

The <u>NAIC's Capital Markets Bureau</u> 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 <u>index</u>

The Trajectory of Interest Rates and Its Impact on the Market Value of the U.S. Insurance Industry's Bond Portfolio

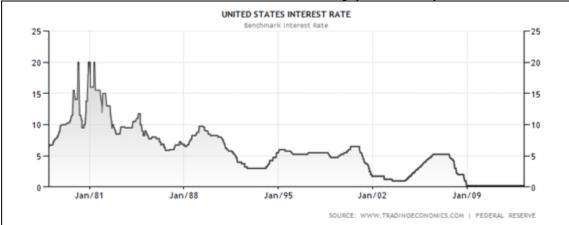
As interest rates worldwide have been bottoming at unusually low levels, bond prices in the secondary market for a wide variety of fixed-income securities have reached their highest levels relative to their par values in more than a decade (that is, because interest rates/yields and bond prices have an inverse relationship and typically move in opposite directions). While this trend has tremendously helped current market values of bond portfolios in general, the future outlook for those values appears much less bright as interest rates are expected to rise, if not imminently, then in the near future to higher, more sustainable levels. This special report reviews the recent history of interest rate levels and describes the term "bond bubble"; it examines the U.S. insurance industry's reported fair values of bond holdings and their evolution over the past 11 years (2002–2012); and, finally, this report discusses the investment risk of higher interest rates in the future.

It is important to note that, while the discussion in this report focuses on the *market* values of the bonds, the statutory accounting principles used by insurers requires amortized cost valuation for the vast majority of bond holdings rather than fair value valuation. Therefore, the market value fluctuations discussed here, while real, do not impact the reported balance sheets of the insurers (unless they result in other-than-temporary impairment (OTTI), which is not particularly relevant in this discussion).

Recent Interest Rates Trends and the "Bond Bubble"

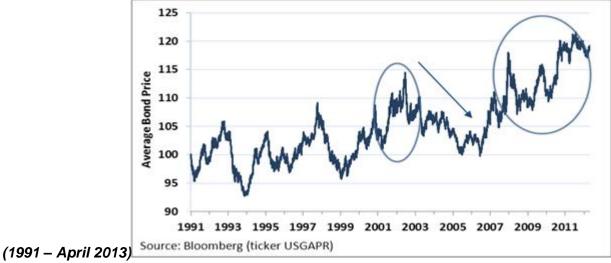
With the U.S. Federal Reserve Bank (Fed) keeping its Fed Funds rate near zero for more than four years, and, globally, central banks still being fairly accommodating, interest rates in the U.S. and in many other countries have been reaching new lows in the past couple of years. The latest decline in interest rates follows the 2007–2008 financial crisis and the subsequent Great Recession. However, interest rates had already been experiencing a fairly consistent downward trend over the past 30 years: the U.S. Fed Funds rate decreased from the mid-to-high teen levels of the early 1980s, to the mid-to-high single-digit levels of the 1990s, to the low-to-mid single-digit levels of the early 2000s, and, finally, to the current near-zero level (Chart 1).

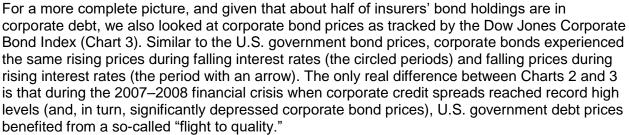
Chart 1: The U.S. Benchmark Interest Rate History (1978–2013)



To understand how these successively lower interest rates affected government bond prices, we looked at one of the Bloomberg/EFFAS U.S. sovereign bond indexes and its average clean price history – that is, without accrued interest - from the index's inception on Dec. 31,1991, until April 29, 2013 (Chart 2). The two circled periods of rising bond prices in Chart 2 correspond to the two circled periods of falling interest rates in Chart 1. Additionally, the downward arrow accompanying falling bond prices in Chart 2 corresponds to the upward arrow for the rising interest rates of 2004–2006 in Chart 1. As the data shows, between mid-2003 and 2006 — as the Fed raised its Fed Funds rate from 1% to 5.25% — the average U.S. government bond price dropped from a peak of almost 115% of par to 100% of par (noting again that interest rates/bond yields and bond prices move in opposite directions).

