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**

The Development of Capital Market Alternatives and Its Impact on the Reinsurance Industry

In this report, the Capital Markets Bureau reviews the evolution and expansion of the insurance-linked securities (ILS) market and its impact on reinsurance providers, insurers specializing in providing risk transference capability to direct insurance writers. The ILS market, which was estimated to be approximately $22 billion in total outstandings (excluding mortality transactions) as of June 30, 2014 according to Munich Re's second quarter 2014 market update, consists of a variety of sub-markets, one of which is the catastrophe (cat) bond market. Other significant ILS products include collateralized reinsurance contracts and industry loss warranties. In addition, second quarter 2014 new issuance volume was so high (approximately $4.5 billion) that full year 2014 is likely to achieve a record new issuance level. In all of these products, non-traditional reinsurance market participants have become active players over the past few years. The majority of this risk-assuming capital belongs to pension funds seeking attractive asset returns believed subject to only limited return correlation with their other investments. This influx of a large amount of additional capital into the reinsurance market has had an impact on reinsurance providers, providing competition for its primary product, adding pressure to lowering market pricing for risk assumption and reducing reinsurers' profitability. These market changes are expected to be permanent, and reinsurers are responding by changing how and where they do business.

While the ILS market has grown substantially in recent years and U.S insurers are active participants as bond sponsors, their ownership of these securities is limited. As of year-end 2013, within the U.S. insurance industry, life insurers held $134 million in ILS, of which 76% was in cat bonds and 24% in ILS-assuming mortality and morbidity risks. Property/casualty (P/C) companies held a more modest $29 million of ILS, of which 81% was in cat bonds and 19% was in ILS-assuming mortality and morbidity risks. Investor appetite for these aforementioned risks has increased in recent months due in part to their attractive spreads coinciding with investors' ongoing search for higher yielding investments; ILS returns are also generally uncorrelated with other types of securities. And thus far in 2014, the cat bond market as well as ILS investors, have demonstrated a desire for U.S. hurricane risk.

The aggregate investment in ILS for the U.S. insurance industry was $168 million at year-end 2013, a substantial decrease from the $428 million the industry held as of 2011 year-end. The Capital Markets Bureau published a May 4, 2012, special report on the ILS market titled, "A Comprehensive Overview of the Insurance-Linked Securities Market."

Developments in the Alternatives Risk Transfer Market

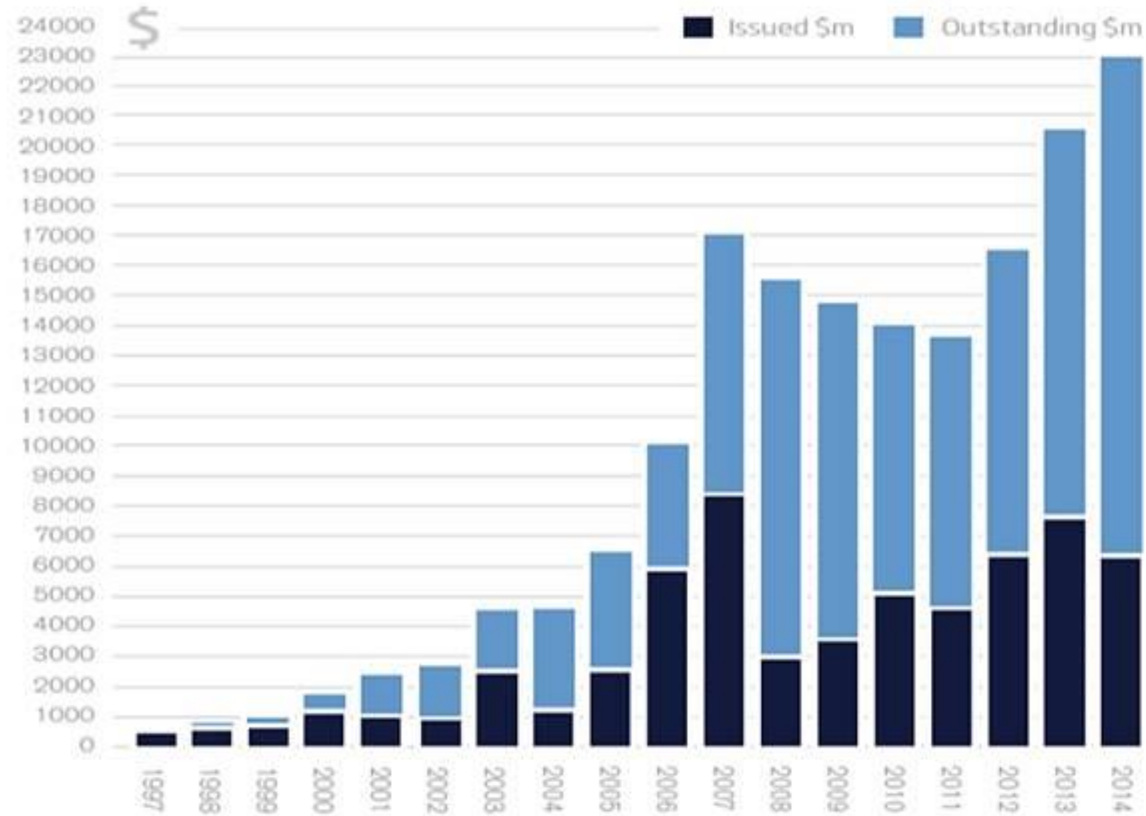
The alternative risk transfer market began in the mid-1990s in an effort to expand and diversify the ability of primary insurers to transfer peak insurance risks, such as hurricanes in Florida and earthquakes in California and Japan. Alternative risk transfer is the use of techniques other than traditional (re)insurance that provide risk-bearing entities with protection from risks of loss. The objective was to attract new, non-traditional capital willing and able to absorb peak insurance risk uncorrelated to their existing portfolios while seeking favorable returns.

Cat bonds were the primary initial vehicle to attract this alternative capital. However, over time a variety of other vehicles were developed, including collateralized reinsurance, industry loss warranties and reinsurance "sidecars." Collateralized reinsurance is contracts or programs where investors or a third-party provides collateral to cover the full potential of claims that could arise from the contract or program. Industry loss warranties are a type of reinsurance derivative contract where one party purchases protection based on total loss due to a cat event that would impact the entire insurance industry rather than their losses. Each vehicle has its own advantages, differences and clientele, but each permits a non-insurance entity, such as a pension fund, to assume insurance risk in return for payments from the party ceding the risk.

