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Securing tomorrow
The ripple effects of insurance-linked securities in the reinsurance market

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New capital, new technology, new ways to reinsure risks

If the definition of insurance at its most basic is the spreading of the risk of loss associated with a particular event among as many participants as possible, the practical business of insurance has often meant marrying the skill set necessary to manage that risk with the capital necessary to support it.

That marriage of skill sets—actuaries, underwriters, distributors, and others—with capital, is the basis of the modern insurance industry. However, recent changes may have opened that traditional business model to the risk of a disruptive innovation.

An observer looking for a niche in the insurance industry vulnerable to disruption could do worse than focusing on the reinsurance sector. This vital sector of the industry, unlike consumer or even general business-driven sectors, is a well-defined area with sophisticated buyers and sellers who are relatively few in number and thus relatively easy to target. With technology rapidly increasing both the information available to nontraditional market participants and the ability to manage, analyze, and utilize it, there appears to be clear potential for reducing friction.

Layer on a capital market seeking diversity for safety while still receiving an acceptable return, and the attractiveness of the risk- and insurance-linked securities (ILS) market becomes obvious.

This is where the reinsurance and capital markets converge, offering capital providers a place to invest with a reasonable return that barely correlates to most capital market risks, while offering the reinsurance market capital that may be at a lower cost than that available through traditional market participants.

One recent report noted that alternative capital now constitutes about 12 percent of global reinsurance capital. The report said that traditional capital was approximately $497 billion at the end of the first half of 2015, while alternative capital was $68 billion, and expected to double or more by 2018.[1]

In any market, a relatively new entrant commanding the equivalent of a 12 percent and rapidly growing market share could be expected to cause some dislocation and disruption of legacy players.

The most recent report on the US insurance market by the Federal Insurance Office (FIO) noted "the growing role of alternative risk-transfer capital in the insurance industry. While this remains a small share of the total capital committed to reinsurance underwriting, its growth continues to put downward pressure on reinsurance premiums. The past year has witnessed continued growth not only in catastrophe bonds and other insurance-linked securities, but a very rapid pace of growth in industry-loss warranties and collateralized reinsurance. Once considered an innovative market segment, these alternative forms of risk transfer appear to be taking on permanent presence in the insurance markets."[2]

Alternative capital, broadly defined, continues to enter the reinsurance market. Clearly, this marks a change from the traditional regulated reinsurer model and may lead to a redefinition of market roles. The question is what this means to the marketplace and to its participants, direct and indirect. This includes not just insurers and reinsurers, but regulators, consumers, and investors.

If one accepts, as the FIO seems to, that alternative capital is now a permanent presence in the markets, then participants may wish to keep in mind the words of the great biologist, Charles Darwin: "It is not the strongest or the most intelligent who will survive, but those who can best manage change."

In the short run, change may spell struggle, but in the longer run, it may mean progress. True, downward pressure on premiums and margins may have negatively affected reinsurers in the recent past, but reinsurers—like all participants in the market—can and must learn to adapt to the changes the entry of alternative capital has wrought. Those who most effectively adapt may find themselves with a new competitive advantage in this new marketplace.

[1] Aon Benfield, Inc., "Reinsurance Market Outlook: Supply Increase Pauses and Demand Set to Accelerate," September 2015.
[2] Federal Insurance Office, US Department of the Treasury, "Annual Report on the Insurance Industry," September 2015.

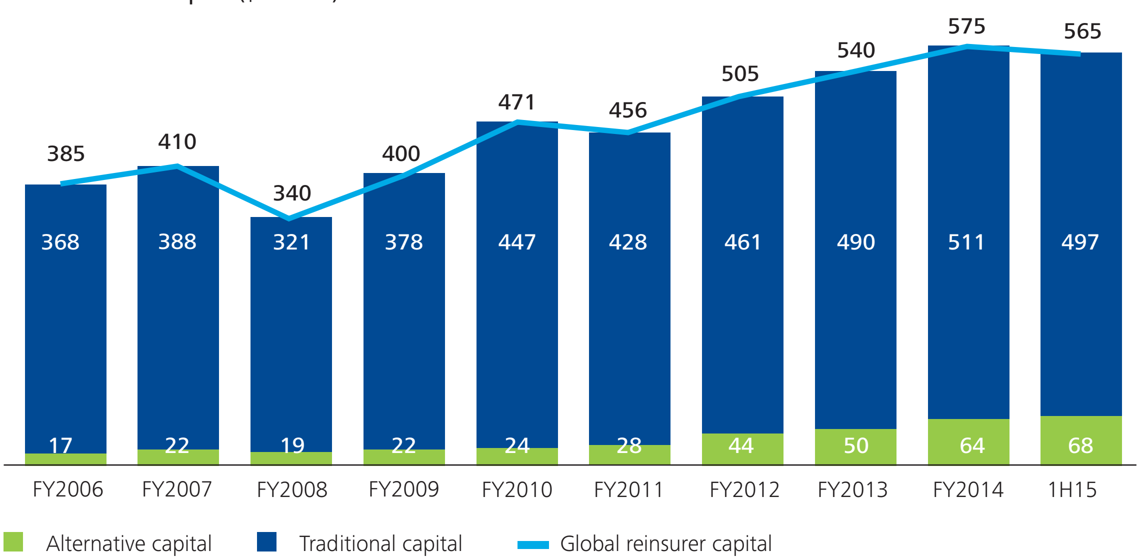
History and evolution of insurance-linked securities

What are insurance-linked securities? The National Association of Insurance Commissioners (NAIC) provides this definition: ILS are securities whose performance is linked to the possible occurrence of pre-specified insurance risks. ILS are an expansion of a class of securities originally known as catastrophe (or cat) bonds. While cat bonds remain the dominant type of outstanding ILS, there are also other non-cat-bond ILS in existence, such as those based on mortality rates, longevity, and medical-claim costs. ILS bonds may be used by an insurer, or any other form of risk-bearing entity (such as a corporation or government agency), in addition to, or as an alternative to, the purchase of reinsurance.[3]

The modern era of insurance-linked securities began in 1992 when Hurricane Andrew and a number of other natural catastrophes triggered a capacity shortage in the reinsurance industry. The search for additional capacity led to the creation of catastrophe bonds, issued beginning in the mid-1990s,[4] with the first rated bonds issued in 1997.[5]

Figure 1: Alternative capital (as a percentage of global reinsurer capital) continues to grow

Global reinsurer capital ($ billions)



Source: Aon Benfield Analytics, "Reinsurance Market Outlook," January 2015.