Chart 2: Bloomberg/EFFAS US Govt All > 1yr Bond Index Average Clean Price History





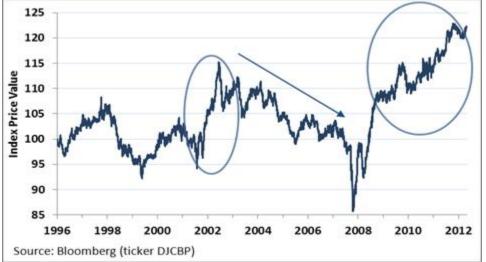


Chart 3: Dow Jones Corporate Bond Index Price Value History (1996 – April 2013)

Although nearly no one predicts a return to a double-digit Fed Funds rate any time soon, most market analysts and investors have been anticipating an eventual increase in rates in the near term. After all, the low interest rates that have been observed for the past four years are not solely a natural market occurrence, but a concerted effort by the U.S. central bank to stimulate the U.S. economy, which has been struggling to recover from the post-2008 financial crisis-led recession. While the U.S. central bankers have been reluctant to tighten monetary policy in the face of a lukewarm economic recovery, they agree that such low interest rates cannot be sustained forever.

Moreover, central bankers have undoubtedly learned some lessons from the 2008 financial crisis. The onset of the crisis was brought about by the real estate bubble of the mid-2000s, which was, in part, caused by the then-historically lowest interest rates put in place in response to the 2001 economic recession. Many analysts and investors believe that the latest round of low interest rates have introduced a "bond bubble"; i.e., asset prices appear to be based on implausible or inconsistent views about the future for an extended period of time. And, in this case, we are observing a steady, unsustainable inflation of bond prices, which are bound to reverse when interest rates start rising toward a more long-term, sustainable level. The problem with bubbles is that they can last longer and rise farther than most would generally think possible, making it hard to time an appropriate investment strategy response. There are also many analysts and investors who argue against the use of the term "bond bubble" and say that the current bond price inflation is not severe enough to call it a "bubble." Semantics aside, few would disagree that interest rates will rise at some point when the Fed removes/scales down its monetary policy support, and, in turn, bond prices are likely to decline across most bond types.

The Market Value of the Insurance Industry's Bond Portfolios

Totals and Broad Averages

To see how the interest rate trajectory of the past decade has impacted the market values of the insurance industry's bond portfolios, we reviewed the U.S. insurance industry's long-term bond holdings between 2002 and 2012. In Chart 4 below, we graphed *total* fair value (FV), book/adjusted carrying value (BACV), par value and actual cost history. All measures (except for a dip in FV in 2008) show a steady increase in dollar value over the past 11 years (to year-end 2012) as insurers' bond portfolios have grown over time.

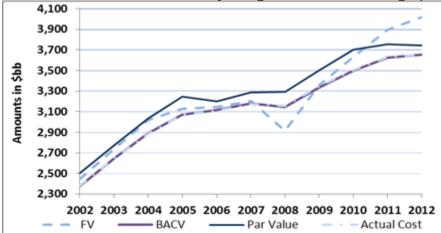
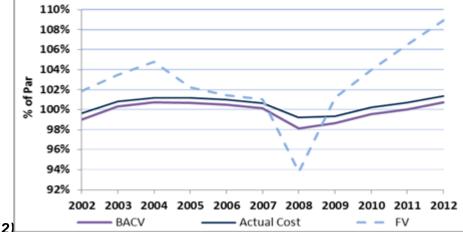


Chart 4: U.S. Insurance Industry Long-Term Bond Holdings (2002–2012)

To better reflect the impact of interest rates we calculated FV, BACV and actual cost as a percentage of par value across all bond holdings, and averaged them in Chart 5 below. Notably, Chart 5 displays a steady BACV and actual cost as a percentage of par values, oscillating between 98% and 101% during the 11-year period ending in 2012, while the FV as a percentage of par values shows a more dramatic result. Besides the expected 2008 value drop caused by sharply wider credit spreads, Chart 5 also shows a bond price appreciation to about 105% of par between 2002 and 2004 (during former Fed Chairman Alan Greenspan's easing), a subsequent pre-2008 bond price depreciation to about 101% of par (during the last round of rising interest rates) and a bond price expansion from about 101% of par in 2009 to about 109% in 2012.