As is the case with most developing markets, at first the market grew slowly, but as it became better understood and more widely accepted, the alternative risk transfer market began to grow rapidly. The cat bond market peaked, as measured by bonds outstanding, in 2007 and declined for the first time in 2008 as most markets contracted during the financial crisis. While the financial crisis had a limited direct impact on the cat bond market, investors did incur modest losses on several outstanding cat bonds due to the failure of Lehman Brothers Holdings Inc. Those losses were suffered largely because Lehman Brothers, as the original broker on the transactions, failed to meet its obligations as a swap counterparty.

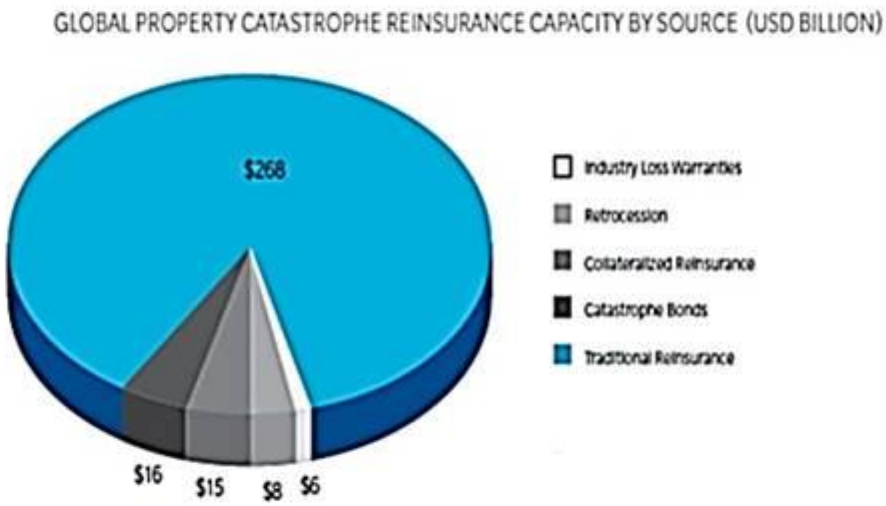
The cat bond market did not begin growing again until 2012, when it responded to investor and sponsor concerns by developing improved market structures and practices. By 2013, the cat bond market had reached a new peak of outstandings at $20.5 billion and has continued growing since, and was at $22.9 billion in the second quarter of 2014 (as shown in Chart 1). Issuance during 2014 is expected to reach a new annual high exceeding the previous high reached during 2007 of $8.2 billion, with $6.6 billion issued so far in 2014 as of Sept. 19.

Chart 1: Cat Bond and ILS Issued and Outstanding: 1997 to 2014Q2



Source: Artemis, "Q2 2014 Catastrophe Bond & ILS Market Report."

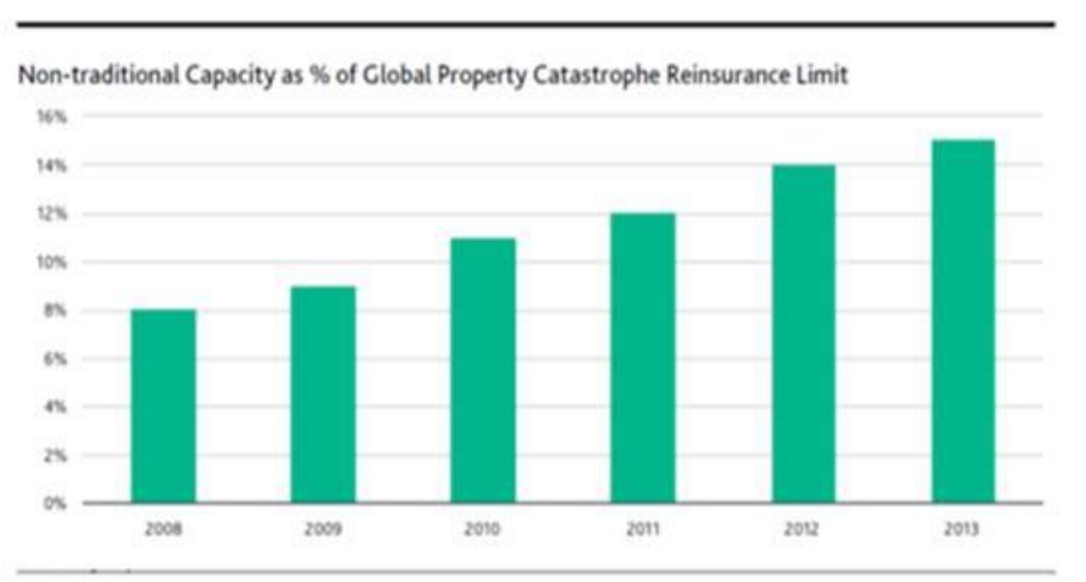
As the size and importance of the ILS and cat bonds market grew, so did its impact on the transfer of cat risks in the traditional reinsurance market. Over time, as the alternatives market grew in size, it continued attracting increasing numbers of sponsors transferring their assumed risks instead of using traditional reinsurance covers. Eventually, cat bond market pricing became increasingly competitive and grew to become an important pricing driver for all forms of cat reinsurance. This growth had a dual impact on established reinsurers (i.e., reinsurers that have a long-standing history in the reinsurance business): it simultaneously reduced demand for their product and reduced its pricing. This is especially notable, as the cat risk product has traditionally been reinsurers' leading profit source.



Source: Guy Carpenter, "Mid-Year Market Overview: September 2013."

With the ILS market's continuing development, even mid-size insurers can now economically access the alternative risk transference vehicles. This is a substantial change from the market's early days, when only large insurers could justify the large fixed costs required to enter into these transactions. While established reinsurers offering traditional reinsurance continue dominating the global insurance risk transfer market, with respect to overall capacity provided (as illustrated in Chart 2), alternative markets are also growing in terms of their capacity and role within the cat market (as illustrated in Chart 3). The impact of the convergence of these two markets has been a topic of extensive discussion; however, established reinsurers continue to dominate the global cat reinsurance market.