[3] National Association of Insurance Commissioners, "Capital Markets Special Report: A Comprehensive Overview of the Insurance-Linked Securities Market," May 4, 2012.

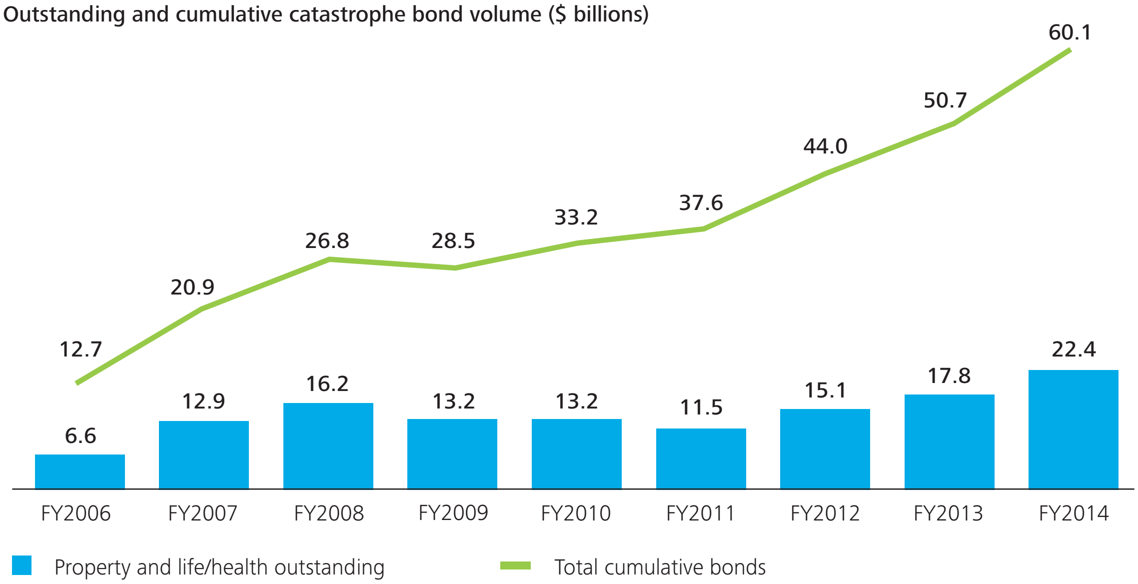
[4] "Perilous Paper: Bonds That Pay Out When Catastrophe Strikes Are Rising in Popularity," The Economist, October 5, 2013.

[5] Swiss Re Capital Markets, "What Are Insurance Linked Securities (ILS), and Why Should They Be Considered?," Presentation to the CANE Fall Meeting," September 2012.

As the FIO report noted, even almost 20 years later, alternative capital—including ILS, industry loss warranties (ILWs), collateralized reinsurance, and sidecars that allow outside investors to cover the risk and gain the benefit of a specific book of business—still remains a relatively small portion of the capital devoted to reinsurance underwriting, as shown in Figure 1; but its growth and its impact has been steadily increasing, as shown as the compound annual growth rate (CAGR) for alternative capital is 18 percent between the end of FY 2006 and FY 2014, as compared to only 4.2 percent for traditional capital. This is also evident in the growth of outstanding catastrophe-bonds volume that comprises the largest chunk of outstanding ILS, with a CAGR of 21.4 percent for the same period (Figure 2).

Figure 2: ILS issuance is growing year-over-year, with total outstanding volume at $60 billion at the end of 2014

Outstanding and cumulative catastrophe bond volume ($ billions)



Source: Aon Benfield Analytics, "Insurance-Linked Securities: Capital Revolution—Alternative Markets Fuel Dynamic Environment," September 2014.

While here we focus primarily on cat bonds, there are similarities with other alternative capital instruments. As mentioned previously, they offer investors exposure to an asset class that is largely uncorrelated to capital market risks. They all offer capacity in the reinsurance market, which may, in some cases, displace and possibly disintermediate traditional reinsurers.

So far, this additional capacity seems to be displacing traditional capacity, resulting in what the FIO report describes as "persistently lower premiums (that) are a product of at least two main factors. One factor is weaker demand from primary insurers, some of which are retaining more (i.e., ceding less) of the risks. The second factor is the continued growth in reinsurance market capacity."[6]

A third factor may be the relative lack of significant insured natural-catastrophe losses, to harden the market, cause ILS investors concern, or both. If one posits that only a significant loss event could cause investors concern about the safety of this asset class, then in the absence of a major series of natural catastrophes to trigger such a loss, investor concern is unlikely, especially given the history of ILS losses, or lack thereof.

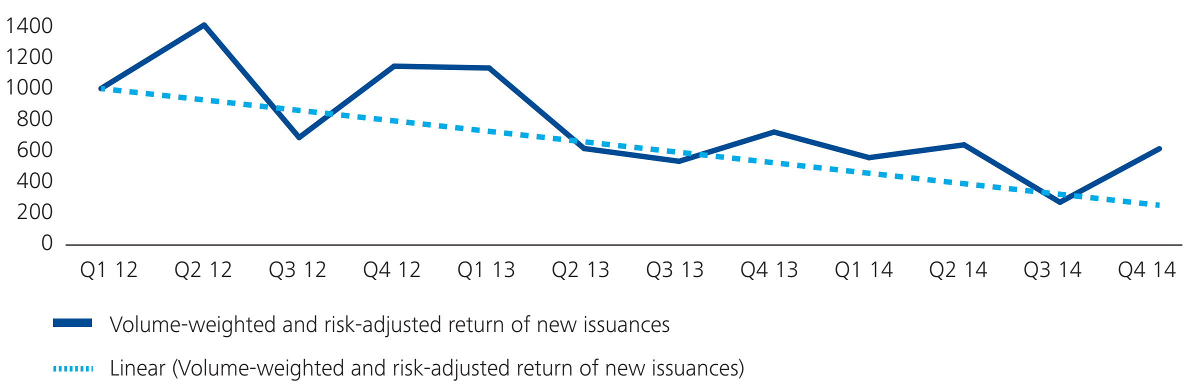
Since the catastrophe bond market's inception, ten transactions have resulted in a loss of principal to investors out of the more than 300 transactions that have come to market in its nearly 20-year history. Of these ten historical losses, six were the result of insured loss events and four were related to credit events in the vehicle's collateral due to the collapse of the firm responsible for guaranteeing the bond's collateral. The total size of the affected placements was $1.7 billion, with losses ranging from about $500 million total for a Japanese earthquake in 2008 and a Missouri tornado in 2010, to nine percent in Class C of a $405 million oil facility in 2005, and the return of collateral in the one known result of the case involving the firm noted above.[7]

