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A Comprehensive Overview of the Insurance-Linked Securities Market

The Capital Markets Bureau previously published a Special Report discussing insurance-linked securities (ILS) on Feb. 4, 2011, which is available on the NAIC website.

ILS are securities whose performance are 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. The very first cat bond issuance occurred in 1994, and the market has continually grown and adapted since that time.

ILS Types

There are numerous forms of ILS in existence and, as the market matures, additional types of ILS have been developed.

Cat Bonds: The most common form of ILS today are cat bonds. Cat bonds are designed to offer reinsurance protection to the bond's sponsor for incurred claims from one or more major catastrophes, such as hurricanes, tornados and earthquakes.

Life and Health Transactions: Life and health insurance companies have also benefited from various forms of ILS. Additionally, other forms of risk-bearing entities (such as pension funds) also use ILS to transfer risk at some future point in time. Several transactions have transferred risks related to potential mortality fluctuations, such as premature deaths, living longer than expected or diverging mortality rates between two defined populations. Three transactions have covered a health insurance company sponsor against incurring higher-than-expected medical-claim costs on group medical insurance. ILS have been used to help finance the acquisition of blocks of life insurance business, as well as supplying required statutory reserves that were considered by the sponsoring insurer as economically unnecessary. We expect that additional types of life and health insurance ILS will be developed as the market continues to mature and grow.

Regulatory Issues

ILS as a Risk-Reduction Mechanism: Insurance regulators, and the insurance community at large, have multiple reasons to care about the ILS market. By far, the dominant reason is that insurance companies, of various types and geographies, can substantially benefit from the risk-absorption capabilities of the ILS market. Quite a few insurers have chosen to transfer specific unwanted risks to ILS investors, either in place of, or in addition to, the use of other risk transference vehicles such as reinsurance. ILS are flexible vehicles that have been used to transfer a variety of types of risks to capital market participants.

However, in actual practice, the cat bond market has been substantially concentrated in transferring U.S. wind risk, which is the risk of a claim occurring due to either a hurricane or tornado occurring in the United States. As a result, the ILS market has primarily benefited U.S. property/casualty insurers to date. Major repeated issuers of ILS based in the United States

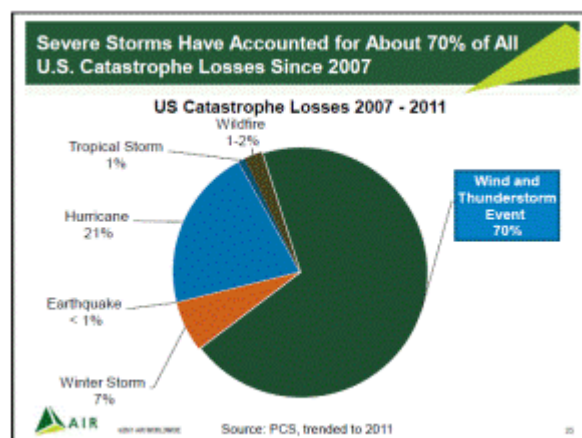
include Chartis (a subsidiary of American International Group), United Services and Automobile Association (USAA), Allianz, Chubb Group, State Farm and Travelers.

ILS as an Investment Vehicle: A second area of interest is the use of ILS as an investment vehicle. While we later discuss the advantages of these instruments as investments in general, our analysis of the investment portfolios of the insurance industry as of Dec. 31, 2010, indicates that only a small number of insurers have any ILS-related investments. The total aggregate investment in ILS for the entire insurance industry is quite modest at approximately \$380 million, or less than 5% of the ILS market as a whole. This exposure is sufficiently small to be inconsequential for both the insurance industry as a whole, as well as for those companies that have invested in ILS.

Advantages of Cat Bonds for Insurers

Capacity: Cat bonds offer insurers several advantages. They increase market capacity for reinsurance coverage, especially for U.S. wind risk, which is the most commonly named market peril. One large storm could damage much of the Eastern United States, triggering many reinsurance coverages. Reinsurers assume carefully controlled amounts of U.S. wind risk reinsurance because they need to limit their event exposure to a reasonable percentage of their capitalization. The chart below clearly illustrates why wind risk is so important to U.S. property/casualty insurers from a catastrophe loss exposure perspective. Non-wind-related risks account for a small slice of catastrophe losses to U.S. insurers during this five-year period.

Distribution of U.S. Catastrophe Losses by Peril



2007 to 2011

Source: AIR Worldwide, 2011

Atlantic Hurricane and U.S. Thunderstorm Seasons in Perspective, Dec. 13, 2011.

Cat bonds offer an alternative market from which insurers can seek additional protection. Other reasons to use cat bonds could include increased diversification of coverage suppliers, competitive all-in costs and reduced credit risk. When adding U.S. wind risk and U.S. earthquake risk together, the cat bond market becomes clearly dominated by U.S.-related perils, with approximately 70% of the outstanding cat bonds market assuming one or both of these two risks.

Catastrophe Bond Exposures by Peril Assumed



2002 to 2011

Source: Swiss Re Capital Markets, Dec. 13, 2011

Low Credit Risk to Sponsor: A significant advantage of an ILS cover for an insurer sponsoring an ILS transaction is that there should be little credit risk that the vehicle will become unable to pay a required reinsurance claim. This low-level credit risk in ILS transactions is because the risk coverage is fully funded in advance through the bond offering. Consequently, the primary credit risk in the transaction is related to the investment of these bond proceeds in assets collateralizing the reinsurance obligation.

Credit Losses Occurring in Pre-Financial Crisis Transactions: Credit losses on invested collateral have occurred in four ILS transactions, all of which were issued prior to the financial crisis. These credit losses occurred due to a confluence of factors, including the meltdown of the housing market and the failure of Lehman Brothers. These credit losses occurred even though the collateral used in the transactions were believed to be low risk at the time the transactions were designed. These losses to ILS investors occurred despite the fact that no underlying insured event happened to trigger any insurance-related losses for either the primary insurer or reinsurer. The investor losses were solely due to losses in the transaction collateral and/or associated derivatives transactions.

Several transactions were exposed to losses related to Lehman Brothers exposures via a total return swap (TRS). The invested assets also turned out to be of significantly greater risk than was expected at the time the transaction was structured. The four transactions ran into problems because of five primary reasons: (1) Lehman Brothers' failure as a TRS counterparty; 2) collateral account assets that became unexpectedly illiquid when markets deteriorated during the financial crisis; 3) the lack of a top-up provision, where the TRS provider was not required to add additional collateral to the trust as the market value of the trust's existing collateral declined; 4) inadequate investment concentration limits; and 5) assets with mismatched maturities compared to the liabilities' maturity when the TRS also failed. Each of these cat bond transactions eventually defaulted due to these collateral-related issues. However, the collateral investment for transactions completed since the financial crisis have been structured more conservatively, so these problems are less likely to recur in new transactions.

Short-term asset-backed securities (ABS), in combination with TRS, were often used as a collateral investment vehicle for ILS issued prior to the financial crisis. However, since the financial crisis, this design is no longer being used for new ILS issues. Consequently, the market will soon have no remaining exposures to ABS collateral.

Collateral Investment Since the Financial Crisis: In transactions that have occurred since the credit crisis, bond proceeds have been invested in lower-risk investments. By far, the most popular investment in new transactions are U.S. Treasury-based money market funds. In these transactions, the collateral funds are invested in a money market fund that is limited to investing only in U.S. Treasury Bills. These are extremely low-risk investments, but they also earn virtually no income return in today's extremely low-interest rate environment.

Another vehicle often used to invest the transaction's collateral are tri-party repurchase agreements (tri-party repos). Tri-party repos are short-term lending transactions with a securities dealer that are directly collateralized by a high-quality investment, such as U.S. Treasury Bills, U.S. government agency issues or high-quality corporate bonds. These transactions are marked-to-market daily and the collateral is managed by a third party, so there should be limited risk in these transactions.

Important ILS Terms and Concepts

Coverage Terms: The ILS transaction's sponsor can design the precise terms of the coverage being sought, subject to finding investors willing to purchase bonds resulting from the transaction. Because the transaction is designed to meet the insurer's needs, the resulting cover should meet the insured's coverage needs in terms of amount of coverage, risks covered, period of coverage, payment triggers and other important terms. The end result might be similar to a reinsurance cover that the insurer would place with a traditional reinsurer. However, a reinsurance transaction typically reimburses the primary insurer on the basis of actual claims paid by the primary insurer.

In contrast, an ILS contract often determines the amount to be paid to the sponsoring insurer on a generic basis. The determination of ILS payments is often determined through the use of non-company-specific factors, such as industry-wide reported claims, or based on a formula incorporating measurable observed physical factors, such as recorded wind speeds or earthquake readings. Because these ILS payments might not be based on the sponsor's actual realized claim costs, protection of this type can result in "basis risk" to the sponsor if the purchased protection is not closely correlated with the bond sponsor's actual realized claims. For example, most ILS covering Japanese earthquakes are based on parametric triggers. That is, the insurance coverage amount to be paid to the sponsor is based on a formula linked to the size and location of an earthquake. Consequently, the amount paid to the bond's sponsor if a triggering event occurs is independent of the sponsoring insurer's reported claims and depends only on the results of the ILS' formula. The amount received by the bond sponsor could be more or less than they would receive had they instead had a reinsurance contract that would have reimbursed the insurer on a claims-paid basis.