Chart 3



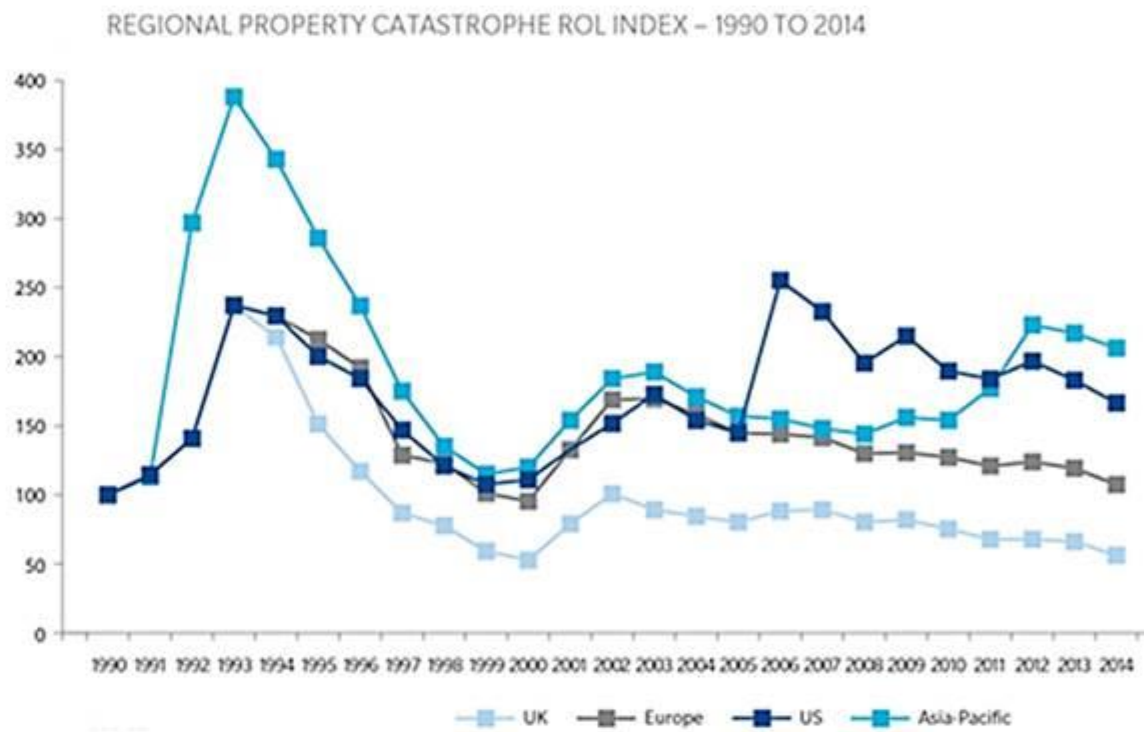
Source: Guy Carpenter (as cited in Moody's Investors Service, "Global Reinsurance Outlook Turns Negative," June 18, 2014).

The global reinsurance industry has been under considerable earnings pressure. In August 2014, A.M. Best revised its reinsurance industry outlook to negative. According to A.M. Best: *"It has become even more apparent that as compression continues bearing down on investment yields and underwriting margins, this strain on profitability will ultimately place a drag on financial strength. … The market headwinds at this point present significant longer term challenges for the industry."*

Because the global reinsurance industry is still profitable, this earnings pressure is likely not a solvency issue. The industry remains so well capitalized that earning a reasonable return on capital is the industry's primary issue. Major reinsurance providers have adequate financial reserves and should be able to meet reasonably expected claim costs.

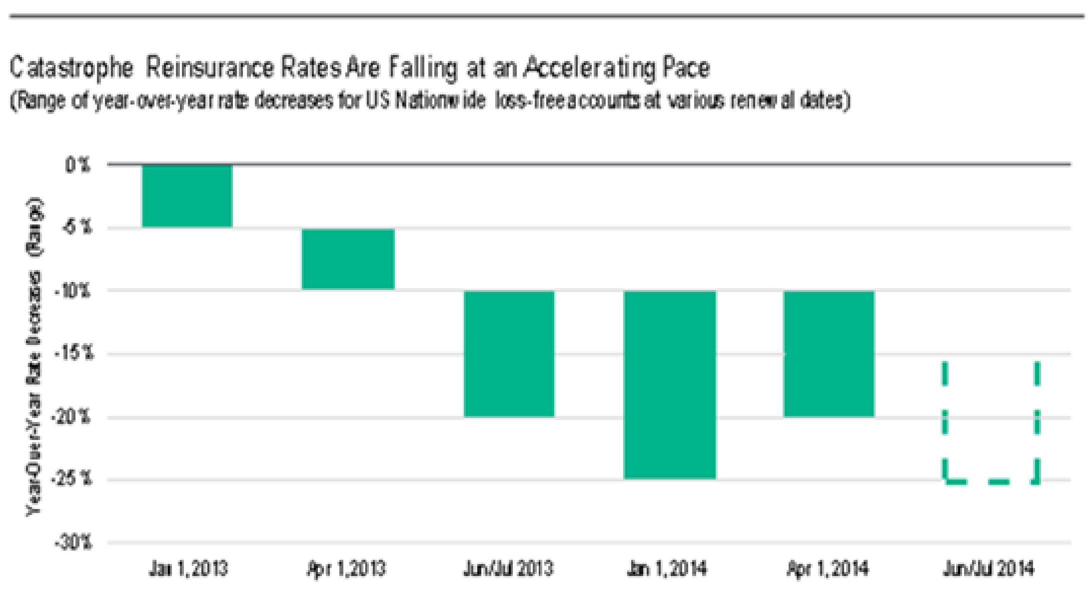
A confluence of factors have resulted in growing amounts of risk-bearing capital, declining prices paid for risk assumption and declining returns on equity. As displayed below in Chart 4, the U.S. cat rate-on-line, a premium rate expressed as a percentage of the coverage amount, has decreased in most years since its 2006 high point, when a major Florida hurricane cat loss occurred. Since then, it has cumulatively declined substantially. In addition, P/C catastrophe reinsurance rates have been declining at an accelerating pace in recent years (as illustrated in Chart 5). Reinsurers' returns fluctuate annually depending on incurred losses, which can be volatile, but as the alternatives market expands, it is contributing to the erosion of cat reinsurance market pricing and expected industry profitability. According to A.M. Best: *"Given where rate adequacy is, it will continue to take optimal conditions, including benign or near-benign catastrophe years, a continued flow of net favorable loss reserve development and stable financial markets, to produce even low double-digit returns, such return measures that would have been considered average or perhaps mediocre just a few short years ago."*

Chart 4



Source: Guy Carpenter.