With these losses, only one was disputed to the point of litigation or arbitration and it is important to note that in that case the sponsor recovered under the transaction as scheduled. It is standard in all catastrophe bonds that collateral supporting the transaction remains in the collateral account, to the benefit of the sponsor to ensure prompt claims payment.[8]

One might think that what may deter investors is a lower level of return, and indeed ILS returns have fallen to historically low levels (Figure 3). One should not be surprised then to see a drop-off in investor interest. The lower interest rate environment has had the effect of causing returns to decrease, similar to other fixed-income asset classes.

Figure 3: Return on ILS securities are in steady decline

ILS declining return



Source: Munich Re, "Insurance-Linked Securities (ILS) Market Review 2013 and Outlook 2014," 2014.

[6] Federal Insurance Office, US Department of the Treasury, "Annual Report on the Insurance Industry," September 2015.

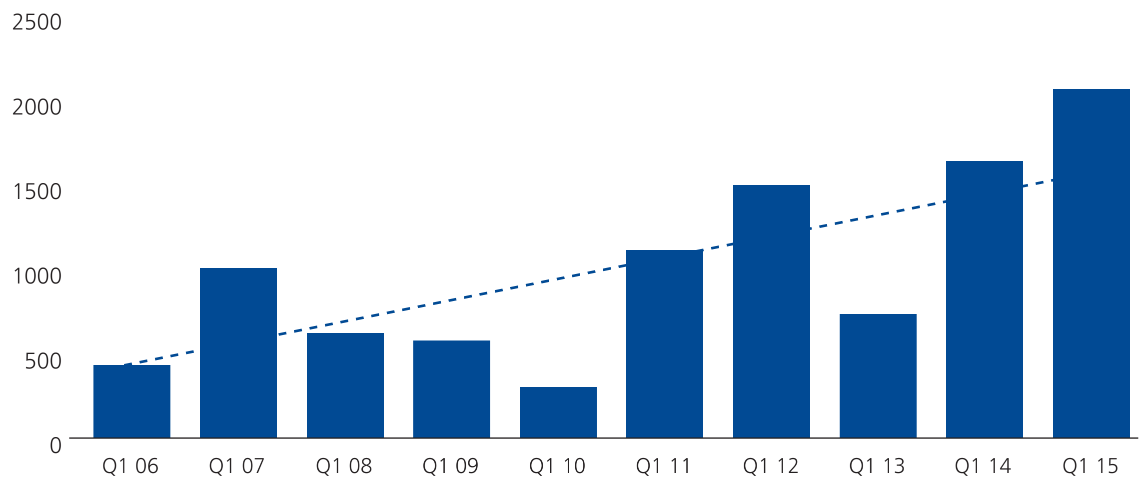
[7] National Association of Insurance Commissioners, "Capital Markets Special Report: A Comprehensive Overview of the Insurance-Linked Securities Market," May 4, 2012.

[8] Ibid.

The numbers tell a different story. As shown in Figure 4, issuance during the first quarter of 2015 was at record levels despite lower returns. With its penchant for understatement, the NAIC noted that "Insurance-linked securities—both from the life and property/casualty sectors—hold great appeal for investors."

Lower interest rates for ILS are in general still slightly higher than similar corporates in this overall climate of very low interest rates. Cat bond coupons also reflect, in part, any changes in rates of interest earned on the investment supporting the collateral, thus providing some interest rate protection on the upside.

Figure 4: Q1 15 saw a record level of new risk capital issued in catastrophe bond and ILS.
Q1 ILS issurance by year ($ millions)



ILS average transaction size and number by year

Source: Artemis, "Catastrophe Bond & Insurance-Linked Securities," January 2016.

Cat bonds certainly do have risks—including a potential cliff risk triggered when the attachment point is reached. That means, to oversimplify dramatically, if the trigger is X and X happens, then the entire investment may be lost all at once. Though the industry is experimenting with various structures, cat bonds are usually structured to start paying based on the existence of a defined event or a certain magnitude of industry losses, and in many cases interest and principal may both be fully at risk. Yet the historically low loss levels and the added diversification benefit ILS provide seem enough to continue to attract investor interest.

Another risk is the quality of the collateral. the reliability of a fully collateralized instrument is dependent on the quality of the collateral.

Longtime industry observer Steve Evans, owner of Artemis—the news, analysis, and data-media service devoted to the catastrophe bond and ILS, alternative reinsurance capital and associated risk transfer markets—noted, "Over the last 16, 17 years, it's [the ILS market] gone from being a way to tap the most liquid form of capital, to an accepted asset class.… it's gone from insurers and reinsurers encouraging capital markets investors to put up capacity to back risk-transfer needs, to investors learning about the space, to investment fund managers gaining an appreciation for it."[9]

[9] Interview with Steve Evans, Deloitte Center for Financial Services, September 1, 2015.