ILS Payment Triggers: In an ILS transaction, payment depends on the occurrence of a triggering event. There are four basic types of triggers (along with combinations of these four basic types): 1) indemnity triggers, which are based on the actual claims incurred by the transaction sponsor; 2) industry index triggers, which are based on an industry-wide index of claims; 3) parametric triggers, which are based on assumed claims from an actual physical event (such as the magnitude of an earthquake or the wind speed of a hurricane); and 4) modeled triggers, which are based on estimated claims generated by a computer model. While an indemnity trigger is most useful to a transaction sponsor, investors generally prefer non-indemnity-based triggers because they are more transparent than an indemnity-based trigger and are not prone to moral hazard risk from the sponsor. In a parametric-trigger-based transaction, it is possible that the payments to the sponsoring insurer could be triggered even if little or no claims occurred from the actual event to the sponsor.

Recent U.S. hurricane cat bonds typically use either an indemnity or industry trigger to determine when claim payments are made to the cat bond's sponsor. Alternative triggers, such as those based on parametric readings (such as a hurricane reaching a specific level on the Saffir-Simpson Hurricane Wind Scale; e.g., a Category 5), are less commonly specified as cat bond payment triggers. More important than a hurricane's raw intensity is the hurricane's geographic path. For example, even a relatively modest hurricane travelling over Long Island in New York state will trigger more primary insurance claims than a much larger hurricane hitting a less-populated area, such as Maine or New Hampshire. However, the attachment points for a cat bond to make a reinsurance payment in such circumstances are usually set quite high with a low probability of occurrence. This is evidenced by the fact that only one hurricane-related cat bond has ever made a payment to a bond sponsor, despite multiple hurricanes occurring every year.

Claims Expected to be Incurred: This is an important statistical construct for cat bonds. It measures the average amount of insurance claims to be paid to the bond's sponsor, and resulting principal losses that the cat bond is expected to incur, over a large number of hypothetical modeled scenarios. Claims expected to be incurred is the fundamental risk benchmark upon which cat bonds are priced and evaluated. A bond's level of claims expected to be incurred is a function of both the probability of a bond incurring an insurance claim combined with the expected claim's dollar amount. Claims expected to be incurred is calculated prior to the issuance of the cat bond, and market practice is to assume that the metric remains constant over the security's lifetime.

A bond's claims expected to be incurred is calculated by an independent catastrophe modeling specialist organization using its proprietary catastrophe model. This number is calculated as part of the issuance process, is an important part of the transaction's offering documents and is expected to remain constant over the life of the transaction. The risk models of different modeling vendors will often result in different expected claim incurred measures. In addition, as vendors modify their models over time, the resulting claims expected to be incurred could also change over time. The principal independent catastrophe modeling firms that do claims expected to be incurred analyses are AIR Worldwide, EQECAT and Risk Management Solutions (RMS). As one would expect, prospective bond issuers try to take advantage of differences in the views of the various modeling firms. As an example, RMS revised its U.S. hurricane model in February 2011, considerably raising its expected claim costs. According to the ILS information website Artemis, RMS has rarely been selected as the modeling agent for a new U.S. wind cat bond issue since that date.

While the probability of incurring a principal loss on a cat bond may be relatively low, the severity of the principal loss is typically high, resulting in meaningful overall claims expected to be incurred.

The level of claims expected to be incurred can vary greatly by transaction. Typically at a bond's issuance, claims expected to be incurred is less than 200 basis points per annum. For some transactions with a particularly low probability of attachment (or unlikely to be subject to a claim), it could be as low as 50 basis points per annum.

Probability of Attachment: The sponsoring insurer has considerable flexibility, subject to market conditions, in designing the transaction parameters. This includes setting the desired probability of claims being incurred by the reinsurance contract, which then becomes a principal loss for the cat bond investor. The probability of a claim or loss being incurred is described as the "probability of attachment" in reinsurance and cat bond terminology. The probability of attachment indicates how likely, or unlikely, a risk is being transferred by the transaction from the sponsoring insurer to the investor. A low probability of attachment, such as 1 in 100, means that the investor is unlikely to be exposed to a principal loss on the investment unless a very unexpected event(s) occurs. In contrast, a high probability of attachment, such as 1 in 12.5, means that the investor is much more likely to incur a principal loss from the transaction. These

probabilities are determined by the models that calculate the likelihood of a reinsurance contract claim occurring that becomes a principal loss on the cat bond.

No Cushion for Incurred Claims: Unlike other structured finance transactions, cat bonds do not have a cushion built into the transaction that permit them to absorb a certain level of incurred reinsurance claims before principal losses are incurred by the cat bond investor. Any and all claims that are paid by the cat bond to the sponsoring insurer under the terms of the reinsurance contract must be absorbed by investors in the associated cat bond. Under the transaction's terms, there is no other source of funds to pay the reinsurance claims other than reducing payments made to investors in the transaction's cat bonds. However, only a small percentage of cat bond transactions result in a reinsurance claim payment being made to the sponsoring insurer, so only a small number of cat bond investors to date have ever incurred a principal loss. The premiums paid by the primary reinsurer are paid out as interest income to the cat bond investor. If a small loss is incurred, it is possible the loss would only result in lost income.

Bond Coupon: A cat bond's coupon consists of two parts: 1) a fixed percentage amount of the bond's principal paid by the bond's sponsor in payment for the assumption of the reinsurance risk; and 2) a floating interest rate related to the income earned on the investment of the collateral supporting the transaction. The former item is analogous to the reinsurance premium paid by a primary insurer for a reinsurance cover.

Yield: The cat bond's yield is based on the insurance premiums received from the sponsor, investment income earned by the transaction's collateral and the amortization of any premium or discount from par at time of purchase. These three items are used to calculate the bond's yield under the assumption that no principal reductions will be incurred due to insurance claims paid to the bond's sponsor.

Discount Margin: Cat bonds are priced on a nominal dollar price basis for trading purposes. However, a discount margin (DM) can be calculated for the bond to measure the amount of the bond's yield above the floating rate index to which the bond's actual yield is being compared. DMs are based on popular interest rate indices, such as the London Interbank Offered Rate (LIBOR) or the Euro Interbank Offered Rate (Euribor). Current market-based discount margins for cat bonds are usually in the range of 200 basis points to 600 basis points or more depending on the bond's characteristics. DM is the standard market benchmark used for evaluating bonds with a floating coupon rate. In the cat bond market, it is applied in a manner consistent with the application of other yield spread benchmarks for other types of bonds.

Nature of Risk Assumed: Cat bonds in particular are subject to substantial "cliff risk"; that is, the likelihood that the entire cat bond principal will be used to pay reinsurance claims once the attachment point is reached. Investors take a significant risk of losing their entire invested principal if the event(s) that the insurance company sponsor has protected itself against occurs. A cat bond's principal repayment performance is often binary, either incurring full repayment or incurring a complete principal loss.

Ratings: Cat bond issues have usually been rated in the BB or B rating range, or high non-investment grade. Standard & Poor's has been the predominant rating agency in recent years for rating cat bonds. The level of rating assigned is typically related to the bond's expected claim incurred cost previously discussed.

Coverage Term: Cat bonds can readily offer the sponsoring insurer coverage for a multi-year term at a predetermined cost. The typical cat bond term is approximately three years, with some transactions outstanding for slightly longer periods. Seasonality is also important in some cat bonds because weather events are often highly seasonal. In contrast, traditional reinsurance programs are usually for a single year and need to be renewed annually.

Cat Bonds as a Reinsurance Alternative: Cat bond issuance is increasingly attractive to insurers in a hard reinsurance market, when traditional reinsurance capacity has either become more expensive or might not be available at all. The reinsurance market is often cyclical due to

market conditions, but an unprecedented series of major natural catastrophes in a wide range of countries (including Japan, New Zealand, the United States and Thailand) has served to harden reinsurance pricing, reduce reinsurance availability and could, therefore, lead to additional sponsor interest in cat bond issuance as an alternative to reinsurance. The cat bond market brings an additional source of capital to the reinsurance market and could consequently affect the dynamics of the traditional reinsurance pricing cycle. This could mean that reinsurers might not benefit as much, or even at all, from a “hard market” where previously reinsurance prices would have risen after the occurrence of extensive insured losses. This hardening of the market could become less pronounced with the growth of the cat bond market. Capital market sources are subject to different market dynamics, so cat bond pricing could be either high or low at countercyclical times vs. reinsurance market pricing trends.

Reinsurers frequently take advantage of the differing market dynamics. On average, about half of cat bond market transactions are sponsored by reinsurers, as distinguished from primary insurers. Because reinsurers have been among the earliest and most active cat bond market participants, they have had an opportunity to assemble the resources and infrastructure necessary to become market leaders. In some cases, reinsurers use the market as a vehicle to transfer risks that it has assumed from its clients. In other cases, the reinsurer simply facilitates risk transfer by sponsoring a specific transaction for a client’s benefit, helping the client externally transfer an unwanted risk. This business’s profile can fit in well with a reinsurer’s business profile, offering an opportunity for the company to earn incremental revenue without bearing additional insurance risks. Additionally, reinsurers could be in a position to take advantage of pricing differentials between cat bond and reinsurance market pricing, as well as benefit financially from arbitraging these pricing discrepancies.

