NAIC National Association of Insurance Commissioners & The Center for Insurance Policy and Research

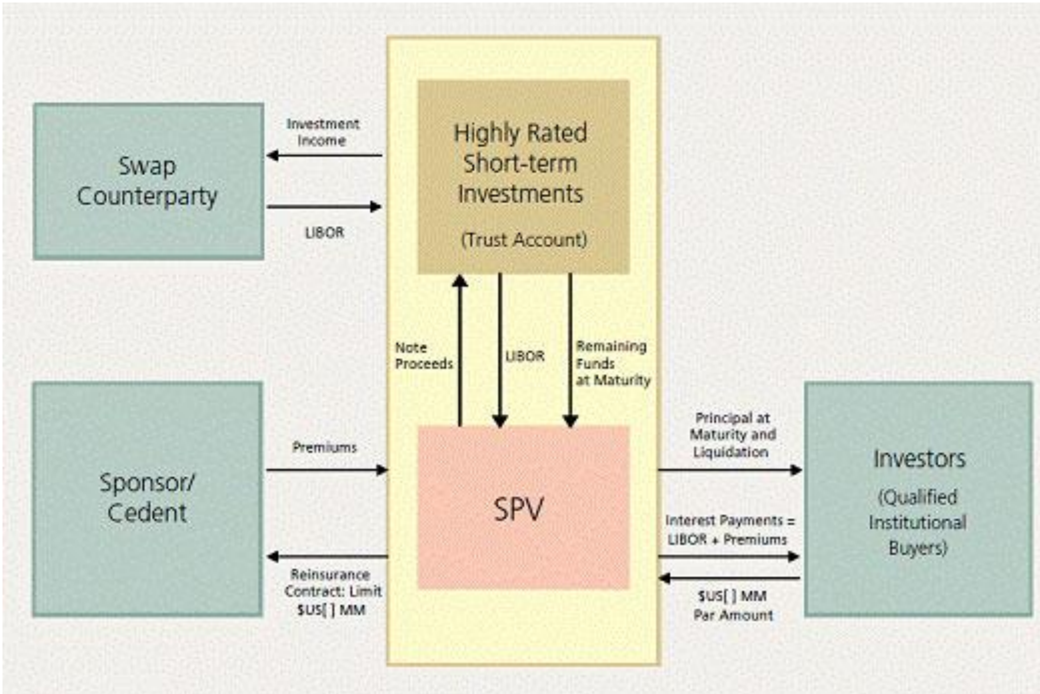
Capital Markets Special Report

The **NAIC's Capital Markets Bureau** monitors developments in the capital markets globally and analyzes their potential impact on the investment portfolios of US insurance companies. A list of archived Capital Markets Bureau Special Reports is available via the **index**

Insurance Linked Securities: Recovering Slowly After the Crisis

Insurance linked securities (ILS) are securities whose performance is linked to the performance of some pre-specified insurance risk. ILS are an expansion of what was originally known as catastrophe bonds(better known as cat bonds). In all such investments under the terms of the agreement a specified set of insurance related risks from the sponsoring insurance company are effectively transferred to the investors in the security. ILS are used by insurers (and reinsurers) to help manage their risk exposure to a specific peril. ILS bonds are often used in addition to or as an alternative to the purchase of reinsurance. The insurer may select the ILS option for a variety of reasons such as lower cost, more customized terms, longer time periods, less counterparty credit risk or a simple lack of additional capacity in the reinsurance market for the largest risks such as Florida hurricane.

The NAIC published a lengthy article on ILS in our June 2010 SVO Research Monthly. We are publishing this update given recent developments in the ILS market, especially the healthy degree of issuance during 2010Q4. The ILS market seems to have at least partially recovered from its abeyance during the financial crisis. ILS bonds are the foundation of complex structures which are based upon an investor purchasing a bond with specially designed terms with cash. The cash proceeds from the sale of the bonds are deposited in a special purpose vehicle (SPV). This cash is then invested in low risk investments such as U.S. Treasuries or short duration, high quality asset-backed securities. These investments then serve as collateral that guarantees the performance of the insurance risk assumption under a reinsurance agreement with the transaction's sponsor. The agreement states that the SPV, and indirectly, the bondholder will absorb potential insurance losses by reducing interest and/or principal due on the bonds if the contractually specified events or losses occur. Via the working of the ILS transaction, investors assume risks that the sponsoring insurance company is transferring away. If the specified event or risk does not occur, the investor gets a superior rate of return and their capital back. If the risk does occur, the investor absorbs the allocated loss up to and including loss of 100% of their invested capital.