Growth outlook for ILS

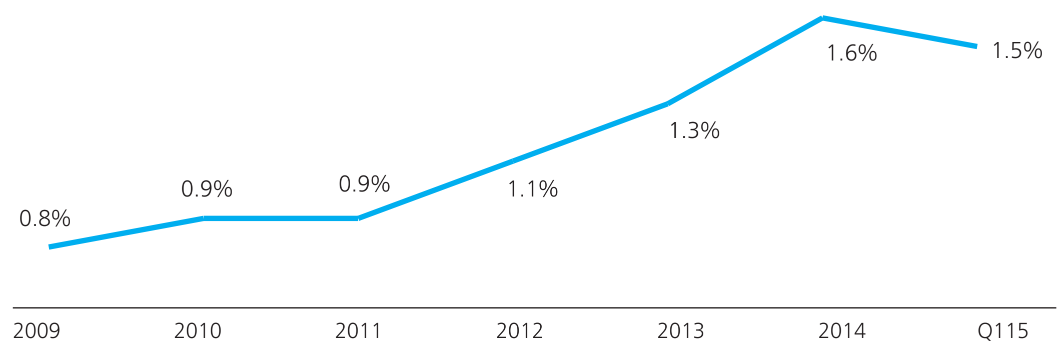
Prospects for the continued growth of the market for ILS look promising for many reasons.

One basic reason is a simple question of size. Despite the apparent negative effect of ILS and other forms of alternative capital on the financial returns of regulated reinsurers, the absolute size of the market is tiny, compared with the current size of the securitization market (Figure 5).

Figure 5: Securitization volume: ILS versus total securitization across all markets including insurance

Particulars	2009	2010	2011	2012	2013	2014	Q1 2015
Global securitization issuance ($ billions)	386.04	609.21	528.55	577.16	595.27	561.75	136.74
Cat bonds & ILS issuance ($ billions)	3.21	5.45	4.96	6.3	7.67	9.09	2.06

ILS as a percentage of global securitization issuance



Source: www.artemis.bm, Securities Industry and Financial Markets Association (SIFMA)

This is in a market where securitization as a whole is down from the glory years before the financial downturn, in which securitization was a deemed a causative factor.

A recent International Monetary Fund (IMF) staff discussion noted that 2014 total securitization in the US and European markets was less than a third of the more than $2,200 billion issued in 2007, and less than half the levels issued all the way back to 2003. US securitization issuances were more than $400 billion in 2014, representing a steady climb since 2008, but still far below the approximately $1,600 billion issued each year in 2006 and 2007.[10]

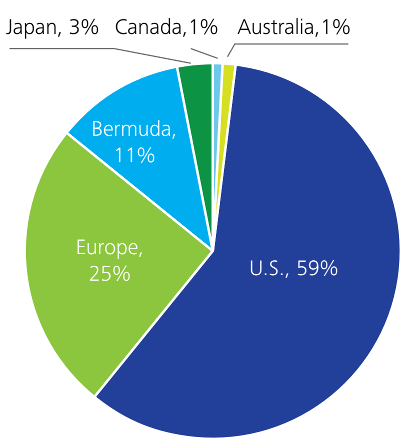
One recent industry report said that while alternative capital in the reinsurance sector totaled approximately $68 billion at the end of the first half of 2015 as shown in Figure 1, that number was expected to rise to between $120 billion and $150 billion by 2018.[11]

If so, this market would still be relatively small compared to the securitization market, even as larger economic trends may factor into the growth of the overall market. For example, currently, US investors dominate the market for ILS (Figure 6), but the EU is attempting to stimulate its overall securitization market, with its finance chief proposing reducing capital charges for banks and insurance companies holding certain asset-backed securities.[12] Even if not directly affecting ILS, this may have the spillover effect of attracting new investors to this asset class.

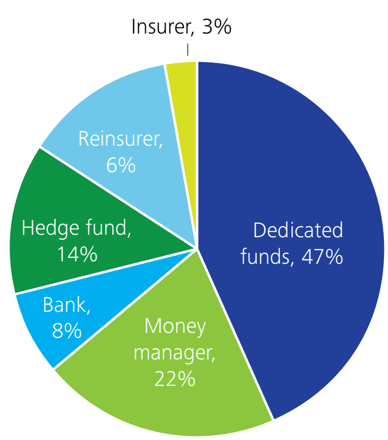
Capital charge changes may also attract expanded US investment in the market, especially by life insurers. US insurers had $5.76 trillion in assets at year-end 2014, with $3.86 trillion in bonds, according to the NAIC.[13] The NAIC also notes that at year-end 2013, the aggregate investment in ILS for the US insurance industry was $168 million, down from $428 million held by the industry in 2011. Life insurers held $134 million of that, 76 percent in cat bonds and 24 percent in ILS covering mortality and morbidity risks.[14]

Figure 6: Cat bond investor profile—most investment comes through investment funds
Insurers have an opportunity to increase investment in ILS.

Investors by region



Investors by type



Source: Swiss Re Capital Markets, "Investors by regions and Investors by type," August 2012.

[13] National Association of Insurance Commissioners, "Year-End 2014 Insurance Industry Investment Portfolio Asset Allocations," June 22, 2015.
[14] National Association of Insurance Commissioners Center for Insurance Policy and Research, "Insurance-Linked Securities: Catastrophe Bonds, Sidecars and Life Insurance Securitization," September 3, 2015.

Insurance investment yields had steadily declined since 2010, from 4.42 percent to 4.11 percent in 2013, before climbing back to 4.20 percent in 2014.[15] For the life and health sectors, yields had declined more than a hundred basis points, from 4.69 percent in 2010, to 3.65 percent in 2013, before rebounding to 4.20 percent in 2014.[16]

A recent Lane Financial LLP report noted the return that cat bond owners have received over the years. Lane measures the insurance component (composed of the change in the price of the bond on the secondary market plus the spread return, reflecting the insurance premium paid by the bond's sponsor) and the floating component (return on the collateral), and provides the resulting total return. The insurance component may be negative or positive, while the floating component cannot be negative.[17]

From 2002 to 2014, the insurance component was negative in just one year: 2005, with a -1.44 percent return. The average annual return for the period was 8.44 percent.[18]

In an industry where investment income may mean the difference between success and failure in an era of extended low interest rates, why would insurers not be flocking to ILS?