A Hypothetical Cat Bond

The following is an example of a hypothetical cat bond transaction. XYZ Insurance Company (XYZ) is a leading homeowners insurance writer in Florida, with a 5% market share. XYZ has been, and continues to be, exposed to substantial wind-risk claims in this area whenever a severe storm occurs. The claims that XYZ expects to incur as a result of a storm, as a share of total industry reported claims, is close to its 5% market share.

In an effort to better manage and reduce XYZ’s risk in the event of an occurrence of a major area storm, XYZ would like to procure reinsurance coverage protection against a large hurricane loss. XYZ has determined that it would like the coverage to begin once industry paid losses reaches a total \$5 billion and continue until total industry paid losses reach \$10 billion. The reinsurance coverage will be paid to XYZ on the basis of 5% of total industry claims paid over the \$5 billion floor, up to a total of \$250 million paid to XYZ when the coverage caps out at the \$10 billion industry claims ceiling.

To implement this objective, the creation of ABC Re Ltd. (ABC Re) is sponsored by XYZ. ABC Re enters into a \$250 million reinsurance contract with XYZ. Claims to be paid on the reinsurance contract are indexed to the Property Claims Service (PCS®) catastrophe loss index for that geographical area. ABC Re issues a \$250 million three-year maturity cat bond to investors containing parallel terms with those found in the reinsurance contract with XYZ. The proceeds of the cat bond sale are placed in a special trust collateralizing the reinsurance contract between ABC Re and XYZ. This collateral is invested in a U.S. Treasury money market fund earning a low net yield in today’s market. XYZ agrees to pay an annual reinsurance premium of 6% of the maximum reinsurance coverage to ABC Re for the cover, or \$15 million per year (6% x \$250 million). This XYZ-paid reinsurance premium, plus any interest income earned on the invested collateral, is distributed quarterly to the cat bond investors as a coupon payment on the cat bond they purchased.

As part of the transaction structuring process, a catastrophe-modeling firm is engaged to evaluate the details of the proposed transaction. The catastrophe modeling firm uses a proprietary, sophisticated computerized modeling system to develop a large number of possible

future hurricane paths, the likelihood of each hurricane path occurring, and the expected likely damage and insured losses from each modeled hurricane. At the conclusion of the modeling process, the catastrophe-modeling firm can calculate a variety of metrics related to the proposed transaction.

In a cat bond transaction, the single-most focused-upon metric is expected claims to be incurred. Based on thousands of storm simulations that the catastrophe-modeling firm has run regarding the risks assumed under the agreements, the catastrophe-modeling firm concludes that, on an actuarial basis, the average annual loss to be incurred under the reinsurance contract is 1.50% of the principal amount insured. This metric is referred to as the expected claims to be incurred. This metric applies to the reinsurance contract and the cat bond itself. Of course, actual losses experienced in any given year are highly unlikely to be 1.50% of the principal amount insured, but losses are expected to actuarially average out at 1.50% over a sufficiently large number of modeled occurrences. This transaction valuation exercise is done for pricing and modeling purposes. It is not an actual loss expectation in the conventional sense. Given the contract's terms, reinsurance claims paid by ABC Re to XYZ, and the corresponding bond principal lost by the cat bond investors, will be defined as 5% of industry losses reported on the PCS catastrophe loss index above the contractually defined trigger amount of \$5 billion if an event occurs and there is a loss with a ceiling of \$10 billion. Once the PCS index reaches its \$10 billion in paid claims ceiling, both the reinsurance contract and bond limits are reached and no further losses will be incurred by ABC Re or the cat bond investors.

Principal written off on the cat bond is paid by ABC Re to XYZ as a reinsurance claim payment that will help XYZ offset claims incurred from the storm. All reinsurance payments made to ABC are based on the PCS catastrophe loss index results, regardless of the status of ABC's actual claims incurred. The cat bond's principal is written down by the same amount as the reinsurance payment, with the cat bond investors thereby effectively absorbing the insured losses on behalf of XYZ. As a specific example, if a Florida hurricane results in \$7.5 billion in total industry losses, XYZ will receive \$125 million from ABC Re and the cat bond investors forfeit half of their \$250 million in bond principal, as per the terms of the contract. As collateral is liquidated to pay the claim in excess of net premiums, the principal value of the cat bond is reduced.

Investor Returns and Losses Realized to Date on ILS Transactions

Transactions with Realized Principal Losses: The table below lists cat bond transactions where investors have realized principal losses to date due to the payment of an insurance claim to the bond's sponsor or due to the realization of collateral investment losses. Insurance claims have been paid as the result of the occurrence of a variety of covered insured events, including earthquakes, hurricanes, tornados and explosions.

Four transactions realized principal losses due to a single event discussed above: investment losses associated with the investment of the transaction's collateral combined with the failure of a Lehman Brothers subsidiary that served as a TRS swap counterparty to the transaction. In the case of the Lehman-related losses, there is no publicly available information regarding the size of the loss investors realized from the transactions.

Catastrophe Bond Realized Principal Losses Transaction Incurring Principal Loss and Amount of Associated Principal Loss

Transaction	Year Issued	Sponsor	\$ Size (million)	Loss Percentage	Reason for default
Kelvin Ltd	1999	Koch Energy Trading	\$50	complex	Temperatures
KAMP Re 2005	2005	Zurich American	\$190	75%	Hurricane
Avalon Re	2005	Oil Casualty Ins. Ltd	\$405	9% in Class C	Explosions
Carillon Ltd.	2006	Munich Re	\$84.50	NA	Lehman failure
Ajax Re Ltd.	2007	Aspen Insurance	\$100	NA	Lehman failure
Newton Re	2008	Catlin	\$150	received collateral	Lehman failure
Willow Re	2008	Allstate	\$250	NA	Lehman failure
Muteki Ltd	2008	Zenkyoren	\$300	100%	Japanese earthquake
Mariah Re Ltd	2010	American Family	\$200	100%	Joplin, MO tornado

Overall Investment Return: Lane Financial has decomposed cat bond market annual investment returns into discrete sub-components: price return, spread return and floating return. The insurance component is defined as the bond's price return (change in price of the bond in the secondary market) plus the spread return (the insurance premium paid by the bond's sponsor). According to Lane Financial, the cat bond segment of the ILS market as a whole incurred negative returns in its insurance component only during one calendar year, 2005, for a negative return of 1.44%. All paid claims for covered events absorbed during the year are reflected in the price return. In all but 2005, the total insurance premiums paid by the sponsors on cat bonds tracked by the index considerably exceeded the total claims paid. On average over the period 2002 to 2011, investors in the ILS market would have earned an annual 5.73% insurance return on their ILS investment. In addition to the insurance component, the investor also receives an income return on the investment of the transaction's collateral ("floating return"). The floating return and the spread return will always be positive, while the price return can be either positive or negative.

Catastrophe Bond Investment Performance by Source 2002 to 2011

Calendar Annual Returns, ALL Cat				
Year	Total	Insurance	Floating	Price
2002	8.91%	6.86%	1.93%	1.23%
2003	7.41%	6.09%	1.25%	0.83%
2004	5.82%	4.26%	1.50%	-0.59%
2005	1.84%	-1.44%	3.31%	-6.22%
2006	11.69%	6.13%	5.27%	-0.68%
2007	14.86%	8.91%	5.50%	1.80%
2008	2.65%	1.28%	1.35%	-6.78%
2009	13.22%	11.65%	1.43%	4.45%
2010	11.81%	10.51%	1.18%	3.26%
2011	3.63%	3.04%	0.57%	-4.67%
<i>Annual Average</i>	8.18%	5.73%	2.33%	-0.74%
<i>Std Dev</i>	4.64%	4.08%	1.76%	3.91%

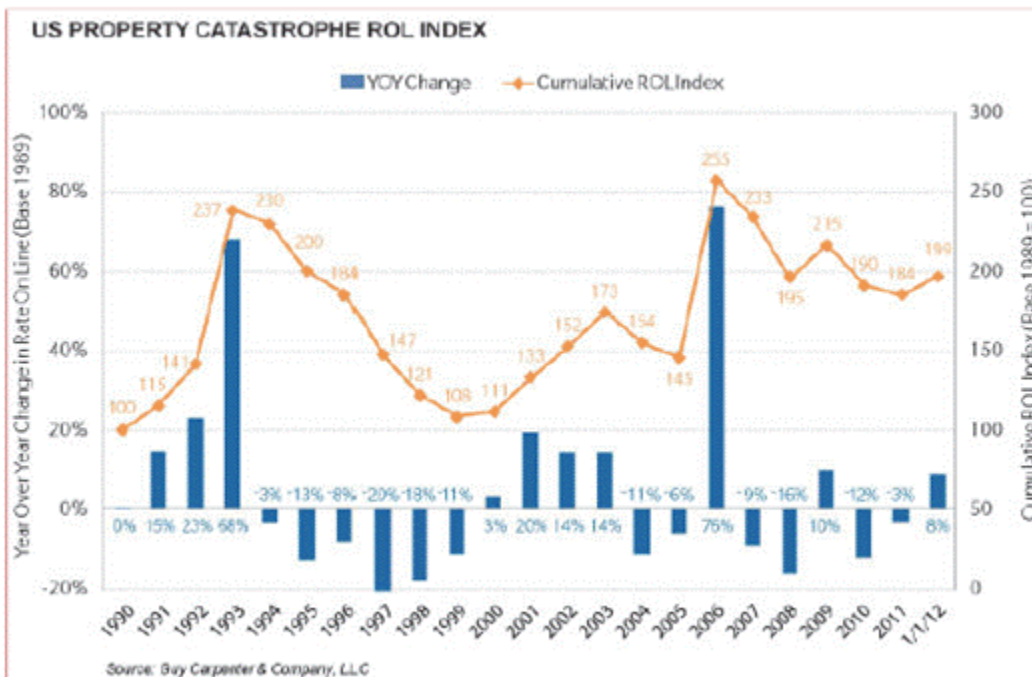
Source: Lane Financial L.L.C, *Quarterly Market Performance Report – Q4 2011*.