Chart 5

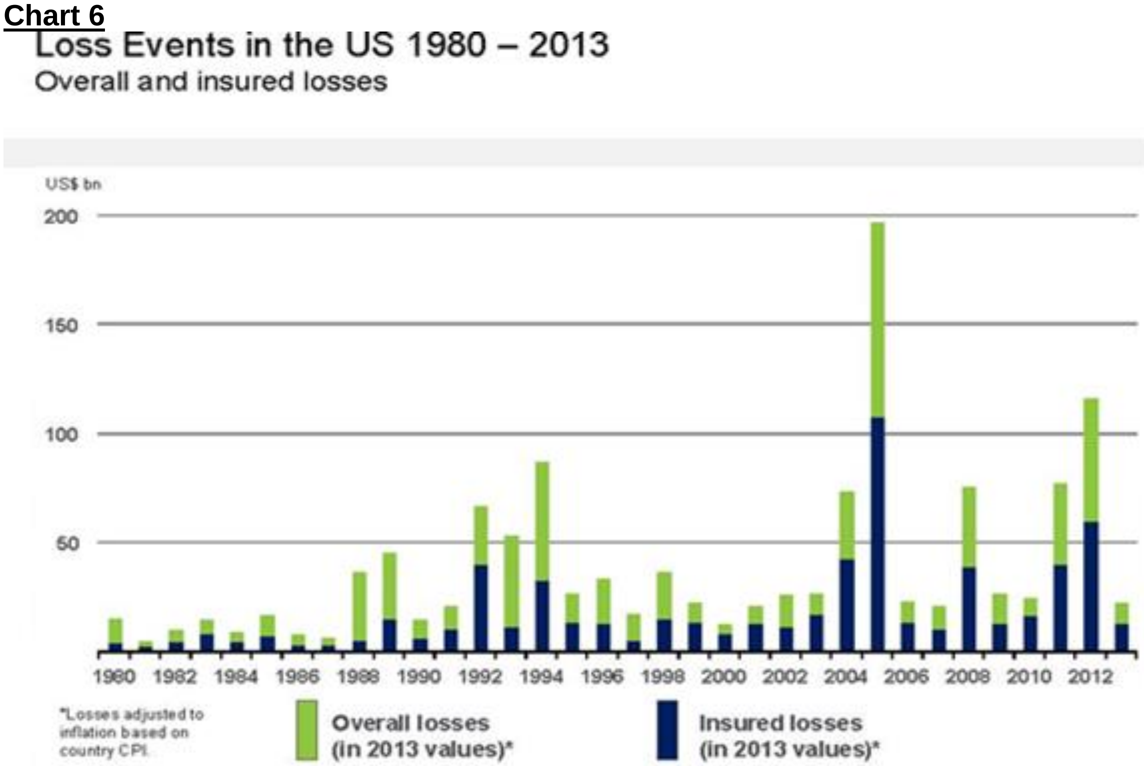


Source: Willis Re except June/July 2014. Rates pertain to U.S. Nationwide loss-free accounts. June/July 2014 estimated by Moody's based on conversations with broker-market reinsurers (as cited in Moody's Investors Service, "Global Reinsurance Outlook Turns Negative," June 18, 2014).

The March 2011 earthquake in T?hoku, Japan, had little impact on raising reinsurance pricing or even stopping pricing declines. The T?hoku earthquake was by far the costliest earthquake ever occurring, with $38 billion of insured losses. In the past, losses of this magnitude typically resulted in rising reinsurance prices. However, after this earthquake, there remained sufficient

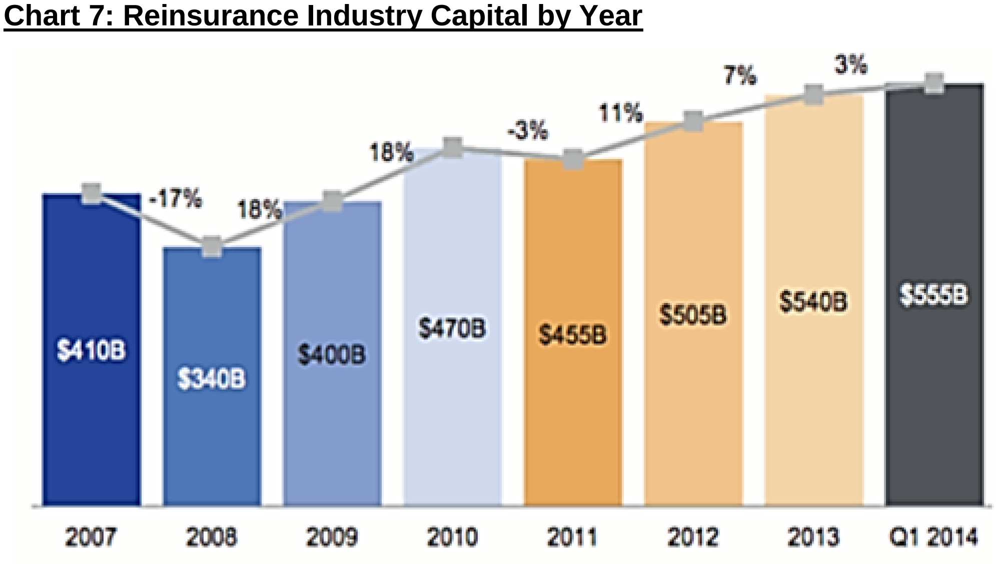
industry capital to keep cat rates from rising significantly afterward. Consequently, it is difficult to predict if cat rates will rise substantially even after the occurrence of a major cat loss.
Over recent years, established reinsurers' capital has grown primarily through retained profitability (Chart 6), aided by the incurrence of relatively low cat losses (as shown in Chart 7). Only a small portion of established reinsurers' capital growth is from capital raising initiatives such as equity issuance. According to Munich Re, insured losses from U.S. cat losses — the dominant portion of the global cat market — have remained considerably below the $100+ billion per year high experienced in 2005, the year of Hurricane Katrina. These low losses have assisted the expansion of reinsurers' capital bases. Only in 2012 did total insured losses even modestly exceed $50 billion.

Chart 6



Source: Munich Re, "2013 Natural Catastrophe Year in Review," Jan. 7, 2014.

Chart 7: Reinsurance Industry Capital by Year



Source: Aon Benfield Analytics, as reported by Artemis.bm, July 2, 2014.

In addition to expanding established reinsurer capital, substantial amounts from non-traditional providers have been attracted to the reinsurance market, especially for cat risks. A variety of vehicles — including ILS (and including cat bonds), sidecars, collateralized reinsurance and industry loss warranties — have attracted capital from pension funds, hedge funds and other institutional investors. These investors seek the favorable returns offered by the reinsurance market compared to other investment opportunities, and with respect to limited return correlation with their other investments. It is difficult for investors to find assets offering attractive returns in today's low interest rate environment, and having such an investment with only limited return correlation makes it especially attractive.