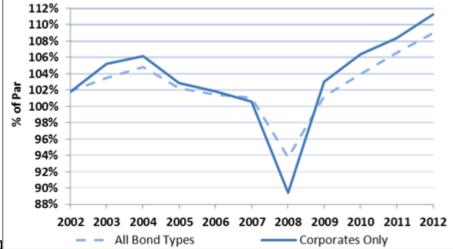




2012)

While Chart 5 includes the values for all reported long-term bond types, Chart 6 below includes FV as a percentage of par values for all bond types and for corporate bonds only and shows an even more dramatic history of bond prices in the 11 years to year-end 2012. Most notably, the average FV as a percentage of par for corporates reached a high of about 111% at the end of 2012. It may not be a "bond bubble," but this number appears quite high for long-term comfort for insurers owning about \$1.9 trillion in corporate debt at year-end 2012. When interest rates rise and if corporate bond prices "correct" back to the end of 2009 average price levels (of about 103%), then this would translate into an approximately eight-point drop in prices.





(2002–2012)

Buckets of Averages While the historical numbers above are quite revealing, the analysis is somewhat limited because it only shows a single data point for each year. Diving a little deeper into the insurers' bond holdings data, we grouped insurers' individual holdings into several buckets of FV as a percentage of par and weighted them both by FV (Table 1A) and by par value (Table 1B). The highlighted numbers indicate double-digit weights and bolded numbers show the highest weight for each year; the middle line separates above-par and below-par buckets.

One noticeable result is that the weights' distribution among the various buckets is fairly similar for any given year, regardless of whether the weighting is by FV or par value. Notably, echoing Chart 5, both tables show a high weight of concentration in the "above-par" buckets, especially during the periods of falling and low interest rates (such as 2002–2004 and 2009–2012). Moreover, 2011 and 2012 were the only two years in the 11-year time period analyzed that had double-digit weights in the "greater than 120% of par" bucket. In both years, bonds valued above par (i.e., all of the buckets above the middle line) weighed in at 85% – 90% of all insurers' bond holdings. And, in 2012, almost half (48.6% in Table 1A) of the bond holdings was in the two categories with greater than 110% of par. Chart 7 provides a graphical representation of Table 1A, showing the heavy concentration of insurers' bond holdings in the top four buckets visually.

This shows an unprecedented amount of bonds that are currently priced at a significant premium in the insurers' portfolios. Given that the market interest rates have largely bottomed and credit spreads are near record tight levels, there is little opportunity for the bond prices to go much higher. Meanwhile, there is a lot more downside risk for bond market values when interest rates begin to rise.

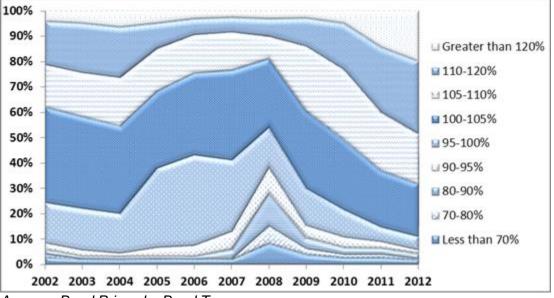
FV as % of Par	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
≥120%	4.3%	5.2%	6.6%	5.2%	3.3%	2.8%	3.3%	3.0%	5.1%	14.4%	20.0%
≥110 and <120%	16.9%	19.3%	19.8%	9.9%	6.2%	5.7%	6.9%	11.1%	18.2%	25.6%	28.6%
≥105 and <110%	16.5%	17.1%	19.0%	16.7%	15.1%	14.9%	8.8%	25.3%	27.3%	22.9%	19.7%
≥100 and <105%	37.9%	36.4%	34.5%	30.4%	32.4%	35.5%	27.1%	30.5%	27.8 %	22.5%	20.7%
≥95 and <100%	15.8%	16.4%	15.6%	31.4%	35.5%	28.3%	15.9%	14.7%	10.9%	5.8%	5.4%
≥90 and <95%	2.5%	2.0%	1.4%	3.0%	4.2%	6.8%	10.0%	4.8%	4.1%	2.5%	1.3%
≥80 and <90%	2.0%	1.1%	0.9%	1.1%	1.0%	3.3%	12.9%	4.3%	2.8%	2.3%	1.5%
≥70 and <80%	1.0%	0.4%	0.3%	0.3%	0.3%	0.8%	6.9%	2.3%	1.2%	1.3%	0.9%
<70%	2.9%	2.1%	1.9%	2.2%	2.0%	2.0%	8.2%	4.0%	2.7%	2.7%	1.9%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Table 1A: Insurance Industry Fair Value as a Percentage of Par Buckets Weighted by Fair Value, All Bond Types