Market Pricing

Issuance Pricing: Cat bond pricing at issuance depends on a variety of factors. Some are due to factors unique to the issue, such as risks covered, coverage term and claim-payment

parameters. Other factors are market-related, such as the overall state of capital markets, other structured transactions simultaneously available in the market, and investor demand for assets. One of the most important factors is reinsurance market pricing. As discussed above, cat bonds and reinsurance are often direct substitutes for each other. An insurer seeking protection from potential catastrophe exposures will naturally compare the price of protection from both markets. As the chart below illustrates, reinsurance market pricing can be quite volatile, even from one year to the next. This pricing volatility will likely also be reflected in cat bond pricing and new issuance. A “rate on line” is a common method for evaluating reinsurance pricing. It is a percentage derived by dividing the reinsurance premium paid for the coverage by the limit on the reinsurance coverage supplied. For example, a \$1 million premium paid for a \$10 million limit on reinsurance coverage supplied is a 10% rate on line.

U.S. Property/Casualty Reinsurance Pricing Index 1990 to 2012



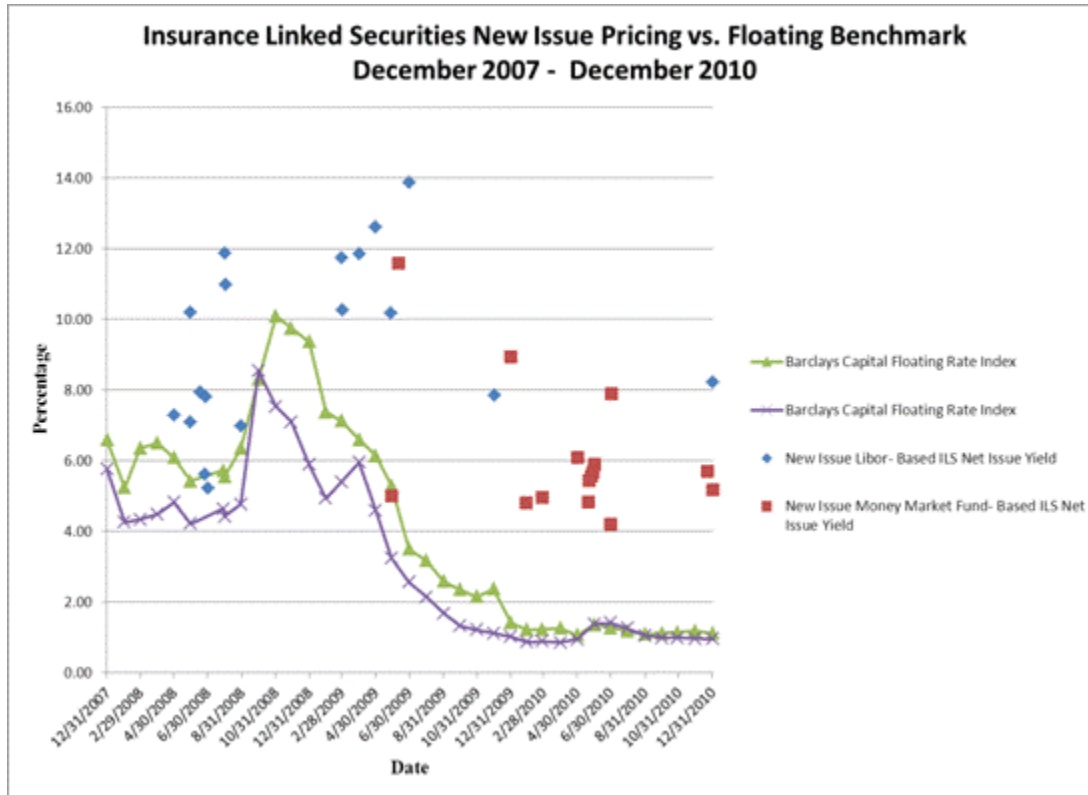
Source: Guy Carpenter, *January 2012 Reinsurance Renewal: US Property Pricing*, Jan. 17, 2012.

The chart below illustrates net expected yields for a series of cat bonds issued over a three-year time period. In constructing this chart, we have taken the market yield of the cat bond at its time of issue and deducted the bond’s claims expected to be incurred to result in an expected net yield for the cat bond. For example, if the cat bond’s yield is 6% at issue and the claims expected to be incurred is 1.5%, the bond’s net yield is 4.5%. This is a measure of the average return that the investor would expect earn for assuming the cat bond’s risk over a sufficiently large sample size. In some scenarios, the investor would earn the 6% yield, and, in other scenarios when large cat losses occur, the investor would earn a negative return; however, over a large number of scenarios, the average return earned by the investor in this cat bond should be a 4.5% net expected yield. These numbers are all reflective of cash flows that are projected in the model used, and are not indicative of actual cash flows to the investors.

In fact, the actual market expected net yields at issue have varied widely during this period. There also seems to be little relationship between cat bonds’ expected net yields to current market yields on two Barclays Capital floating rate bond benchmarks. We have compared the

cat bonds yields to floating rate benchmarks because the cat bonds are themselves floating rate bonds. The yields on these cat bonds are more driven by factors related to the cat bond issue itself and cat bond market conditions than overall fixed-income market conditions.

**Insurance-Linked Securities New Issue Pricing vs. Floating Benchmark
December 2007 to December 2010**



Source:

Lane Financial L.L.C; Bloomberg; Barclays Capital.

Pricing in the Secondary Market: Cat bonds trade on a variety of factors in the secondary market. Of course, as is true with any market, the level of supply and demand is a major driver. Other factors that are also important in pricing cat bonds include peril(s) covered, the claims expected to be incurred, probability of attachment and seasonality.

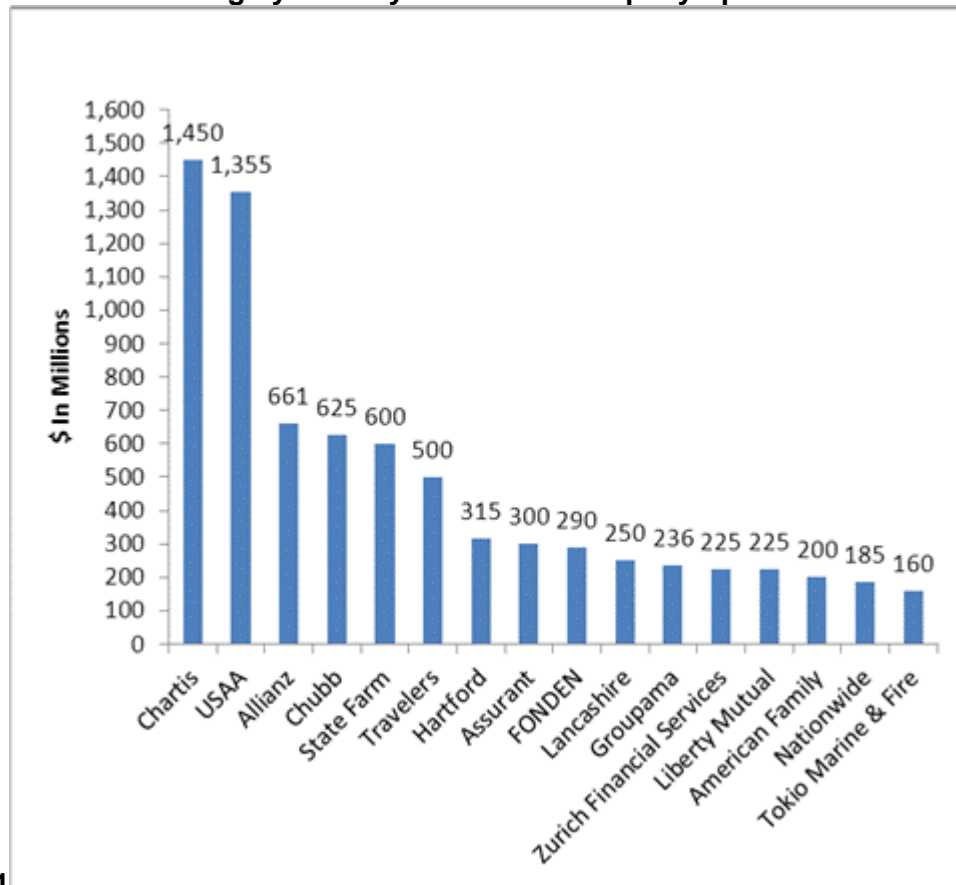
The primary metric used for evaluating bonds in the secondary market is the multiple of discount margin to claims expected to be incurred. In this metric, no credit is given for the actual level of the benchmark floating rate index, such as LIBOR itself. For example, whether LIBOR is 1% or 4%, the actual value of LIBOR is not incorporated into either the DM numerator or in the claims expected to be incurred denominator of the measure. The reasoning for this is that the cat bond investor is primarily being paid for assuming cat risk. The market, therefore, wants to compare the reinsurance-risk premium being received by the bond investor to the cat risk being assumed, without mixing into the measure the investment income being earned by the investment of the transaction's collateral.