That is an interesting question. The FIO notes movement by insurers in search of higher returns through different asset classes. Its report says,". . . growth of life insurer investments in higher-yielding, non-traditional asset classes outpaced growth in traditional bond investments in 2014, continuing a trend over the past several years."[19]

So why are insurers, especially life insurers, not stocking up on ILS? Regulatory disincentives may be a factor. Regulators would not look favorably on insurers investing in ILS who are already exposed to the covered peril in their primary business. But that should not present an obstacle to a life insurer, for instance, investing in a natural catastrophe bond.

However, insurers investing in cat bonds had been required to file them with the NAIC Capital Markets & Investment Analysis Office for determination, as they were not eligible for the NAIC's filing exemption for securities that have a current, monitored rating by an acceptable rating organization.[20] The organization's Valuation of Securities (E) Task Force, though, has moved to make these filings exempt.

Risk-based capital charges (RBC) are a major concern. A presentation by the North American Chief Risk Officers Council to the NAIC crystallized that concern.[21] The presentation showed that currently a BB-rated cat bond gets a capital charge of 3.4 percent and is categorized under the C1 factor–asset risk component. This results in a capital charge to a life insurance company of $16.9 million for a $500 million cat bond, with no recognition of the diversification benefits.

The Council has proposed modifying the RBC charge to recognize the insurance benefits of the cat bond as well as its diversification benefits. Under this proposal, the capital charge would be moved to the C II–insurance risk component. This is intended to recognize that the underlying contract behind the cat bond is an insurance contract because, the Council says, its valuation is primarily determined by weather events unlike a typical corporate bond, which is affected by financial credit risk and market risk.

It is worth noting again that cat bonds are typically fully collateralized, meaning minimal credit risk, with the major risk being the quality of the assets used as collateral. This reinforces the justification for treating the bonds as an insurance risk rather than an asset risk.

Under the proposal by the Chief Risk Officers Council, the capital charge on the $500 million cat bond would be reduced from $16.9 million to $2.4 million.

[15] SNL Financial, "Insurance, Industry trends and statistics," September 2015.
[16] Ibid.
[17] Morton N. Lane, Roger G. Beckwith, "Quarterly Market Performance Report - Q4 2014," Lane Financial LLC, December 31, 2014.
[18] Ibid.
[19] Federal Insurance Office, US Department of the Treasury, "Annual Report on the Insurance Industry," September 2015.
[20] National Association of Insurance Commissioners Center for Insurance Policy and Research, "Insurance-Linked Securities: Catastrophe Bonds, Sidecars and Life Insurance Securitization," September 3, 2015.
[21] North American Chief Risk Officers Council, "Discussion of Life Insurer Capital Treatment for Catastrophe Bonds," November 17, 2014.

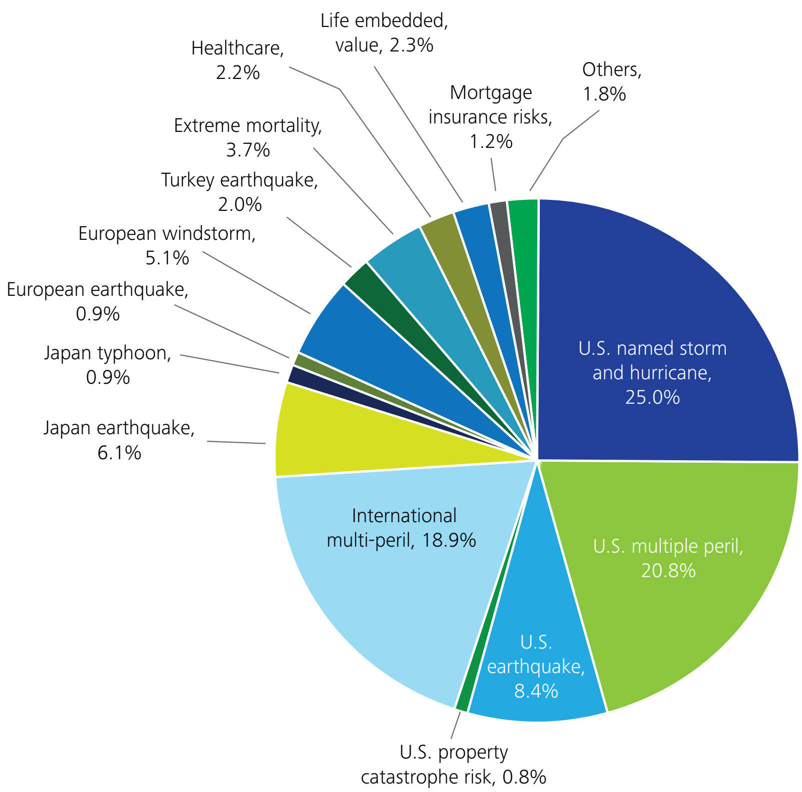
How new ILS coverage areas may affect demand

Increasing demand by insurers and other investors may not be the only growth driver for ILS. Indeed, there seems to currently be sufficient, if not excess capital in the reinsurance sector, as may be inferred from the soft pricing in that market, increasing demand in and of itself might only serve to reduce returns.

The classic capitalist response to a situation where current supply exceeds demand, and there is little control over supply, is to increase demand to absorb capacity. This could be done by expanding existing markets or penetrating new ones. That may actually be both profitable and to the common good with the increasing availability of capital in the insurance sector. Increasing demand may not just help soak up available capital, but may also open new and possible non-commoditized areas for reinsurers to profitably deploy capital.

ILS issuances are concentrated around covering catastrophe risks, dominated by US perils. A very small percentage of issuances are covering mortality- and health-related risks.

Figure 7: Catastrophe bonds and ILS risk capital outstanding by risk or peril



Source: www.artemis.bm

[3] National Association of Insurance Commissioners, "Capital Markets Special Report: A Comprehensive Overview of the Insurance-Linked Securities Market," May 4, 2012.
[4] "Perilous Paper: Bonds That Pay Out When Catastrophe Strikes Are Rising in Popularity," The Economist, October 5, 2013.
[5] Swiss Re Capital Markets, "What Are Insurance Linked Securities (ILS), and Why Should They Be Considered?," Presentation to the CANE Fall Meeting," September 2012.