Investors in these instruments are almost always institutional investors due to the complex nature of the transactions. Due to the complex nature of these investments, it is often the case that the investor in the transaction specializes in investing in these types of investments.

Often the direct investor in these transactions are special purpose funds created specifically to invest in such transactions. Such specialized catastrophe-oriented funds and/or managers in the market include Eskatos, Coriolis Capital Ltd, Credit Suisse, Nephila, AXA Investment Managers, Fermat Capital Management, Pentelia Capital Management, Anchor Risk Advisors, Solidum Partners, Clariden Leu, Securis, Goldman Sachs Asset Management, and Secquaero Advisors. Through the use of such funds, the ultimate ILS investor or investors in the specialized funds can assemble a diversified portfolio of such investments. In addition, traditional investment managers such as OppenheimerFunds, Pioneer Investments, and PIMCO have also participated in this market at times.

Investors are attracted to ILS as investments for two primary reasons: (1) relatively high nominal yields which are hoped to also translate into favorable expected returns and (2) an asset class with returns that are generally expected to be uncorrelated with more traditional investments. While this lack of correlation is generally true, in certain cases such as the recent financial crisis, certain transactions were more correlated than expected. Such was the case when Lehman Brothers was involved as a derivative counterparty in an ILS transaction and a few rare occasions when the collateral securing the ILS suffered from market value volatility.

A wide and expanding range of insurers have issued ILS. ILS have covered a wide range of risks including life and property and casualty risks, traditional and non-traditional risks and risks from various parts of the globe. A partial list of issuers that have sponsored these transactions include a wide range of U.S. and non-U.S. insurers including USAA, Chartis, Swiss Re, SCOR, and Aetna. While originally these securities were designed to cover catastrophe risks (hence the term cat bonds), more recently the technology has been adapted to also cover many other forms of insurance related risks.

These transactions can offer an insurer several advantages over traditional forms of reinsurance:

1. The risk is prefunded by the counterparty which means that as long as the bond proceeds are invested in low risk assets, there is virtually no credit risk in the transaction to the cedent. Despite this, some past transactions had major problems when the residential mortgage-backed related collateral that was supposed to be low risk turned out to instead be much more risky than expected with the real estate market's collapse.
2. These transactions open up an entirely new class of assumers of risks for the cedents beyond traditional reinsurers.
3. These transactions are often for multiple year periods. Therefore, they give the cedent certainty for the terms and cost of several years' worth of reinsurance unlike traditional reinsurance which is often renegotiated annually.

We list below significant ILS transactions that were originated during 2010Q4. Please be aware that given the fact that all transactions are non-public in nature, this may not be a complete list.

- Swiss Re / Successor X: U.S. and Australia hurricane and quake
- Chartis / Lodestone: U.S. hurricane and quake
- SCOR / Atlas VI: Euro wind & Japanese quake
- USAA / Res Re: U.S. assorted perils
- Aetna / Vitality Re: U.S. morbidity
- Swiss Re / Vita IV: extreme mortality
- Swiss Re / Kortis Capital: longevity trend, U.S. versus U.K. mortality
- Goldman Sachs/Signum Finance: U.S. level term mortality protection
- Groupama/Green Fields: France windstorm
- Flagstone Re /Montana Re: assorted earthquake and hurricane
- American Family /Mariah: U.S. severe thunderstorm
- Swiss Re/Vega Capital 2010-1: assorted perils and locations
- Axa/Calypso Capital: Euro wind