As noted previously, market practice is for the claims expected to be incurred metric to be calculated prior to issuance of the bond. It is then assumed to remain constant for the life of the security. Typically, the ratio is in the range of 2.0 times to 5.0 times. Bonds with a higher level of expected claims to be incurred would be likely to have a lower multiple than a bond with a lower level of claims expected to be incurred. A multiple of 2.0 times, for example, means that the current expected market return on the cat bond if no insurance claims occur is twice the level of claims modeled. Only in special cases, such as for a bond with a very short remaining maturity with little to no remaining perceived insurance risk, would this multiple be less than 1.0 times.

Cat Bond Insurance Company Sponsors

The leading primary insurance company sponsors in this market are some of the largest property/casualty insurance companies. Typically, they are U.S.-focused and are subject to substantial U.S. wind exposure risk. The sponsor with the largest single outstanding book is Chartis, the global property/casualty subsidiary of AIG. The insurer with the second-largest outstanding book, just slightly smaller, is USAA, a company that has long been an innovator and leader in the cat bond market. The remaining sponsors are all considerably smaller in size as measured by their book of outstanding cat bonds. The following chart of cat bond issuance outstanding by sponsor includes only cat bond issuance sponsored by primary insurance companies. It does not include cat bonds sponsored issues by reinsurers such as Swiss Re and Munich Re, although they have also been active in this market.

Catastrophe Bonds Outstanding by Primary Insurance Company Sponsor



December 2011

Advantages of Cat Bonds and ILS for Investors

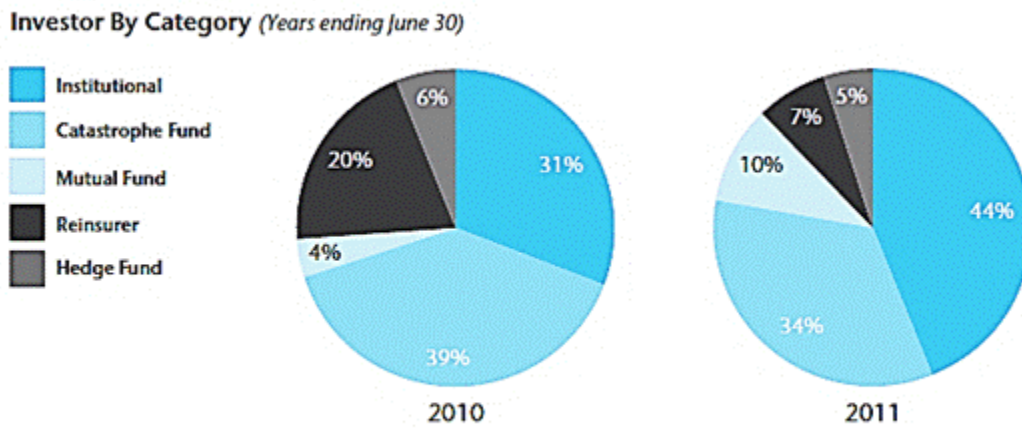
Lack of Correlation: Cat bonds also offers several investor advantages. One major advantage is that their market returns have little correlation with other major asset class returns, because incurred claims are not due to economic events such as market movements, interest rates or inflation. Instead, their performance is directly related to naturally occurring events, such as hurricanes, earthquakes and floods, independent of economic parameters. The same is true for non-cat ILS.

Types of Investors: Investors in cat bonds and ILS transactions fall into several categories. The two largest groups are institutional investors and funds specifically created to invest in such issues, typically primarily or exclusively cat bonds. Smaller portions of the market belong to other types of investors, such as retail-oriented mutual funds, reinsurers and hedge funds. As the market continues to evolve, we expect that existing investors will become more comfortable

with this market, and new investors might become attracted to it. Insurance company investments, which we have already indicated is relatively modest in dollar amount, is included in the chart below in the institutional investor category, with the exception of reinsurers that are displayed separately.

The NAIC's analysis of the Dec. 31, 2010, investment holdings of the U.S. insurance industry shows that the industry owned approximately \$380 million in cat bonds. These insurance industry holdings are concentrated in a handful of insurance companies, almost all of which are life insurance companies. In contrast, property/casualty insurance companies, which are already exposed to catastrophe risk from their insurance business, have purchased very few cat bonds, as this would add to an already significant business risk.

**Catastrophe Bond Market Share by Investor Type
For Years Ending June 30, 2010, and June 30, 2011**



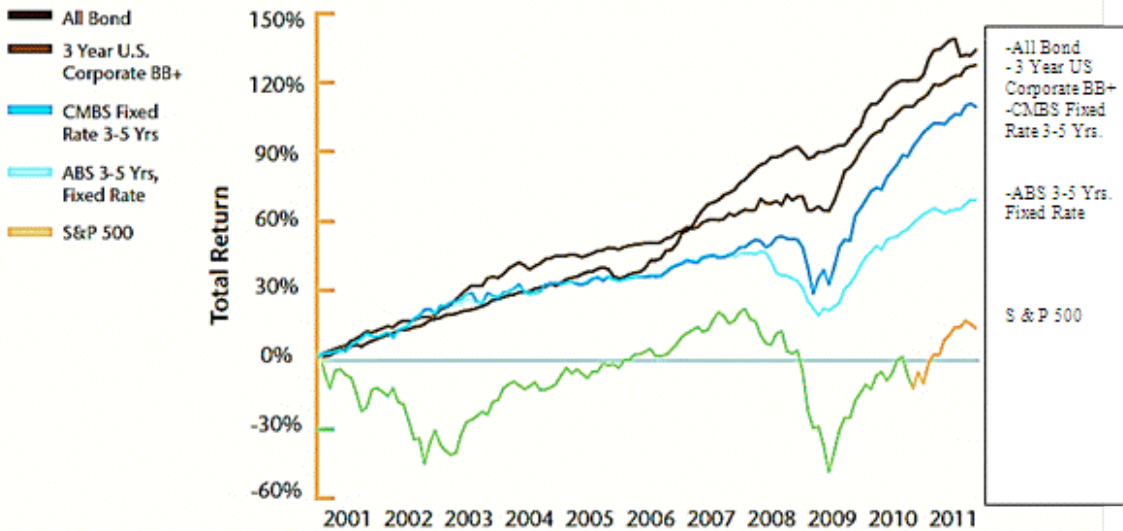
Source: Aon Benfield Securities

Source: AON Benfield Securities, *Insurance Linked Securities, 2011*.

Investment Performance: Given the wide divergence of the market and its relatively low trading volumes, it is difficult to measure the investment performance of the market, and compare its investment performance to alternative investments. Aon Benfield, a leading reinsurance broker and advisor, publishes a series of indices tracking the performance of the cat bond portion of the ILS market in three distinct segments: BB-rated bonds; U.S. hurricane bonds; and U.S. earthquake bonds. Each index is a total return index representing the return an investor would have achieved by allocating an amount of capital weighted to each cat bond available in the market at that point in time. The All Bond Index is the combination of the results of the other three indices for an aggregate market performance. This index includes only cat bond issues, despite its name as the All Bond Index.

The chart below illustrates the total return performance of the Aon Benfield All Bond Index against several other investment benchmarks. The index has exhibited a consistent upward trend for almost the entire period. Not only has it outperformed every other index during this 10-year period, it also has been less volatile. During the lengthy and volatile observation period, the Aon Benfield All Bond Index has rarely declined except for brief periods, unlike the other benchmarks.

**Aon Benfield All Bond Index vs. Investment Benchmarks
2001 to 2011**

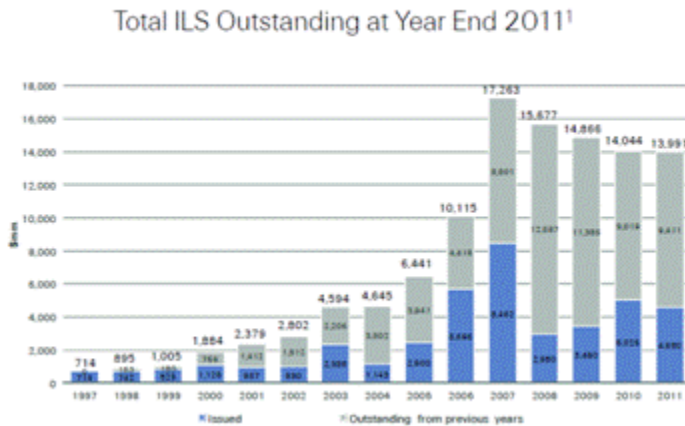


Source: Aon Benfield Securities, Bloomberg

Source: Aon Benfield, *Insurance Linked Securities, Consistency and Confidence 2011*.

Market Dimensions

Total ILS Outstanding by Year 1997 to 2011



Source: Swiss Re Capital Markets.

According to Swiss Re Capital Markets, \$4.6 billion of new ILS securities were issued during 2011. Swiss Re Capital Markets is the securities affiliate of Swiss Re, which is one of the largest professional reinsurers in the world. This 2011 issuance volume is a 9% decline from the \$5 billion of ILS bonds that were issued during 2010.