As shown in Figure 7, current cat bond and ILS issuances disproportionately reflect US perils, primarily in the property-casualty arena. The market continues to welcome these issuances. One recent example is the California Earthquake Authority's three-year Ursa Re Ltd. (Series 2015-1). It was announced in August 2015 with a target of $150 million. The size was significantly increased to $250 million by the time of its September closing, with pricing expected at five percent, the high end of the projected range.[22]

While one data point does not a trend make, this does seem to confirm the desirability of these fully collateralized instruments. In addition, the pricing at the high-end of the offering range is consistent with recent ILS market pricing, demonstrating continuing pricing discipline on the part of the market.

This is a good signal for investors that the market may have found its bottom, with the decline in returns apparently ending, bringing with it a new level of stability and certainty.

Figure 7 clearly shows areas of potential growth. Whatever role climate change may play, many believe that the incidence of extreme weather events has increased in the recent past, from drought- and wind-driven fires to vicious storms and much in between.[23]

One need only compare the capital devoted to covering U.S. named storms as opposed to Japanese typhoons or European windstorms to see possible areas of growth. Earthquakes or hurricanes are not US-only events, and the expansion of ILS into these coverage areas may not only provide a societal good, but also enable ILS investors to geographically diversify their risks.

Then there is a possibility of diversification into other perils, using ILS more frequently to transfer risk related to other property, life and accident, and health lines of businesses. Mortality and longevity risk, for instance, are examples of perils already covered—though to a minor extent—by securitizations. Then there are the potentially huge markets still developing, such as for terror or cyber risks.

But as with almost any relatively new product, there are concerns that need to be weighed against the potential benefits.

[22] Artemis, "Ursa Re 2015-1 Cat Bond Grows to $250m, Prices at Top-End," (blog) www.artemis.bm, September 14, 2015.
[23] Sarah Lyall, "Heat, Flood or Icy Cold, Extreme Weather Rages Worldwide," *New York Times*, January 10, 2013.

US tax considerations related to ILS use and investment

If one assumes that the ILS market will continue to provide sufficient reinsurance capital to meet capacity, then perhaps the two major concerns affecting the market may be summed up under the headings of taxation and transparency.

ILS are commonly written through special purpose vehicles (SPVs), often domiciled outside the U.S. Keeping in mind recent moves by federal legislators in the US to reduce the tax attractiveness of offshore vehicles, it is critical that these SPVs are properly structured.

Perhaps more so now than ever, policymakers and legislators are sensitive to real or potential abuses of offshore vehicles and any transactions that can potentially damage the local tax base and fiscal landscape, and reduce the tax burden by shifting the responsible jurisdiction. The concerns are similar to those now being addressed under the Base Erosion and Profit Shifting (BEPS) Project.

The Organisation for Economic Co-operation and Development and the G-20, between them representing around 90 participating jurisdictions, have worked to develop BEPS. This endeavor is based on the belief that international tax rules have not always kept up with developments in the world economy, and that globalization has increased the need for countries to cooperate to protect their sovereignty on tax matters through multilateral efforts to improve tax rules. The aim is to ensure that multinational enterprises report profits where economic activities are carried out and value is created.[24]

Under the umbrella of BEPS initiatives, jurisdictions—including the US—may react to such perceived threats to the tax base by redefining—even retroactively—where the lines are drawn in making the difficult tax distinctions that arise with regard to determining the tax treatment of ILS issuers and holders, tax accounting and income recognition rules, and the like.

For example, is the business being conducted to be treated as insurance for tax purposes, or as a sort of financial product? Is there a US-sourced business being engaged in or is it purely "offshore"? Do ILS products, specifically cat bonds, constitute debt or equity for tax purposes, and how does that affect US reporting requirements?

The answers to these arcane tax determinations, and many others, are less than crystal clear, subject to reinterpretation or regulatory change, and can have a profound effect on the after-tax economics to participants in the ILS market. Participants would do well to avail themselves of the advice of experts in this area.

Yet another area in which specialists with market knowledge may help mitigate concerns and help both potential investors in, and issuers of, ILS to manage risk is through advancing transparency.

[24] Organisation for Economic Co-operation and Development, "Taxing Multinational Enterprises: Base Erosion and Profit Shifting (BEPS)," Update No. 3," OECD Policy Brief, October 2015.

Increased transparency could broaden ILS market

Transparency is an issue of great interest to both regulators and investors. Triggers for an ILS can vary, and may be based on parametrics, indemnity, industry loss, modeled loss, or hybrid factors. Some US state insurance regulators have raised concerns with non-indemnity trigger securities, possibly for fear it is a maneuver to help avoid regulatory scrutiny.

Other regulatory concerns may include the lack of transparency to cedents engaging in the transactions within the statutory filings, as well as which lines of business are covered.

In general, both regulators and investors may feel more comfortable with more transparency, especially as it relates to risk and pricing. One possible plus, noted by the North American Chief Risk Officers Council in its proposal to the NAIC, was that with increased life insurer purchases would come increased ratings coverage.

While institutional investors and dedicated fund managers who now dominate ILS investments (Figure 6) may already be comfortable in their expertise with and knowledge of the securities, others in the broader market might eventually feel more secure diversifying into this asset class were there broader coverage by acceptable rating organizations.

Attracting a broader base of investors can help improve the market for these types of securities. If a broader group of investors view the ILS issuances as an acceptable and attractive asset class, demand for existing outstanding bonds would increase as new issuances would be unable to meet demand. This demand for existing issuances would potentially create greater price transparency, thereby having a knock-on effect of opening the asset class to an even wider investor base.

Diversifying the investor base should be a goal for this market. In their note on securitization in general, the IMF staffers said, "Securitization markets could be strengthened in the future to the extent that they are underpinned by a diversified institutional investor base (beyond just banks) with long-term capital."[25]

There is some diversification within the ILS investor base already. Pension funds have long been major purchasers, though in the recent past, our practitioners have noticed an increased presence by hedge fund and private equity, and a slight pullback by pension funds seeking higher yields and who could provide more capital, albeit at a slightly higher price, were that needed. This confirms that the more investor classes that are interested in the market, the higher the probability of market stability.