Guy Carpenter, a leading global reinsurance broker, estimates approximately $50 billion of all forms of alternative capital is currently available to assume cat and other insurance risks. This amount has been expanding as additional investors enter the sector. According to Standard &Poor's (S&P), leading market participants expect this number to double over the next five years. While some of this capital might be temporary and exit after incurring large insurance losses or other market changes, other participants, particularly pension funds, are expected to remain committed for the long term. Even if pension funds incur substantial dollar losses in the reinsurance market, the relatively small asset allocations should minimize its overall impact, and keep them active in the reinsurance market.

Further blurring the lines between established reinsurers and non-traditional capital, hedge fund sponsors have entered the reinsurance market. They have created new reinsurance companies that are being used to attract and manage additional assets. While a hedge fund-sponsored reinsurer's primary focus is largely asset management, it is required under U.S. tax rules to underwrite sufficient insurance to maintain its favorable U.S tax treatment. These reinsurers add capacity to an already well supplied reinsurance market. Many of these hedge fund-sponsored reinsurers are also affiliated with an established reinsurer that provides underwriting expertise. This cooperative arrangement benefits both parties: the hedge fund-related insurer benefits from enhanced reinsurance underwriting expertise, and the established reinsurer benefits from fees paid for this underwriting advice, as well as the expectation of enhanced investment returns. The underwriting relationship can be particularly important for the new reinsurer because expertise is in limited supply and difficult to attract on its own. An overview of several leading hedge fund sponsored reinsurers is shown in Chart 8

Chart 8

Hedge Fund-Sponsored Reinsurers

	Greenlight Re	Third Point Re	Hamilton Re	PaC Re	Watford Re
Founders/sponsors/capital providers	Greenlight Capital (David Einhorn)	Third Point (Daniel Loeb) Private equity (Kelso, Pine Brook, and Dowling Capital)	Former S.A.C. Capital and now Two Sigma	Paulson & Co. (John Paulson) Validus (also acts as an MGA underwriter)	Arch Capital Group and Highbridge Principal Strategies
Domicile	The Cayman Islands	Bermuda	Bermuda	Bermuda	Bermuda
Capital raised	$258 million	$780 million	$1 billion	$500 million	$1.13 billion
Commencement of operations	July 2004 (began underwriting in April 2006)	January 2012	December 2013	June 2012	January 2014
Business/strategy	Mix of property, casualty, and specialty reinsurance	Lower volatility property and catastrophe reinsurance	High-margin property catastrophe and low-severity casualty reinsurance	Top-layer property catastrophe	Mix of property, casualty, and specialty reinsurance, with limited property catastrophe
Reinsurer management	CEO: Bart Hedges CFO: Tim Courtis CUO: Brendan Barry	CEO: John Berger CFO: Robert Bredahl	Chairman: Sandy Weill CEO: Brian Duperreault CFO: Jonathan Reiss	Validus acts as managing underwriter	CEO: John Rathgeber CFO: Roderick Romeo

Source: Aon Benfield and companies' websites (as cited in Standard & Poor's Ratings Services, "Hedge Fund Reinsurers: Are the Potential Rewards Worth the Added Risk?" Aug. 11, 2014).

Given the large and growing capital base, as well as modest incurred losses for almost a decade, premiums paid by cedants for transferring risk to reinsurers have been declining. Industry studies reveal that reinsurance prices, especially on standard U.S. cat covers such as an East Coasthurricane, have declined as increasing amounts of capital compete to assume these risks. The cost of a typical Florida hurricane cat cover for a U.S insurer has been subject to price declines, often by considerable margins. According to Aon Benfield Analytics: *"New record reinsurer capital levels and continually building interest from alternative capital investors pushed risk margins lower on June 1 and July 1 reinsurance renewals. Margins in some programs today stand at levels not seen for a generation."* In the non-traditional reinsurance risk assumption market, this pricing phenomenon translates into declining cat bond yield spreads. Positively, there are signs that the market's depressed pricing may soon be reaching a bottom and are not expected to decline further from current levels.

Current State of the Reinsurance Market

As just discussed, due to growing capital, much of the reinsurance market has been subject to weak and falling pricing. At first, the pricing weakness primarily impacted the U.S. windstorm market. Over time, as investors became more comfortable assuming insurance risks and the reinsurance market became more competitive, pricing declines spread to the broader cat market, including risks such as fires and earthquakes. While the alternatives market remains primarily focused on wind coverages — a fairly narrow but important part of the reinsurance market — reduced pricing has also spread through other market segments as established reinsurers seek attractive business opportunities.

Partially offsetting this negative pricing trend, cedants may be purchasing additional reinsurance protection as it becomes more readily available and at a lower cost. However, anecdotal information on this issue is mixed. Aon Benfield believes additional instances of opportunistic reinsurance use will emerge near-term, as reinsurance buyers continue incorporating lower price points into covering their peak zone risks. Reinsurers themselves are also taking advantage of the strong market demand for assuming these risks by transferring some of their own assumed risks to external parties at attractive rates. Contrary to previous years, currently the largest reinsurance requirements can be readily supplied by the market without premium pricing. As a result, insurers may be inclined to purchase more reinsurance coverage than in the past, especially given the availability of more advantageous terms and lower cost.

New reinsurance buyers have also come to market seeking coverages that previously would have been infeasible. One example is the New York's Metropolitan Transportation Authority (MTA) sponsorship of $200 million of cat bonds from MetroCat Re Ltd. In this case, a previously uninsured storm surge risk has been transferred to third parties at an attractive cost. Other examples may soon follow as the market becomes increasingly easier to access.

On the other hand, as insurance companies have grown in size and diversity, they have also become increasingly willing and able to retain assumed risks, thereby reducing reinsurance demand. That is, a national property insurer may be able to assume more local cat risk without reinsurance than an equivalent regional insurer because the impact of a local cat will have less impact on a more geographically diversified insurer. In addition, a larger insurer may be capable of retaining higher risk limits than a smaller company, thereby reducing its overall reinsurance needs.

In an effort to protect their franchise from the effects of declining pricing, some established reinsurers have responded by expanding into, or relying more heavily upon, reinsurance market sectors that are less impacted by increased capacity. These reinsurers are seeking opportunities in less competitive sectors in an effort to earn higher returns. While this is an understandable business response, it also results in competitive reinsurance pricing spreading to ever more reinsurance sectors. Efforts to replace the foregone U.S. cat income will be challenging because the U.S. cat market has been one of the most profitable segments of the reinsurance business.