The size of the outstanding ILS market grew slightly during 2011 to \$14 billion outstanding at year-end 2011. This metric includes all property/casualty cat bonds outstanding, as well as life and health bonds with substantial principal at risk. However, it does not include embedded value, or NAIC Regulation XXX or NAIC Regulation AXXX securitization-related transactions. The ILS market has generally been contracting since the financial crisis, consistent with the continuing general decline in most forms of structured finance. Given the pipeline of potential new issues in the planning stages, we might soon see some modest growth in the ILS market,

but it remains unlikely that amounts outstanding will soon reach 2007's \$17.3 billion peak in outstandings.

Life and Health ILS

While property/casualty-oriented cat bonds dominate the ILS market, the life and health insurance industry has also made substantial use of this market, especially prior to the financial crisis. Since the financial crisis, the life and health ILS market has shown more modest activity. There were three new life and health ILS transactions issued during 2011, for a total of \$416 million in par amount. This was down slightly from three issues with a \$425 million par amount issued during 2010. The peak year for life and health transactions was 2007, with \$6 billion issued.

Life and Health ILS Issues Prior to the Financial Crisis: Prior to the financial crisis, U.S. life and health insurers used ILS for a variety of purposes. Many of these ILS transactions were used to manage insurers' statutory capital and reserve requirements. Actual risk transference was usually a secondary consideration.

Prior to the financial crisis, a variety of different types of life and health transactions occurred. In many cases, the resulting ILS were wrapped by a financial guarantor that insured both the principal and interest of the resulting bonds. The guarantor wrap substantially simplified the effort required to get the investor to purchase the bond, as the investor could primarily rely on the guarantor's creditworthiness in evaluating the security.

The life insurance industry's largest single ILS transaction was a 2007 \$2.5 billion transaction sponsored by MetLife Reinsurance Company of Charleston (MetLife Re). This was a complex transaction where MetLife Re issued \$2.5 billion in floating rate surplus notes that were used to fund a reinsurance trust related to a closed block of life policies in Metropolitan Life Insurance Company's book.

A number of transactions took place during 2004 to 2007 that financed required reserves for term or universal life insurance policies for a variety of insurers. These transactions were often referred to as "XXX transactions" or "AXXX transactions" in reference to the NAIC model regulations that these transactions were designed to address. These ILS were often initially rated triple-A by rating agencies based on financial guarantor bond insurance. The Orkney and Ballantyne Re transactions were of this type. Both were sponsored by a reinsurer named Scottish Re. However, several of these reserve financing-oriented transactions incurred significant financial difficulties. The problems arose due to the financial crisis and its associated fallout, including declining housing prices, defaulting residential mortgage loans, failed financial institutions and investors abandoning some markets. The specific problems that arose in these transactions included credit problems at the financial guarantor wrapping the ILS, realized investment losses incurred by the structured finance investments collateralizing the transaction, and the failure of certain short-term investment markets used to finance the transactions.

Tailwind Re, sponsored by UNUMProvident Corporation, reinsured a block of long-term income claim-protection reserves during 2006.

Several excess mortality transactions have been issued where certain life insurance risks were transferred. During 2006, OSIRIS was sponsored by AXA and Tartan Capital was sponsored by Scottish Re. Several Vita transactions were sponsored by Swiss Re during 2004 and 2005.

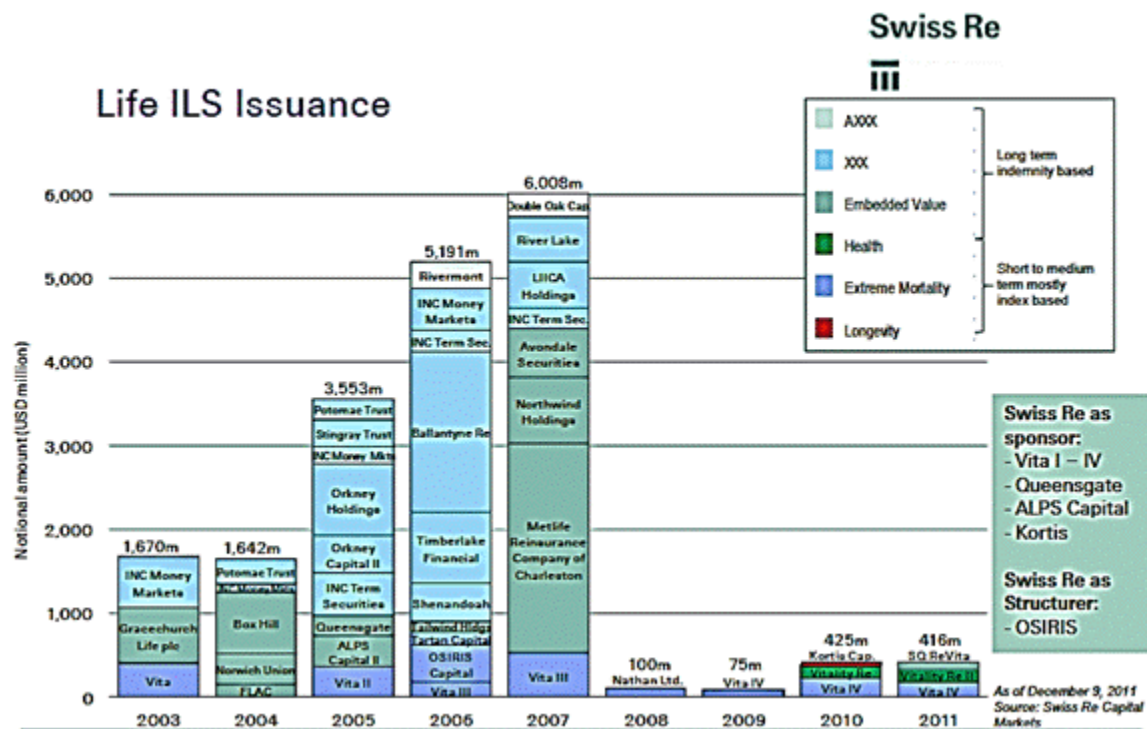
Life and Health ILS Issues Post Financial Crisis: Several types of ILS issues have been sponsored by life and health insurers since the financial crisis.

Aetna sponsored three Vitality Re issues that provided with Aetna catastrophic-risk protection and thereby reduced the company's required capital levels. Vitality Re protected Aetna from the occurrence of a higher-than-expected medical benefits ratio occurring on specified group health insurance policies.

Swiss Re sponsored several excess mortality bonds. They were issued by Vita Capital and provide Swiss Re with protection against the occurrence of extreme mortality in the United

States, the United Kingdom, Canada and Germany, from such risks as infectious disease, terrorism and earthquake casualty. Vita Capital issued bonds in 2009, 2010 and 2011. Swiss Re sponsored Kortis Capital, which transferred longevity-trend risk against significant and unexpected increases in U.K. mortality improvements, relative to U.S. mortality improvements. Kortis was the first rated and tradable security providing protection against longevity-trend risk. Aurigen Reinsurance, a Canadian life reinsurer, sponsored Vecta I, a CDN\$120 million embedded value securitization. This December 2011 transaction monetized expected future profits that were expected to be generated by a defined block of insurance business. Principal repayment on the bonds is linked to the emergence of future profits on the business associated with 12 life reinsurance treaties assumed from six separate life insurance companies. Aegon and Deutsche Bank announced in February 2012 a €12 billion longevity-risk transference transaction. To initiate this transaction, Aegon transferred longevity risks related to annuity policies it had written to Deutsche Bank. Deutsche Bank then transferred these risks to other third parties via a series of nonpublic capital markets transactions. While little information is publicly available about these transactions, they are indicative of the potential for continued expansion of ILS into life-related risks.

Life Insurance-Linked Security Issuance by Year 2003 to 2011



Source: Swiss Re, December 13, 2011.

Major Events Affecting the ILS Market During 2011

Financial Crisis: The first is the continuing fallout from the financial crisis and the resulting significant contraction of the overall structured securities market. During 2011, the structured securities market continued being negatively affected by the fallout of the financial crisis, with constrained new issuance and cautious investors. In some sectors, such as non-agency residential mortgage-backed securities (RMBS), issuance has dried up almost completely. The experience in the ILS market has been consistent with this overall trend. Peak ILS issuance was \$7.2 billion in 2007, just prior to the onslaught of the financial crisis. The market has been slowly recovering since then, but new issuance has generally been insufficient to keep up with maturing ILS, thereby causing the market to generally shrink in size.

2011 Japanese Earthquake and Tsunami: The second factor is the March 11, 2011, Japanese earthquake and tsunami. This earthquake resulted in the first complete natural catastrophe driven cat bond market investor loss of principal. The entire principal of a \$300 million bond issued by a Munich Re sponsored transaction (Muteki Ltd.) was paid out in a reinsurance payment to the bond's sponsor due to the occurrence of a Japanese earthquake. A partial loss is also being incurred by a second bond that is part of that same transaction. In addition, several other cat bonds have been negatively affected by the earthquake, although investors in these bonds have not yet incurred any principal loss. None of these other bonds will incur principal losses for investors unless an additional second reinsurance claim triggering event occurs prior to the bond's coverage period ending.