Arguably, the investor base would be most diversified by the inclusion of ILS as a standard asset class in every money manager's arsenal, including mutual fund managers serving individual investors. One way to help that happen would be for the industry to embrace one recommendation of the IMF staffers: provide standardized definitions for the underlying characteristics of securitizations (i.e., simplicity, transparency, collateral features, track record of underlying asset quality, etc.).[26]

[25] Miguel Segoviano, Bradley Jones, Peter Lindner, and Johannes Blankenheim, "Securitization: The Road Ahead," International Monetary Fund, Washington DC, January 2015.

[26] Ibid.

Design changes enhance ILS attractiveness

For insurers, ILS may represent an attractive path to enhanced capital management. For reinsurers, ILS may seem more of a basic threat to their business model. To not just survive, but thrive, each should learn to properly use ILS to enhance their business models and help provide effective hedging.

There may be a way yet to go. One recent survey, for example, showed that only three percent of primary insurers had issued or purchased ILS as part of their risk management efforts within the property/casualty segment within the past three years.[27]

Directionally though, the opportunity to participate in the market and thus use ILS to enhance risk management is increasing. While the ILS market suffered retraction during the great recession similar to other asset-backed instruments, from the low of issuances in 2010, the ILS market has grown by 687 percent through 2015, while other asset-backed securitization markets have not accelerated at the same pace, growing only about 160 percent for the same period.[28]

[27] A.M. Best, "A.M. Best Special Report: A.M. Best Spring 2015 Insurance Industry Survey," August 5, 2015.
[28] SIFMA, "US Bond Market," October 2015.

During the 2010 to 2015 period, there has been increased regulatory interest, and several catastrophic triggering events that tested the resolve of the investor base and its confidence in the modeling capabilities of issuers, underwriters, and investors. With all of these challenges, the ILS market has experienced continued growth over the past years.

While it might seem cannibalistic for insurance and reinsurance companies to engage in ILS, it is a vehicle to diversify capital, open capitalization of the industry to a wider addressable market, and provide flexible options for certain stacks in the reinsurance coverage tower.

The flip side of this trend is that it creates disruption to the traditional players in the middle market, can create pricing challenges, and force more transparency relating to the risk on line for certain low-probability events, with more competition from a pricing perspective coming from nontraditional sources. It erodes the ability for some players to rely on the pricing of low-probability events to defray the risk of higher-probability events.

Still, the advancements of product designs have supported the continued market growth. Better modeling capabilities and the use of parametric coverage provisions—adding to instrument liquidity and making investors less subject to the impact of individual underwriting decisions—have contributed to the increased growth of ILS. However, parametric covers require further analysis on behalf of the insurers and reinsurers transferring the risk through the ILS market to ensure the retained basis risk is properly identified and managed.

The advancements in the market have created other considerations for issuers and investors to work through. For example, the further ILS product design drifts from indemnity coverage, the more the concept of potentially having derivative elements to account for needs to be evaluated.

Accounting standard setters in the US and internationally have refined the models around consolidation accounting and, based on the typical structure for an ILS, have kept issuers and investors mindful of staying focused on how ILS products are treated under these complex standards.

With the greater volume of ILS issuances, data points on market value for the risk have more frequent calibration points, but secondary pricing still has limited price transparency, thereby still limiting investor demand to those who can hold the instruments without the desire to manage them for total return.

One design change worth noting is the shift in the size of issuance, to smaller, more consumable deals that are faster to market. This trend in smaller, but more numerous deals, has continued the past few issuance years.

This continued evolution helps expand the market. For example, through the first three quarters of 2015, $4.7 billion in traditional cat bonds were issued, down from the year before. However, a new variant—"cat bond lite" structures—saw $490 million in new capital in 2015 compared to $242 million in 2014. Cat bond lite structures are usually smaller placements, allowing lower entry points with reduced frictional costs, thus making cat bonds in this form available to a wider segment of the investor universe.[29]

[29] Zaeem Shoaib, "ILS Market Looks to Expand Reach Amid Quiet Q3 for Cat Bonds," SNL Financial, September 30, 2015.

Traditional market participants should embrace change

Everyone—investor, insurer, reinsurer, regulator, and consumer—can benefit from a vibrant ILS market. Possible advantages include an expansion of available coverage, including into as-yet-uncovered areas at lower cost globally, and an asset class that provides a reasonable return to investors with reasonable risk largely uncorrelated to the capital markets.

The biggest regulatory fear is lack of capacity, followed by concern about pricing, both eventually trickling down to affect consumers. Stability, efficient pricing, and capacity from the capital markets would help address these fears.

For insurers, the advantages have been obvious, as in the lower cost of capital for reinsurance driven by ILS issuance. Diversification of risk capital at a lower cost is close to the Holy Grail. Yet in contrast, for reinsurers the recent past has meant depressed returns and margin pressures. But many reinsurers have moved to take advantage of what ILS can offer. As the NAIC has reported, half of cat-bond market transactions on average have been sponsored by reinsurers, sometimes as the vehicle to transfer their own risk and other times to help a client externally transfer that client's risk, thereby increasing profit without adding to the reinsurer's own risk.[30]

Both insurers and reinsurers need to continue to explore innovative responses to what is still in many ways a nascent market. The disruptive innovation that is ILS should be used to help transform and improve the reinsurance market, while rationalizing the traditional reinsurer model.

The traditional regulated model provides regulatory transparency and helps ensure a certain level of capacity even in the face of multiple disasters. Any factor affecting the traditional regulated market as much as alternative capital potentially could, must at least provide a similar level of certainty with regard to capacity and regulatory oversight.

An open, transparent, and relatively liquid market could do just that, making the present a possible prologue to a very different future. The previously mentioned and seemingly limited nature of the penetration of ILS as a risk-management tool for primary insurers may be misleading to an extent. If, for instance, a series of major catastrophes were to really test both the insurance and reinsurance markets and a major insurer needed to recapitalize, would it choose to seek traditional debt or equity capital, or tap the pool of quickly available capital in the capital markets?

Capital is one thing, rethinking a business model is another. Disruptive innovation is often considered deadly to the existing order, but effective strategic risk management can transform disruptive innovation into business opportunity.

