hurricane Andrew in 1992, unbeknownst to them, a new market was coming to life to help cover the insured costs of such natural disasters and to provide capital markets a chance to participate in the risks and rewards associated with catastrophe-based insurance. At the time, Hurricane Andrew was the costliest hurricane in United States history, causing insurance and reinsurance entities to seek new ways to raise capital and to cede some of the risk related to these catastrophes.

The ultimate result of this search was to securitise this risk into an investible product, which as a broad asset class, are commonly referred to as insurance-linked securities, or ILSs. The general characteristics of an ILS involve a specific insurance/reinsurance policy or group of policies with a similar underlying risk, such as a Florida hurricane, packaged in such a manner that the premiums from the underlying policies are offered as returns to investors. Of course, the downside risk is now also transferred to the investor.

The notion of ceding this risk into an investment was first enacted through opaque, over-the-counter transactions. However this has evolved into catastrophe or cat bonds. Cat bonds have arguably become the largest element of the ILS spectrum and are certainly the most transparent element regarding pricing information, underlying risks ceded to the investment public and market size.

In investment terms, cat bonds are bonds whose principal payments depend on the non-occurrence of a predefined catastrophic event or other measurable risk. A cat bond is conceived when an entity such as an insurance or reinsurance company, the sponsor, wishes to cede a specified insured risk. The risk will generally be transferred to a Special Purpose Vehicle (SPV) via some form of reinsurance contract. The SPV then floats a bond to the investment public. This bond will differ from a typical bond in that the risk of default does not lie with a credit event at the underlying company, but instead is based on a specified triggering event, such as a California earthquake.

If this triggering event occurs, then, for the losses under policy under the terms of the reinsurance contract, the SPV pays the ceding reinsurance company the full national value of the bonds. In return for taking on this focused risk, investors in this catastrophe bond are compensated by above-average interest rates. A typical catastrophe bond includes a floating interest rate, calculated by a base rate such as the U.S. Treasury Bill rate plus a spread, which is typically between 5-15%.

Although the industry saw its seeds begin to grow in the early to mid-1990s, the major surge in the industry came after the 2005 hurricane season. Hurricanes such as Ivan, Frances, Katrina, Rita, Wilma and Emily contributed over \$80 billion in insured losses. In response, rating agencies increased their capital requirements for reinsurance companies. As a corollary, these entities found themselves in need of further sources of capital, and at the same time, a decrease in the market capacity for further ceding of risk via typical means. Investors, on the other hand, were drawn to this market based on the prospective high rates of return, with the returns being non-correlated to general market returns.

The market continued to grow and diversify in its offerings. Alongside cat bonds came instruments such as industry loss warranty, a form of further packaging risk into a contract which no longer covered against risks under a specific contract, but instead covering against industry wide losses.

On the investor front, specialised ILS funds were emerging. Their funding was heavily drawn from institutional investors such as pension funds. The draw towards high returns linked with low correlation proved to be desirable for investors in search of longevity in their returns. During the 2008-2009 credit crisis, the ILS sector proved its resilience, with annual returns of 3.92% and 9.11% respectively, according to the Eureka ILS index. During this same time span, the S&P 500 lost 34.5% in 2008 and gained 35.0% in 2009. The low, if not zero, beta characteristics of the ILS field prompted a further influx of professionally managed capital seeking safe havens from uncontrollable market fluctuations.

In the context of this article, let us consider a reinsurance company as simply one insurance company that provides insurance to another insurance company

There are risks associated with investments in ILS that should not be overlooked. These risks include (but are not limited to):