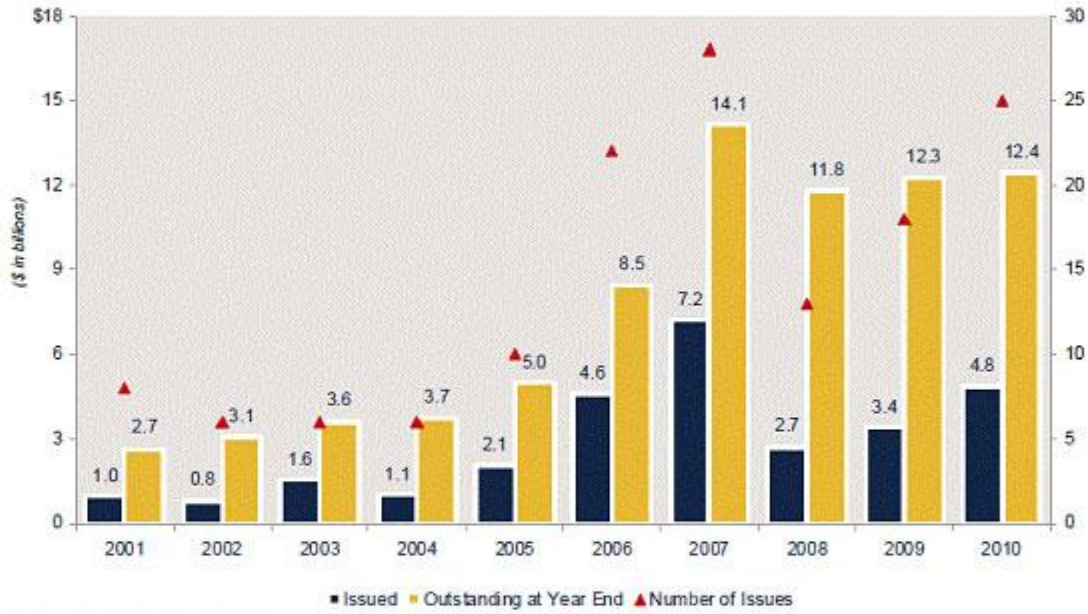
Over time the market has evolved and expanded from its original focus on large catastrophe risks such as hurricane and earthquake. Transactions are being developed to address new types of risk such as morbidity risk in the recent Aetna transaction. In theory, almost any kind of risk that can be quantified can be used as the base of an ILS transaction. However, we believe that given the complexity involved in these transactions, ILS deals will generally be limited to those that the investors can reasonably understand and feel comfortable assuming the risk being underwritten. This includes results from modeling of the risks.

The NAIC adopted a model law (MDL-290) providing for the creation of protected cells by a domestic insurer as a means of accessing alternative sources of capital and achieving the benefits of insurance securitization. While this model law has been adopted by several states, the features available under the law have yet to be used in practice by insurers for a variety of reasons.

As the market continues to develop and expand, it is likely that we will see additional participants from both the issuer and investor sides. However, given the complex nature of these transactions, it is likely to remain a highly specialized market and consequently of relatively modest size. In fact, since 2007 the size of the market has been contracting according to Swiss Re as maturities of existing issues have outpaced new issuance. As of mid-December 2010, Swiss Re estimated that the outstanding notional size of the market was $12.5 billion. Given the years of experience that already exists in this market, and the complexities involved in investing in them, we believe that ILS is likely to remain a highly specialized, niche market. It will serve a useful purpose for both the sponsoring insurer and investor, but will remain but a small part of the insurance risk transference and investment markets.

Insurers, in addition to being issuers of these securities, can and do invest in them on a very limited basis. We would not expect that insurers would or should purchase these securities if they are already exposed to the peril in question in their primary business. For example, we would expect that a homeowners insurance writer in Florida would not purchase a U.S. hurricane based ILS. However, a life insurer or a homeowners insurance writer in California might. Our analysis of the insurance industry's 2009 portfolio holdings disclosed ownership of only $138 million of ILS for the entire insurance industry. Almost all of these were in the life industry and they were held by only a handful of the larger life companies.

CAPACITY ISSUED AND OUTSTANDING BY YEAR (at December 31, 2010)



Source: WCMA Transaction Database.