Insurers and reinsurers sometimes comfort themselves with certain orthodoxies, among them that their stores of institutional knowledge and expertise comprise a formidable barrier to entry. Important as these may have been, that is no guarantee it will continue to keep new competitors outside the gates, whether they be technology companies with billions in capital available to spend or the capital markets that could be the functional equivalent of crowdsourcing.

There is no real reason that the technology that led to the creation of the granular natural catastrophe models on which the industry relies, for example, could not be used to make similar models available to the investing public at a comparatively low cost. The technology that enables a smartphone user to be tracked results in information that could eventually help disintermediate both reinsurer and traditional insurer.

This argues for a re-evaluation and reimagining of both traditional insurer and reinsurer business models in the face of this new technology and of capital market structures dislocating the established value chain.

The goal should be for traditional reinsurers, insurers, and investors to create from the ILS market a new platform that, among other benefits, would allow investors an attractive asset class for diversification, insurers to hedge risks more efficiently, and reinsurers an avenue to avoid commoditization, exploit their expertise, and expand into new growth markets, either geographically or to cover new or different risks, such as cyber.

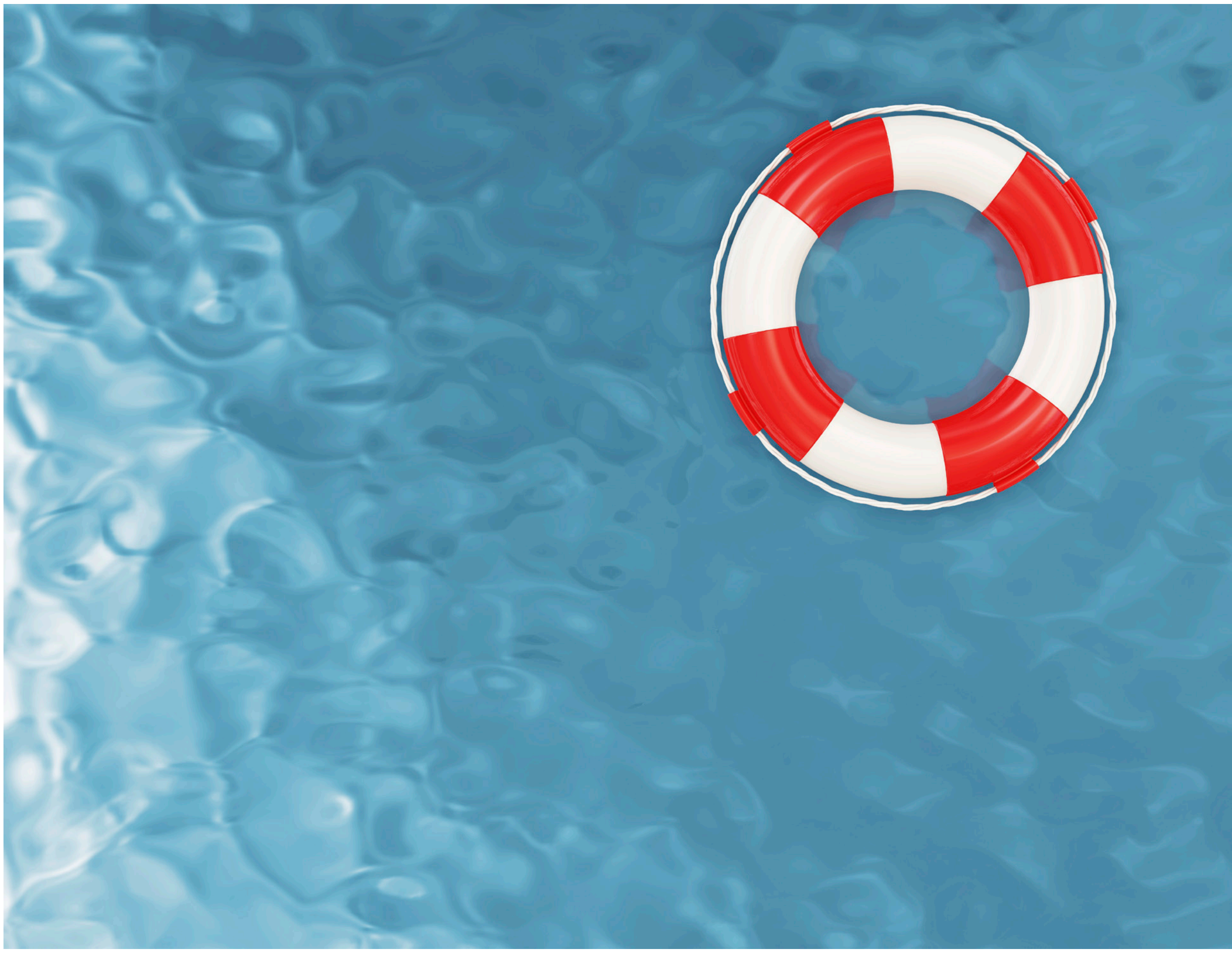
[30] National Association of Insurance Commissioners, "Capital Markets Special Report: A Comprehensive Overview of the Insurance-Linked Securities Market," May 4, 2012.

At a recent NAIC meeting, an insurance intermediary proposed to state insurance commissioners a new product. That product would have a parametric trigger based on the possibility of a defined occurrence (a hurricane) hitting the area covered. The really interesting part was that this coverage would be sold to the end user on a constantly changing pricing basis, as late as days before such a hurricane was supposed to hit.

A homeowner with specimen plants that are not covered by insurance could choose to purchase this coverage a few days before a potential occurrence based on her judgment of the probability of this hurricane affecting her, a judgment itself perhaps based on information obtained from a television meteorologist or an app, and could collect even if the hurricane caused her no damage, but landed in the specified area at the specified strength. Eventually, there could be an app for that, pushing to her phone the ongoing weather news—snowstorm, hurricane, or whatever else—and allowing her to make an impulse buy if she so chose.

That specialty product could help absorb available capital in a market awash with it, but more importantly to the consumer, she would have bought peace of mind.

Whatever happens with this particular proposed product, the takeaway might be that change is coming, and the future will belong to those who choose to let go of current orthodoxies and most effectively adapt their thinking and their business models.



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