Heavy U.S. Catastrophe Occurrences: The third factor is the occurrence of an unusually large and severe group of catastrophes in the United States during 2011. The vast majority of these U.S. catastrophes were associated with the series of tornadoes and hailstorms occurring in the Midwest and Southeast during April and May 2011. There were also substantial property claims from Hurricane Irene on the East Coast. However, most of the property losses were either uninsured or insured by the National Flood Insurance Program operated by the federal government. Despite an equal number of hurricanes forming in 2011 as in 2010, total insured claims for 2011 storms will be significantly higher than those incurred in 2010. It is estimated that total insured claims from the 2011 Atlantic hurricane season will be approximately \$5 billion. An A.M. Best survey of U.S. property/casualty companies reported that their total pretax, accident-year catastrophe-related claims incurred, net of reinsurance and reinstatement premiums, were an estimated \$38.6 billion for the first nine months of 2011. This is up 140% from an estimated \$16.1 billion reported during the same nine-month period in 2010.

Hurricane Irene: This was one of the most damaging hurricanes to ever hit land in the United States. It traveled up much of the East Coast in late August 2011, including areas normally not prone to hurricane risk, such as upstate New York. Hurricane Irene was the first hurricane to hit land in New Jersey in more than 100 years. Despite the significant amount of incurred storm damage, no cat bond is expected to realize a principal loss due to Hurricane Irene. Cat bonds are subject to principal losses only when precisely defined contract triggers are breached, and this will not be the case for any cat bond covering U.S. hurricane risk from Hurricane Irene. At one point, four cat bond issues, with a total par amount in excess of \$1 billion, were believed exposed to potential principal losses from Hurricane Irene. For a brief period, immediately prior to Hurricane Irene hitting land, some exposed bonds were quoted in the secondary market at steep discounts, with one bond quoted as low as 30% of par, due to fears of expected principal losses that might be incurred by the bond. However, as no principal losses occurred on the bonds, they were again soon quoted near par in the secondary market, as they currently are.

Joplin, MO, Tornado: Other major storms also hit the United States during 2011, including a tornado that hit Joplin, MO, May 22, 2011. The Joplin tornado is the costliest tornado in U.S. history, with total damage estimates of \$3 billion and expected insurance claims of approximately \$2.2 billion. Investors in two catastrophe bonds totaling \$200 million issued by reinsurer Mariah Re Ltd. (a special purpose vehicle created for this transaction) have lost their entire principal investment. These cat bonds were sponsored by American Mutual Family Insurance Company. The Mariah Re transactions reinsured American Mutual Family for damage incurred from severe thunderstorms, hailstorms, tornadoes and windstorms over a 19-state territory in the Midwestern portion of the United States.

Overall ILS Market Performance

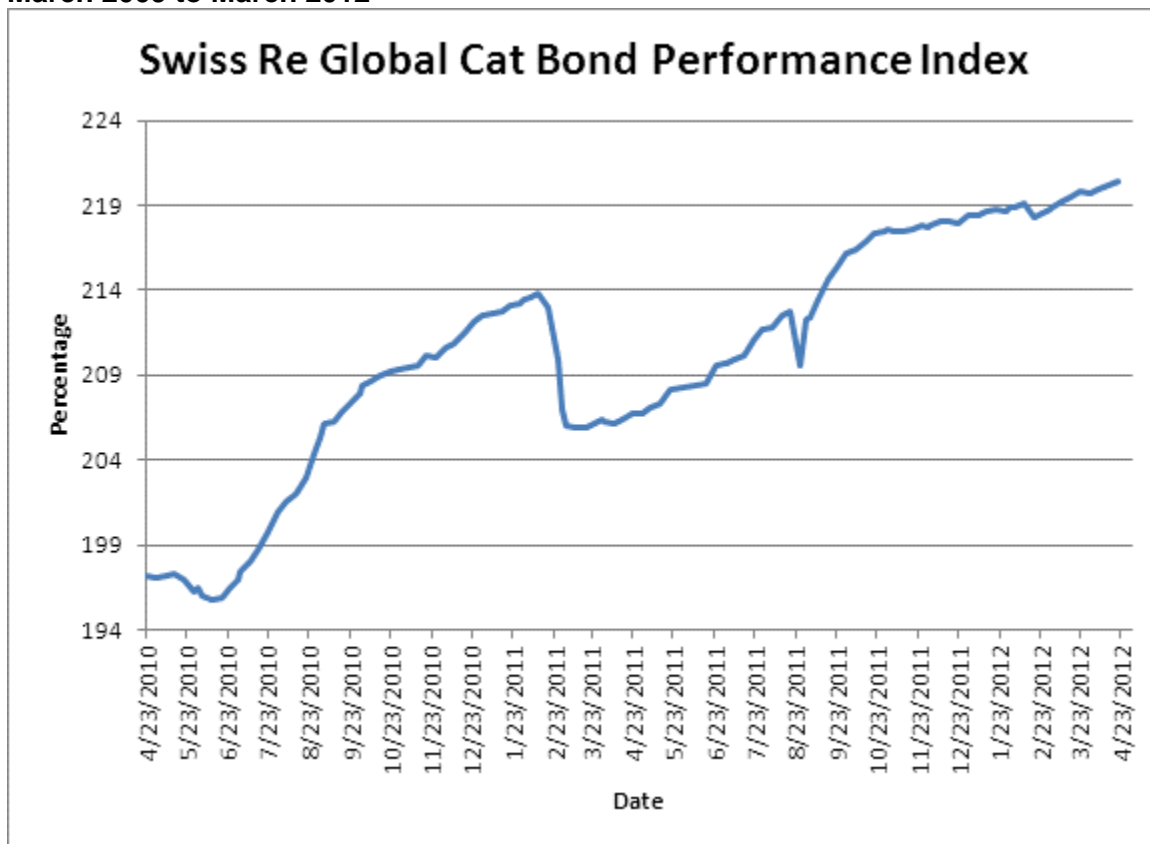
Given the heterogeneous nature of the market, it is difficult to discuss the market in its entirety. Each bond has its own unique characteristics in terms of perils covered, risk periods covered, triggers and parameters.

No return data is available for the ILS market as a whole, although several indices measure returns of the cat bond segment of the market. Measured over short time periods, the cat bond

market has shown modest volatility during an extremely volatile period for capital markets as a whole. The cat bond market as a whole had a meaningfully negative total return during March 2011 as a consequence of the Japanese earthquake and tsunami that occurred that month. The Swiss Re Global Cat Bond Performance Total Return Index tracks the total return for all outstanding U.S. dollar denominated cat bonds. According to this index, the cat bond market declined approximately 4% during March 2011, primarily due to concerns of heavy principal losses to certain cat bonds as a result from the Japanese catastrophes. However, by mid-August 2011, the market had nearly completely recovered from the March decline as it became clear that these concerns were unfounded and that principal losses would be modest. The cat bond market declined yet again in August 2011, but much more modestly. This decline was due to concerns related to another catastrophe, Hurricane Irene on the U.S. East Coast. However, this downward spike and subsequent uptick were considerably more modest than the March correction. In this case, the index returned to its previous levels in a short time period when it became evident that little or no cat bond principal losses would occur from Hurricane Irene.

The cat bond market had another meaningful market correction during the first quarter of 2012, with yields rising and prices falling. In this case, the market move was not due to insured losses being incurred, but it was instead due to market "indigestion" from heavy new issue activity. According to AON Benfield, \$1.5 billion of new catastrophe bonds closed during the quarter, and new issuance during the quarter was the largest ever for a first quarter. As a result, the market yields rose which resulted in modestly negative performance. This is likely to reverse itself relatively quickly absent a major market event, since the higher bond yields will rapidly drive total returns earned up.

**Swiss Re Global Cat Bond Performance Index
March 2009 to March 2012**



Source: Swiss Re Capital Markets.

Prospects for the Future of the ILS Market

As the market continues to develop and expand, we expect that we will see additional participants from ILS sponsors and investors. However, given the complex nature of ILS transactions, it is likely to remain a highly specialized market of relatively modest overall size.

Short Market Tenor: Cat bonds are typically issued around three years to maturity or less. Less than 3% of cat bonds have had maturities of greater than four-and-a-half years at issue date. In addition, issuance in recent years has been relatively modest compared to issuance prior to the occurrence of the financial crisis. These two combined factors result in an outstanding cat bond market with a short maturity profile of only a few years. The generally short tenor of cat bonds at issuance also means that issuance has to remain consistently meaningful if the market is not to automatically shrink.

Cat Bond Maturity Distribution at Issuance

\$13.2 Billion of Bonds Issued Between 2008 and 2011

1.49 Year or Less	2.2%
1.50 to 2.49 Years	3.2%
2.50 to 3.49 Years	78.0%
3.50 to 4.49 Years	14.0%
4.50 Years or Longer	2.7%

New and Non-Traditional Issuers: The market is also attracting new and non-traditional issuers. To date, most issuers have been either reinsurers or primary insurers seeking an alternative to traditional reinsurance coverage. However, the market now also periodically attracts issuers that are not traditional insurers, but are still subject to financial risks that ILS can be used to help manage.

One example is the California Earthquake Authority (CEA). In August 2011, the CEA sponsored a \$150 million Embarcadero Re transaction as a cover for its California earthquake insurance program. The CEA's Chief Executive Officer Glenn Pomeroy has said: "This deal is a game-changer. Traditional reinsurance has been valuable for the CEA, and will be going forward. But the CEA must diversify and expand its claim-paying resources. A diverse set of risk-transfer tools, which includes not only reinsurance and catastrophe bonds but also post-earthquake federal loan guarantees, will help us make earthquake insurance more affordable and more widely used." The CEA also issued a second similar transaction in January 2012 for another \$150 million of reinsurance protection.