February 4, 2011
Major Insurer Share Prices

		Close	Change % Week	Change % QTD	Change % YTD	Prior Week	Prior Quarter	Prior Year
Life	Aflac	$57.47	0.8	1.8	1.8	$56.99	$56.43	$56.43
	Ameriprise	58.08	(3.7)	0.9	0.9	60.31	57.55	57.55
	Genworth	12.91	(6.8)	(1.8)	(1.8)	13.85	13.14	13.14
	Lincoln	30.90	6.3	11.1	11.1	29.07	27.81	27.81
	MetLife	47.34	4.0	6.5	6.5	45.50	44.44	44.44
	Principal	33.56	3.1	3.1	3.1	32.55	32.56	32.56
	Protective	28.89	5.1	8.4	8.4	27.50	26.64	26.64
	Prudential	62.91	2.9	7.2	7.2	61.11	58.71	58.71
	UNUM	25.78	3.4	6.4	6.4	24.93	24.22	24.22
PC	ACE	$63.06	3.1	1.3	1.3	$61.17	$62.25	$62.25
	Axis Capital	36.20	1.7	0.9	0.9	35.60	35.88	35.88
	Allstate	31.35	0.6	(1.7)	(1.7)	31.15	31.88	31.88
	Arch Capital	89.92	2.4	2.1	2.1	87.80	88.05	88.05
	Cincinnati	33.15	3.1	4.6	4.6	32.16	31.69	31.69
	Chubb	58.70	1.3	(1.6)	(1.6)	57.97	59.64	59.64
	Everest Re	85.39	0.6	0.7	0.7	84.88	84.82	84.82
	Progressive	20.13	2.4	1.3	1.3	19.66	19.87	19.87
	Travelers	57.41	2.9	3.1	3.1	55.81	55.71	55.71
	WR Berkley	28.98	2.6	5.8	5.8	28.24	27.38	27.38
	XL	23.44	2.8	7.4	7.4	22.81	21.82	21.82
Other	AON	$48.16	6.3	4.7	4.7	$45.32	$46.01	$46.01
	AIG	40.00	(0.6)	(17.1)	(17.1)	40.26	48.27	48.27
	Assurant	39.46	1.2	2.4	2.4	38.98	38.52	38.52
	Fidelity National	14.00	0.4	2.3	2.3	13.94	13.68	13.68
	Hartford	29.23	5.6	10.3	10.3	27.69	26.49	26.49
	Marsh	28.39	2.2	3.8	3.8	27.78	27.34	27.34
Health	Aetna	$37.42	13.6	22.6	22.6	$32.95	$30.51	$30.51
	Cigna	42.83	3.8	16.8	16.8	41.26	36.66	36.66
	Humana	60.54	4.1	10.6	10.6	58.18	54.74	54.74
	United	42.49	3.8	17.7	17.7	40.93	36.11	36.11
	WellPoint	65.07	3.8	14.4	14.4	62.66	56.86	56.86
Monoline	Assured	$14.88	4.6	(15.9)	(15.9)	$14.22	$17.70	$17.70
	MBIA	10.77	0.2	(10.2)	(10.2)	10.75	11.99	11.99
	MGIC	8.36	1.1	(18.0)	(18.0)	8.27	10.19	10.19
	PMI	2.98	2.4	(9.7)	(9.7)	2.91	3.30	3.30
	Radian	6.82	(3.0)	(15.5)	(15.5)	7.03	8.07	8.07
	XL Capital	23.44	2.8	7.4	7.4	22.81	21.82	21.82

February 4, 2011
Major Market Variables

		Close	Change % Week	Change % QTD	Change % YTD	Prior Week	Prior Quarter	Prior Year
Dow Jones Ind		12,092.15	2.3	4.4	4.4	11,823.70	11,577.51	11,577.51
S&P 500		1,310.87	2.7	4.2	4.2	1,276.34	1,257.64	1,257.64
S&P Financial		223.52	2.3	4.1	4.1	218.56	214.77	214.77
S&P Insurance		194.96	2.5	3.6	3.6	190.23	188.22	188.22
US Dollar $			Change %			Prior		
	/ Euro	$1.36	(0.2)	1.5	1.5	$1.36	$1.34	$1.34
	/ Crude Oil bbl	89.03	(0.3)	(3.5)	(3.5)	89.34	92.22	92.22
	/ Gold oz	1,348.30	0.6	(5.1)	(5.1)	1,340.70	1,420.78	1,420.78
Treasury Ylds %		%	Change			%	%	%
	1 Year	0.28	0.04	0.01	0.01	0.24	0.27	0.27
	10 Year	3.64	0.32	0.34	0.34	3.33	3.30	3.30
	30 Year	4.73	0.20	0.39	0.39	4.53	4.34	4.34
Corp Credit Spreads -bp			Change %			Prior		
	CDX.IG	81.57	(5.4)	(4.0)	(4.0)	86.21	85.00	85.00
	CDX.XO	155.67	(4.2)	(18.8)	(18.8)	162.50	191.67	191.67

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