Table 1B: Insurance Industry Fair Value as a Percentage of Par Buckets Weighted by Par Value, All Bond Types

FV as % of Par	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
≥120%	3.3%	4.0%	5.1%	3.9%	2.6%	2.1%	2.2%	2.3%	3.9%	11.5%	16.5%
≥110 and <120%	2.2.2		17.3%				5.4%				
≥105 and <110%				15.0%							
≥100 and <105%				28.8%							
≥95 and <100%				30.8%							
≥90 and <95%		2.1%		3.1%							
>80 and <90%	2.3%	1.3%	1.0%	1.2%	1.1%	3.8%	13.4%	4.8%	3.2%	2.9%	1.9%
≥70 and <80%	1.3%	0.5%	0.4%	0.4%			8.1%			1.9%	1.3%
<70%	8.6%	7.8%	7.7%	8.6%			16.2%			6.7%	4.6%
Grand Total	100%	100%		0.070		100%		100%		100%	

Chart 7: Insurance Industry Fair Value as a Percentage of Par Buckets Weighted by Fair Value, All Bond Types



Average Bond Prices by Bond Type

While our preceding analysis combines all types of bonds that insurers invest in, we thought it prudent to briefly examine the average FVs (as a percentage of par) over time for the industry's invested bond types, as broken out in Table 2 below. The above-par average FVs have been shaded, and the top four values within each year have been bolded. Interestingly, residential mortgage-backed securities (RMBS), commercial mortgage-backed securities (CMBS) and hybrid FVs have consistently stayed near or below par, while U.S. and foreign government, municipal and corporate bonds, and other loan-backed and structured securities remained near or above par, on average, over the past 11 years. Resonating with the earlier findings, in 2012, every bond type's average price was trading above par, with foreign government and corporates showing the highest averages.

Table 2: Insurance Industry Average Fair	Value as a Percentage of Par History by Bond
Туре	

Bond Type	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
US Government	105.2%	102.8%	101.8%	100.0%	99.1%	102.0%	107.3%	102.7%	104.2%	108.2%	108.5%
Foreign Government	101.3%	106.9%	108.4%	106.4%	106.6%	106.6%	100.8%	104.5%	106.9%	109.4%	112.3%
Municipal	102.4%	103.4%	104.7%	103.3%	103.1%	103.2%	100.6%	103.9%	103.1%	108.6%	110.2%
Corporate	101.8%	105.2%	106.2%	102.9%	101.8%	100.6%	89.4%	103.0%	106.4%	108.4%	111.2%
Hybrid	n/a	83.1%	92.4%	83.0%	100.1%						
RMBS*	99.6%	99.5%	100.2%	98.5%	98.2%	96.5%	84.1%	85.8%	91.4%	103.1%	104.9%
CMBS*	99.6%	99.6%	100.5%	98.2%	99.4%	96.9%	76.8%	86.7%	95.5%	98.8%	102.9%
Other Loan-Backed and											
Structured Securities	101.8%	101.8%	105.0%	102.7%	101.7%	102.3%	101.5%	106.1%	108.0%	99.6%	102.5%
Average Total	102%	103%	105%	102%	101%	101%	94%	101%	104%	107%	109%

* RMBS and CMBS numbers include agency-related debt

A Closer Focus on Corporates

Because corporate bonds are the largest asset class of all bond types in insurers' bond portfolios, and they display one of the highest premium bond prices, we reviewed the corporate bond fair value data more closely. Mimicking Table 1A and Table 1B, we tallied the same FV buckets for corporates in Table 2A and Table 2B, weighted by FV and par value, respectively. Similar to the "all bond" data, both tables show a high concentration in the "above-par" buckets, especially during the periods of falling and low interest rates. They also show the *only* double-digit weights in the "greater than 120% of par" bucket in 2011 and 2012, and, in both years, bonds valued above par were about 89% of all insurers' corporate bond holdings.