Reinsurance providers are finding it particularly difficult to remain competitive in cat reinsurance lines where price competition from alternative capital providers has been most intense. An established reinsurance provider maintaining substantial equity may not be able to price reinsurance at a level competitive with an alternative capital-based provider and still earn a reasonable return. The overall result is declining market returns for all reinsurance providers, whether established or non-traditional. For established providers, falling returns can be expressed as declining premiums, premium rates-on-line and return on capital. For non-traditional providers, it can be expressed as declining spreads on ILS-assuming insurance risks.

Established Reinsurers' Responses and Involvement With ILS/Alternative Markets

Established reinsurers such as those listed in Appendix 1 are insurers, often global in scope, that have been operating in the reinsurance business for a meaningful time period, in some cases for many decades. They have built considerable amounts of intellectual and financial capital over the years in order to meet the risk-management needs of their primary insurer clients. Established reinsurers offer ceding insurers valuable services in addition to risk assumption and compete for clients on more than just offering the lowest price for assuming risks. Their competitive offerings include market knowledge, ancillary services, long-term stability and decades of client relationships. Cedants value such ancillary services, and they are willing to pay for them. For example, one valuable feature of reinsurance sourced from an established reinsurer is the understanding that reinsurance capacity will be available after the occurrence of a major loss event. This expectation is based, in part, on reinsurers' longstanding market history and continuing market participation even after the occurrence of large losses.

Reinsurers have been involved with ILS and other alternatives since the market's inception. Some of the earliest cat bonds were sponsored by reinsurers seeking to transfer their own assumed risks. Just as commercial banks supported the development of the credit default swap (CDS) market to transfer their balance sheet credit risks, so, too, did reinsurers support the development of the cat bond market to transfer portions of their assumed cat risks. They sponsored the formation of sidecars, specialized non-permanent risk bearing entities. Sidecars are special purpose vehicles with limited lives created to permit investors to assume insurance risk and earn returns from a group of insurance policies written and transferred by a sponsoring reinsurer. The sidecar investor expects to earn an attractive return for a predefined time period through investing in the vehicle. The sponsoring insurer earns fees and other revenue on the risk assumed without the insurer assuming additional risk. Sidecars have been primarily, although not exclusively, sponsored by established reinsurers as a method of expanding their business profile in a low-risk manner. Because a sidecar is a limited life vehicle, it is also limited in the nature of the risks it can assume. Sidecars have been most commonly used in short-tail lines, where incurred losses develop fairly quickly. They are not generally used in long-tailed liability coverages, where claims may not occur for many years.

Established reinsurers have remained active in the alternatives market in a variety of roles. For example, large reinsurers may advise clients seeking expertise on how the alternatives market can be most effectively used. Given their market knowledge and close relationships, reinsurers are well placed to assist clients in taking advantage of this market. In addition, established reinsurers have also been involved in managing ILS funds, as they are well placed to evaluate and manage risk exposures because this is the core of their own reinsurance business. Reinsurers can earn management fees for managing ILS and other risk-assumption vehicles for alternative capital providers such as pension funds. While these activities generate limited dollar profitability compared to writing reinsurance, they offer a high return on equity while assuming little risk, making them attractive ancillary businesses.

The alternatives market is heavily influenced by the major (re)insurance brokers, including Guy Carpenter, Willis, and Aon Benfield. In general, activity in the alternatives market has been dominated by insurance-oriented service providers such as these insurance brokers' securities affiliates. Large securities dealers such as Goldman Sachs and Citigroup have had a more modest role in the alternatives market. Lehman Brothers had been a leader in this market until its 2008 failure.

A concern of alternative reinsurance users is the state of the alternatives market after the occurrence of a major loss event. While alternatives' collateralization feature means cedants have little concern about being reimbursed for already covered losses, there is no assurance regarding the availability of additional future reinsurance coverage for future potential losses. A traditional reinsurance contract, on the other hand, typically includes a reinstatement provision making available additional reinsurance to the cedant after the occurrence of the initial covered loss. Established reinsurers generally have a long history of remaining active in their primary markets after major losses, albeit probably with higher premiums.

Most cedants are unwilling to give up all of the benefits of traditional reinsurance (as previously discussed) and rely solely on alternatives, regardless of how attractive pricing may be. However, on the margin, cedants have reduced their reliance on traditional forms of reinsurance while simultaneously increasing their use of alternatives. Many reinsurance programs use both markets, with the typical reinsurance program relying more heavily upon the established reinsurance market.

Established reinsurers are responding to increasing cat market competition in a variety of ways. They are focusing more on less competitive reinsurance market sectors where they believe they have better market opportunities. This includes non-cat covers, cat risk geographies outside the U.S. such as in Japan, and reinsurance lines unsuited for alternative coverage such as long-tailed liability risks. Established reinsurers can cover risks not typically covered by alternatives such as losses from floods and terrorism. The length of coverage supplied by the alternative reinsurance market is typically short-term — often three years and rarely beyond five — making the alternative reinsurance market less suitable for reinsuring longer-term risks, and providing established reinsurers with an opportunity to offer products with less competition from alternatives. Reinsurers may also become increasingly flexible in adapting their contracts to meet client needs. Alternative providers are also becoming increasingly willing and able to assume customized risks, but they remain unlikely to offer coverage as broad as an established reinsurer. However, a recent United Services Automobile Association (USAA) cat bond issue covered such unusual risks as meteor strikes and volcanic eruptions.

Reinsurers have also responded by reducing their cost base to offer more competitive pricing, including reduced operating costs, and by taking advantage of lower cost forms of capital. The reinsurers have, at times, utilized alternative risk transfer vehicles themselves, transferring risks initially assumed by their own balance sheets. As reinsurers assume less risk, they require less capital to support the business and they can return the excess capital to their investors, thereby increasing return on their remaining equity. Reinsurers have also entered new business areas such as assuming mortgage risk or entering into or expanding their direct writing capabilities. Finally, established reinsurers have returned unneeded incremental capital to shareholders through share repurchases and dividends.