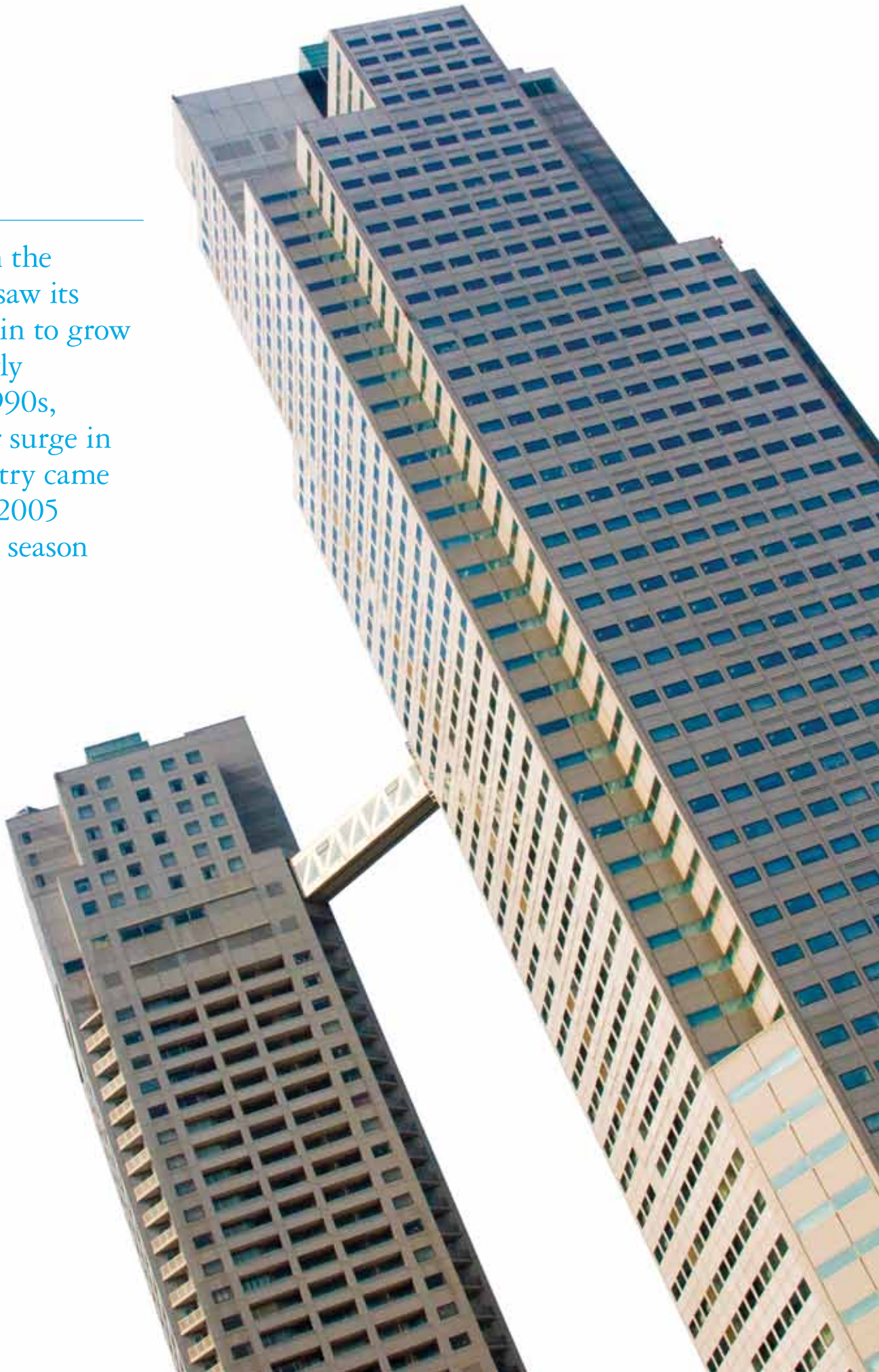
- Investors may lose all or a portion of their investment in the ILS if a triggering event occurs
- In some cases, the maturity date of the ILS may be extended without the prior consent of the investor
- The ILSs may be redeemed before their maturity date at the issuer's option
- Investment in ILSs may have unforeseen accounting and tax consequences for investors
- If the issuer of the ILS becomes insolvent, investors may lose a portion or all of their investment
- A limited secondary market
- Ratings are subject to revision by the credit rating agency

Current market

2012 concluded the second largest historical year of issuance with approximately \$6.3 billion of bonds, behind only 2007's record notional issuance. This highlighted the peak interest from all participants in the ILS market for its continued growth. The best example of this showcased the largest single catastrophe bond issuance in history. The Everglades Re catastrophe bond, originally announced at \$200 million, was upsized shortly after announcement to \$250 million, and subsequently to \$500 million. Due to investor demand, the float of this bond eventually settled at \$750 million. Investor demand was understandable, as the bonds carried a coupon of US Treasury Bill rates plus 17.75%. The issuer, Citizens Property Insurance Corporation, found a way to transfer a portion of their Florida specific hurricane risk from their books, while investors were generously compensated for this focused risk.