A second example is Electricite De France (EDF). In August 2011 EDF, one of the world's largest energy companies, sponsored a cat bond. EDF has substantial physical property exposures in France at risk of damage and financial loss during storms. The transaction supplied €150 million of protection for five years against property losses incurred from French windstorms. This is EDF's second cat bond transaction.

The issuance of a \$750 million cat bond by Everglades Re, Ltd., sponsored by Florida's Citizen Property Insurance Corp., is also especially meaningful as it is the largest cat bond ever issued and will bring considerable new attention and focus to the cat bond market.

Summary

While the ILS market fulfills an important role for ILS sponsors and investors, it remains sensitive to internal and external market factors. For insurers, the ILS market offers additional opportunities to purchase enhanced reinsurance protection for defined events at a well-defined and reasonable cost. The protection can often be purchased for a multi-year period and the purchased protection has little associated credit risk. This cover can also be above-and-beyond protection purchased through more traditional reinsurance channels.

For investors, the ILS market offers the promise of enhanced returns with minimal correlation to other asset classes. However, the availability of ILS investments is limited. The entire market now has about \$14 billion in outstanding bonds. In addition, the heavy concentration of the cat bond segment of the market in a few highly correlated sectors, most notably U.S. wind exposures, makes developing a truly diversified portfolio problematic for a dedicated ILS investor.

However, as the market continues to expand and mature, the market is likely to continue to offer additional opportunities to both sponsors and investors.

April 30, 2012

Major Insurer Bond Yields				Weekly Change				
				Price			Spread	
Company	Coupon	Maturity	Current	Change	Yield	B.P.	Change	
Life	Aflac	8.500%	5/15/2019	\$132.25	\$0.32	3.32%	192	1
	Ameriprise	5.300%	3/15/2020	\$112.34	\$0.64	3.49%	191	(5)
	Genworth	6.515%	5/15/2018	\$100.27	(\$3.20)	6.46%	529	64
	Lincoln National	8.750%	7/15/2019	\$128.38	\$0.39	4.13%	268	(4)
	MassMutual	8.875%	6/15/2039	\$144.88	\$0.65	5.63%	257	(2)
	MetLife	4.750%	2/15/2021	\$110.08	\$0.53	3.41%	163	(1)
	Mutual of Omaha	6.800%	6/15/2036	\$109.11	(\$0.39)	6.07%	325	8
	New York Life	6.750%	11/15/2039	\$129.49	(\$0.33)	4.81%	177	2
	Northwestern Mutual	6.063%	3/15/2040	\$121.12	\$0.21	4.70%	163	1
	Pacific Life	9.250%	6/15/2039	\$129.29	\$0.24	6.86%	381	(2)
	Principal	6.050%	10/15/2036	\$112.90	\$2.45	5.12%	228	(10)
	Prudential	4.500%	11/15/2020	\$106.89	\$0.16	3.56%	189	10
	TIAA	6.850%	12/15/2039	\$127.48	\$0.73	5.00%	193	(3)
P&C	ACE INA	5.900%	6/15/2019	\$121.90	\$0.66	2.52%	109	(4)
	Allstate	7.450%	5/15/2019	\$127.48	\$0.48	3.08%	168	(5)
	American Financial	9.875%	6/15/2019	\$126.73	\$0.37	5.31%	387	(1)
	Berkshire Hathaway	5.400%	5/15/2018	\$118.75	\$0.04	2.08%	95	5
	Travelers	3.900%	11/15/2020	\$109.63	\$0.49	2.63%	93	(1)
	XL Group	6.250%	5/15/2027	\$105.01	\$0.09	5.75%	338	3
Other	AON	5.000%	9/15/2020	\$111.29	\$0.08	3.44%	175	4
	AIG	5.850%	1/15/2018	\$109.93	\$0.69	3.89%	284	(8)
	Fidelity National	7.875%	7/15/2020	\$112.56	\$1.19	5.92%	398	(51)
	Hartford	5.500%	3/15/2020	\$104.41	(\$0.94)	4.82%	328	27
	Marsh	9.250%	4/15/2019	\$133.81	\$0.16	3.69%	229	2
	Nationwide	9.375%	8/15/1939	\$128.84	\$0.88	6.99%	395	(4)
Health	Aetna	3.950%	9/15/2020	\$107.50	\$0.55	2.93%	129	(0)
	CIGNA	5.125%	6/15/2020	\$111.80	\$0.48	3.45%	183	(2)
	United Healthcare	3.875%	10/15/2020	\$108.08	\$0.45	2.79%	114	(1)
	Wellpoint	4.350%	8/15/2020	\$110.83	\$0.44	2.87%	123	1

April 30, 2012

Major Insurer Share Prices

		Close	Change %			Prior		
			Week	QTD	YTD	Week	Quarter	Year
Life	Aflac	\$45.04	5.2	4.1	4.1	\$42.81	\$43.26	\$43.26
	Ameriprise	54.21	1.1	9.2	9.2	53.61	49.64	49.64
	Genworth	6.01	(21.1)	(8.2)	(8.2)	7.62	6.55	6.55
	Lincoln	24.77	2.5	27.5	27.5	24.17	19.42	19.42
	MetLife	36.03	1.5	15.6	15.6	35.49	31.18	31.18
	Principal	27.67	(0.6)	12.5	12.5	27.83	24.60	24.60
	Protective	29.26	3.2	29.7	29.7	28.35	22.56	22.56
	Prudential	60.54	0.8	20.8	20.8	60.05	50.12	50.12
	UNUM	23.74	0.8	12.7	12.7	23.55	21.07	21.07
PC	ACE	\$75.97	4.8	8.3	8.3	\$72.48	\$70.12	\$70.12
	Axis Capital	34.02	1.5	6.4	6.4	33.51	31.96	31.96
	Allstate	33.33	2.6	21.6	21.6	32.47	27.41	27.41
	Arch Capital	39.28	3.6	5.5	5.5	37.90	37.23	37.23
	Cincinnati	35.65	4.1	17.0	17.0	34.26	30.46	30.46
	Chubb	73.07	2.8	5.6	5.6	71.05	69.22	69.22
	Everest Re	99.10	6.4	17.8	17.8	93.13	84.09	84.09
	Progressive	21.30	(5.8)	9.2	9.2	22.61	19.51	19.51
	Travelers	64.32	8.7	8.7	8.7	59.16	59.17	59.17
	WR Berkley	37.66	2.0	9.5	9.5	36.91	34.39	34.39
	XL	21.51	1.4	8.8	8.8	21.21	19.77	19.77
Other	AON	\$51.80	6.7	10.7	10.7	\$48.53	\$46.80	\$46.80
	AIG	34.03	3.8	46.7	46.7	32.80	23.20	23.20
	Assurant	40.34	3.6	(1.8)	(1.8)	38.94	41.06	41.06
	Fidelity National	19.27	4.0	21.0	21.0	18.53	15.93	15.93
	Hartford	20.55	2.3	26.5	26.5	20.09	16.25	16.25
	Marsh	33.45	3.8	5.8	5.8	32.21	31.62	31.62
Health	Aetna	\$44.04	(6.7)	4.4	4.4	\$47.22	\$42.19	\$42.19
	Cigna	46.23	(3.1)	10.1	10.1	47.69	42.00	42.00
	Humana	80.68	(7.8)	(7.9)	(7.9)	87.48	87.61	87.61
	United	56.15	(2.1)	10.8	10.8	57.36	50.68	50.68
	WellPoint	67.82	(1.3)	2.4	2.4	68.74	66.25	66.25
Monoline	Assured	\$14.18	(4.0)	7.9	7.9	\$14.77	\$13.14	\$13.14
	MBIA	10.08	(0.1)	(13.0)	(13.0)	10.09	11.59	11.59
	MGIC	3.46	(16.8)	(7.2)	(7.2)	4.16	3.73	3.73
	Radian	3.12	(9.6)	33.3	33.3	3.45	2.34	2.34
	XL Capital	21.51	1.4	8.8	8.8	21.21	19.77	19.77

April 30, 2012

Major Market Variables

		Close	Change %			Prior		
			Week	QTD	YTD	Week	Quarter	Year
Dow Jones Ind		13,213.63	2.3	8.2	8.2	12,921.41	12,217.56	12,217.56
S&P 500		1,397.91	2.1	11.2	11.2	1,369.57	1,257.60	1,257.60
S&P Financial		207.53	1.1	18.4	18.4	205.23	175.23	175.23
S&P Insurance		188.17	2.2	10.6	10.6	184.16	170.17	170.17
US Dollar \$			Change %			Prior		
/ Euro		\$1.32	0.8	2.1	2.1	\$1.31	\$1.30	\$1.30
/ Crude Oil bbl		104.79	1.7	6.0	6.0	103.06	98.83	98.83
/ Gold oz		1,665.60	1.0	6.3	6.3	1,648.70	1,566.80	1,566.80
Treasury Ylds %		%	Change			%	%	%
1 Year		0.18	0.02	0.08	0.08	0.17	0.11	0.11
10 Year		1.92	(0.06)	0.04	0.04	1.98	1.88	1.88
30 Year		3.12	(0.02)	0.22	0.22	3.13	2.90	2.90
Corp Credit Spreads -bp			Change %			Prior		
CDX.IG		82.11	(1.2)	(27.9)	(27.9)	83.14	113.83	113.83

Questions and comments are always welcome. Please contact the Capital Markets Bureau at CapitalMarkets@naic.org.

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