Long-Term Reinsurance Industry Impact is Mixed

The long-term impact of the convergence of the reinsurance and capital markets is mixed with respect to the established reinsurers. In the short term, recent reports suggest that additional consolidation within the reinsurance sector is likely. That is, as insurance analysts at Keefe, Bruyette & Woods have said, *"fewer carriers should improve overall industry efficiency (benefiting brokers, insurers, and clients), and in that context, bigger insurers' greater negotiating leverage should provide access to more pieces of more desirable business."* Consequently, merger and acquisition activity will be driven by reinsurers seeking scale and diversification. One recent example is Endurance Specialty Holdings' unsolicited, but ultimately unsuccessful, acquisition offer for Aspen Insurance Holdings launched in April 2014. Market observers have stated that the reinsurance market has more providers than needed, and further industry consolidation is required if the companies are going to be successful. In addition, S&P has stated, *"We believe consolidation will rise in importance on the strategic agendas of reinsurance management teams over the next 12 months. For smaller reinsurers that are trying to compete globally, consolidation may be one of the few viable survival options, and midlevel players will be looking to acquire greater size and scope."*

Established reinsurance providers are refocusing their business on markets where they believe they have the most opportunity. Thus far, at least one well known, leading reinsurer has withdrawn from the market and has been seeking opportunities elsewhere. Another leading global reinsurer is switching to a heavier focus on U.S. casualty reinsurance and reducing its property reinsurance exposure.

The overall global need for insurance and reinsurance, and specifically cat covers, will grow along with the global economy. The need for, and penetration of, the primary insurance market will grow as the global economy expands and the demand for protection from cat losses increases. As areas previously believed less vulnerable to cat losses become increasingly prone to such losses, demand for insurance coverage for these risks will increase. One example is hurricane risk in the U.S. Mid-Atlantic and New England regions. The weather patterns in these regions have historically been cyclical, but recent storms (e.g., Hurricane Irene and Superstorm Sandy) have demonstrated the potential magnitude of the risk exposure, resulting in increasing demand for cat risk covers in these regions.

In addition, as the need and availability of funds for such coverages grow in developing economies, so will demand. Severe flooding in Thailand in 2011 inflicted heavy losses, in many cases on parties that were remotely located from the event. Economic losses from the Thai floods were estimated by the World Bank at $46 billion, making it one of the top five costliest natural disasters in modern history. The preponderance of these losses were not reimbursed by insurance coverage. Such events will drive expanding demand for insurance, such as business interruption and property damage, covering areas not previously considered prime markets.

The cat (re)insurance market may also grow as coverage costs decline and as coverage becomes more readily available. An example of this trend is the recent $30 million World Bank cat bond supplying reinsurance to the Caribbean Catastrophe Risk Insurance Facility (CCRIF). According to Madelyn Antoncic, vice president and treasurer of the World Bank, *"CCRIF benefits from access to the highly competitive prices offered by the cat bond market as well as from the efficiency of using this program."* Additional growth in this market can be expected as the process matures and additional uses are identified and developed.

Given the current dynamics of the industry, the entrance of new reinsurers into the industry is considered unlikely. This is different from previous industry cycles, where the "hard market" (when reinsurers have typically had greater pricing flexibility) would attract new entrants, as well as temporary capital through vehicles such as sidecars.

A critical and unanswered remaining question is: How will the alternatives market respond when the inevitable large loss occurs? Historically, a large loss has triggered a reinsurance market tightening, increased reinsurance pricing and the attraction of additional permanent, as well as temporary, capital. Under the current market structure, it is not clear if this pattern will recur and how the alternatives market will respond. Unless replacement capital is available to the industry after a large incurred loss, both in the traditional and alternative forms, the reinsurance market will be challenged to respond to increasing reinsurance demand by supplying as much or more reinsurance as existed prior to the loss event.

Summary

The importance of capital markets-oriented alternatives to traditional forms of reinsurance is large and growing, both in size and scope. Primary insurers have benefited from this trend in a variety of ways: reduced reinsurance cost, increased availability and better terms. However, reinsurers have found the changing dynamics of the reinsurance market less beneficial given the reduced profitability. It has introduced more capital into an industry with declining organic demand and already expanding capital, and these trends are not expected to reverse anytime soon. Following a major cat event, whether or not capital attracted from pension funds, hedge funds and other institutional investors will remain in the market is uncertain, as it would likely depend on investment returns among other factors. Lending comfort, ILS generally represent a small percentage of these investors' assets, therefore, any losses are not likely to have a significant impact on their overall investment portfolio performance.

The NAIC Capital Markets Bureau will continue to monitor trends surrounding the reinsurance and the alternatives markets and their impact on insurance industry, and we will report on any developments as deemed appropriate.

Appendix 1

Global Reinsurers By Peer Group
Hybrid (Re)Insurers
Allied World Assurance Co. Holdings AG
Amlin PLC
Arch Capital Group Ltd.
Aspen Insurance Holdings Ltd.
AXIS Capital Holdings Ltd.
Catlin Group Ltd.
Endurance Specialty Holdings Ltd.
Everest Re Group Ltd.
Hiscox Insurance Co. Ltd.
Maiden Holdings Ltd.
Platinum Underwriters Holdings Ltd.
Sirius International Group Ltd.
Transatlantic Reinsurance Co.
Large Global Composite Reinsurers
Hannover Rueck SE
Lloyd's
Munich Reinsurance Co.
PartnerRe Ltd.
SCOR SE
Swiss Reinsurance Co. Ltd.
Property-Catastrophe & Short-Tail Reinsurers
Lancashire Holdings Ltd.
Montpelier Re Holdings Ltd.
RenaissanceRe Holdings Ltd.
Validus Holdings Ltd.