The ILS market has developed beyond a niche market for insurers attempting to raise capital after extreme events to become a fundamental programme in a reinsurance companies risk management process, while providing a unique asset class for investors. Pension funds and retirement schemes lead the way in terms of new investors in this space. The flow of pension fund investors is expected to escalate over the next few years, pushing this market further.

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Many ILSs are listed on a stock exchange, with the Cayman Islands and Bermuda competing for much of the new business. In 2012, there were 27 special purpose insurers set up in Bermuda to handle new issuances of cat bonds. Meanwhile, the Cayman Island Stock Exchange had cat bonds and other ILS vehicles listed with a market value of nearly \$10 billion. The Chicago Board of Trade offered exchange traded catastrophe derivatives and investors may now invest in exchange traded options and futures.

An indication of the growth can be shown by the previously mentioned issuance of approximately \$6.3 billion in cat bonds in 2012, with over \$1 billion listed on the Bermuda Stock Exchange (BSX) in the last six months of 2012 alone. Jurisdictions such as Bermuda and the Cayman Islands are well-placed to host this business as they have a unique blend of investment management and insurance talent operating in a regulatory environment already actively serving the world's ILS market.

Forming your own reinsurance company

Further evidence of the convergence of the insurance and alternative investment universes can be found in the trend of hedge fund managers, including those at Third Point, Greenlight, SAC and Paulson & Co., setting up offshore reinsurance companies. A partial driver for these transactions is the potential tax deferrals afforded under the existing U.S. taxation rules of reinsurance companies set up in offshore jurisdictions. This is not a new concept, with Warren Buffet being the most notable investor to see the opportunities of merging his investment expertise with the huge investment portfolios generally maintained by an insurance company as early as the 1960s.

Buffet saw the opportunity to make money from the investment returns of the accumulated insurance premiums, or float, that an insurance company must maintain in order to pay future claims. At a basic level, given the large reserves a reinsurance company must maintain to pay future claims, one could argue a reinsurance company is just an investment company that also writes insurance providing access to large pools of cash.

What is unique about the current crop of reinsurance starts-ups is that the investment managers are not investing in an existing reinsurance company, although that may still happen, but they are choosing to capitalise the reinsurance company with their own capital. This immediately turns the investment into an equity investment which would generate long-term capital gains when the investment is ultimately sold. This could be years down the line, hence the potential tax deferral. While investors in cat bonds are essentially taking a gamble that a single triggering event will not occur, an investment in a reinsurance company provides a more balanced investment approach with the risk spread in line with the company's underwriting philosophy. Once the company is set up and starts to write reinsurance business, both the excess capital and float of the reinsurance company are invested back into the sponsoring fund. The fund is then able to collect fees from managing this money while at the same time the fund manager is able to control the investment strategy of the company it effectively owns.



Future state

The continued development of the market has led to some fast-paced innovation in the space. Not only in terms of how the trigger event may be measured on a cat bond but also in the types of risks being insured. Historically, the risks covered by these instruments were more commonly associated with catastrophic events, such as hurricanes. This is not expected to change as demand for natural catastrophe coverage is expected to remain strong, but it is anticipated that demand for protection against other risks, such as pandemics and life, will become more common-place and further fuel the space.

At the same time, existing products, such as cat bonds, are finding new issuers beyond the typical insurance/reinsurance entities. Entities such as workers compensation boards in earthquake prone areas, or even lottery companies have issued catastrophe bonds over the past year.

From humble beginnings following the aftermath of a major natural disaster, the overall size of the ILS market, including cat bonds, ILWs, sidecars and collateralised reinsurance arrangements is now estimated by Conning and Company as approximately 15% of the total property and catastrophe market, equating to about \$35 billion in market size. In addition to the capital allocated by the dedicated ILS fund managers and the infusion of capital from the traditional hedge fund managers, the convergence of alternative asset management and insurance is undeniable.

To the point:

- An examination of this relatively new market and products expanding under the insurance-linked securities
- ILS appeal to institutional investors due to its nature as a low or zero correlation asset class when compared with traditional investment classes
- Like any investment, there are risks
- Reinsurance start-ups are beginning to take hold as an alternative for large capital market participants as a direct participation method into the ILS field
- Transferring risk away from insurance companies to capital markets as a new means of transferring risk to willing market participants
- Future growth potential for this industry is showing some very promising signs due to new launches and the size of those launches