September 29, 2014								
Major Insurer Share Prices			**Change %**			**Prior**		
		Close	**Week**	**QTD**	**YTD**	**Week**	**Quarter**	**Year**
Life	Aflac	$58.47	(2.2)	(7.2)	(12.5)	$59.79	$63.04	$66.80
	Ameriprise	123.58	(1.0)	12.3	7.4	124.85	110.07	115.05
	Genworth	13.26	0.6	(25.2)	(14.6)	13.18	17.73	15.53
	Lincoln	53.89	(1.8)	6.4	4.4	54.90	50.67	51.62
	MetLife	53.91	(2.8)	2.1	(0.0)	55.47	52.80	53.92
	Principal	53.00	(1.9)	15.2	7.5	54.04	45.99	49.31
	Protective	69.49	(0.1)	32.1	37.2	69.59	52.59	50.66
	Prudential	89.10	(2.0)	5.3	(3.4)	90.94	84.65	92.22
	UNUM	34.77	(3.2)	(1.5)	(0.9)	35.92	35.31	35.08
PC	ACE	$104.84	(0.1)	5.8	1.3	$104.90	$99.06	$103.53
	Axis Capital	47.33	(0.5)	3.2	(0.5)	47.59	45.85	47.57
	Allstate	61.29	0.5	8.3	12.4	61.01	56.58	54.54
	Arch Capital	54.72	1.4	(4.9)	(8.3)	53.96	57.54	59.69
	Cincinnati	47.33	(1.5)	(2.7)	(9.6)	48.04	48.66	52.37
	Chubb	90.97	0.2	1.9	(5.9)	90.76	89.30	96.63
	Everest Re	160.09	(1.1)	4.6	2.7	161.82	153.05	155.87
	Progressive	25.49	1.7	5.2	(6.5)	25.06	24.22	27.27
	Travelers	93.77	1.5	10.2	3.6	92.40	85.10	90.54
	WR Berkley	47.93	0.0	15.2	10.5	47.93	41.62	43.39
	XL	33.24	(0.6)	6.4	4.4	33.44	31.25	31.84
Other	AON	$87.51	0.5	3.8	4.3	$87.10	$84.28	$83.89
	AIG	54.17	(1.8)	8.3	6.1	55.19	50.01	51.05
	Assurant	64.63	(0.1)	(0.5)	(2.6)	64.69	64.96	66.37
	Fidelity National	27.86	0.4	(11.4)	(14.1)	27.76	31.44	32.45
	Hartford	37.48	0.9	6.3	3.5	37.15	35.27	36.23
	Marsh	52.48	(0.4)	6.5	8.5	52.69	49.30	48.36
Health	Aetna	$81.34	(1.1)	8.5	18.6	$82.21	$74.97	$68.59
	Cigna	91.24	(1.2)	9.0	4.3	92.32	83.73	87.48
	Humana	131.90	2.8	17.0	27.8	128.25	112.72	103.22
	United	86.51	0.4	5.5	14.9	86.18	81.99	75.30
	WellPoint	121.31	2.3	21.9	31.3	118.62	99.55	92.39
Monoline	Assured	$22.51	(5.0)	(11.1)	(4.6)	$23.70	$25.32	$23.59
	MBIA	9.23	(8.2)	(34.0)	(22.7)	10.05	13.99	11.94
	MGIC	7.90	(6.4)	(7.3)	(6.4)	8.44	8.52	8.44
	Radian	14.37	(2.2)	(4.4)	1.8	14.70	15.03	14.12
	XL Capital	33.24	(0.6)	6.4	4.4	33.44	31.25	31.84

September 29, 2014							
Major Market Variables		**Change %**			**Prior**		
	Close	**Week**	**QTD**	**YTD**	**Week**	**Quarter**	**Year**
Dow Jones Ind	17,071.22	0.5	3.7	3.0	16,987.51	16,457.66	16,576.66
S&P 500	1,977.80	(0.4)	5.6	7.0	1,985.64	1,872.34	1,848.36
S&P Financial	312.83	(0.4)	3.9	6.1	314.10	301.06	294.71
S&P Insurance	291.43	(1.0)	4.0	0.8	294.32	280.10	289.10
US Dollar $		**Change %**			**Prior**		
/ Euro	$1.27	(2.0)	(7.9)	(7.7)	$1.30	$1.38	$1.37
/ Crude Oil bbl	94.48	2.4	(7.0)	(4.0)	92.24	101.58	98.42
/ Gold oz	1,215.00	(1.2)	(5.3)	1.1	1,229.30	1,283.40	1,202.30
Treasury Ylds %	**%**	**Change bp**			**%**	**%**	**%**
1 Year	0.10	0.01	(0.02)	(0.02)	0.09	0.11	0.11
10 Year	2.48	(0.13)	(0.24)	(0.55)	2.61	2.72	3.03
30 Year	3.17	(0.17)	(0.39)	(0.80)	3.34	3.56	3.97
Corp Credit Spreads -bp		**Change %**			**Prior**		
CDX.IG	18.47	18.2	6.3	39.1	15.63	17.37	13.27

September 29, 2014									
Major Insurer Bond Yields				Weekly Change					YTD
				Price			Spread over UST		Spread
	Company	Coupon	Maturity	Current	Change	Yield	B.P.	Change	Change
Life	Aflac	8.500%	5/15/2019	$126.76	($0.25)	2.35%	71	8	(21)
	Ameriprise	5.300%	3/15/2020	$113.58	$0.19	2.61%	73	7	(8)
	Genworth	6.515%	5/15/2018	$113.04	($0.58)	2.73%	138	16	(26)
	Lincoln National	8.750%	7/15/2019	$127.22	($0.34)	2.61%	88	10	(21)
	MassMutual	8.875%	6/15/2039	$155.65	$1.38	4.94%	194	17	18
	MetLife	4.750%	2/15/2021	$110.70	($0.10)	2.89%	79	9	(9)
	New York Life	6.750%	11/15/2039	$133.27	$2.00	4.52%	151	5	23
	Northwestern Mutual	6.063%	3/15/2040	$123.65	$0.97	4.50%	144	9	19
	Pacific Life	9.250%	6/15/2039	$153.54	($0.58)	5.33%	229	18	(5)
	Principal	6.050%	10/15/2036	$123.11	$1.65	4.40%	143	4	6
	Prudential	4.500%	11/15/2020	$108.67	($0.26)	2.94%	89	12	11
	TIAA	6.850%	12/15/2039	$129.99	($0.67)	4.79%	176	21	43
P&C	ACE INA	5.900%	6/15/2019	$115.46	($0.03)	2.40%	67	4	5
	Allstate	7.450%	5/15/2019	$122.68	$0.19	2.25%	55	(2)	(8)
	American Financial	9.875%	6/15/2019	$129.19	$0.04	3.15%	143	5	(44)
	Berkshire Hathaway	5.400%	5/15/2018	$112.53	($0.09)	1.81%	50	4	11
	Travelers	3.900%	11/15/2020	$107.01	$0.20	2.64%	61	5	(1)
	XL Group	6.250%	5/15/2027	$118.11	$0.94	4.37%	170	3	(11)
Other	AON	5.000%	9/15/2020	$111.35	$0.12	2.92%	91	5	1
	AIG	5.850%	1/15/2018	$112.55	($0.20)	1.90%	71	5	(3)
	Hartford	5.500%	3/15/2020	$113.38	($0.06)	2.85%	94	7	(11)
	Marsh	9.250%	4/15/2019	$130.17	($0.22)	1.08%	104	(82)	(21)
	Nationwide	9.375%	8/15/2039	$155.36	$1.30	5.33%	229	6	(7)
Health	Aetna	3.950%	9/15/2020	$106.76	$0.34	2.71%	71	1	(15)
	CIGNA	5.125%	6/15/2020	$111.94	$0.16	2.84%	89	4	(7)
	United Healthcare	3.875%	10/15/2020	$106.79	$0.18	2.65%	63	6	(2)
	Wellpoint	4.350%	8/15/2020	$108.00	$0.15	2.86%	88	4	(11)

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

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