Table 2A: Insurance Industry Fair Value as a Percentage of Par Buckets Weighed by Fair
Value, Corporates Only

By Fair Value	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
≥120%	5.0%	6.8%	9.4%	7.1%	4.2%	3.2%	2.1%	4.3%	7.5%	20.4%	20.0%
≥110 and <120%	23.4%	26.9%	26.1%	14.1%	8.9%	7.6%	4.5%	13.6%	26.1%	26.6%	28.6%
≥105 and <110%	19.5%	20.1%	20.3%	16.9%	14.4%	13.8%	6.5%	29.4%	28.2%	19.6%	19.7%
≥100 and <105%	31.5%	29.3%	29.0%	30.5%	33.6%	32.3%	18.2%	29.6%	23.8%	22.4%	20.7%
≥95 and <100%	12.1%	12.8%	11.8%	25.7%	31.6%	2 9.7%	21.2%	12.9%	9.3%	6.4%	5.4%
≥90 and <95%	2.5%	1.9%	1.5%	3.3%	5.2%	8.2%	14.5%	4.9%	2.9%	2.3%	1.3%
≥80 and <90%	2.5%	1.1%	0.9%	1.3%	1.2%	3.6%	17.3%	3.3%	1.3%	1.5%	1.5%
≥70 and <80%	1.2%	0.4%	0.3%	0.4%	0.3%	0.8%	8.2%	1.1%	0.4%	0.5%	0.9%
<70%	2.2%	0.9%	0.6%	0.6%	0.5%	0.7%	7.5%	0.9%	0.5%	0.4%	1.9%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

value, corporates	, 0111y										
By Par Value	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
≥120%	4.0%	5.6%	7.8%	5.7%	3.4%	2.5%	1.4%	3.5%	6.0%	17.3%	16.5%
≥110 and <120%	20.9%	24.6%	24.2%	12.8%	7.9%	6.7%	3.5%	12.3%	23.3%	25.4%	26.9%
≥105 and <110%	18.3%	19.4%	20.0%	16.2%	13.6%	12.9%	5.4%	28.0%	26.6%	20.0%	19.7%
≥100 and <105%	31.5%	30.1%	30.0%	30.8%	33.4%	31.7%	15.8%	29.5%	23.5%	23.9%	21.8%
≥95 and <100%	12.4%	13.5%	12.7%	27.1%	32.7%	30.3%	19.3%	13.5%	9.6%	7.1%	5.9%
≥90 and <95%	2.7%	2.1%	1.6%	3.6%	5.7%	8.8%	13.9%	5.4%	3.2%	2.7%	1.5%
≥80 and <90%	3.0%	1.3%	1.1%	1.6%	1.4%	4.2%	17.9%	4.0%	1.6%	1.9%	1.9%
≥70 and <80%	1.7%	0.5%	0.4%	0.5%	0.4%	1.0%	9.6%	1.4%	0.5%	0.7%	1.3%
<70%	5.4%	2.9%	2.2%	1.5%	1.6%	2.0%	13.1%	2.5%	5.7%	1.1%	4.6%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Table 2B: Insurance Industry Fair Value as a Percentage of Par Buckets Weighed by ParValue, Corporates Only

Drilling down into the corporate bonds' average FV data shown in Table 3 below, the values that are more extreme than the average total for the insurance industry (which is the last line at the bottom of the table) have been bolded; i.e., when they were higher than the total when it was above par and lower than the total when it was well below par, such as in 2008. We found that life insurance companies tend to own corporate bonds with average FVs that are more volatile than the all insurers' average corporate bond holdings, with values from eight out of the past 11 years highlighted (including the most recent few). This is generally expected because life companies tend to invest in longer duration bonds, which are more sensitive to interest rate fluctuations.

 Table 3: Insurance Industry Fair Value as a Percentage of Par by Insurer Type,

 Corporates Only

Insurer Type	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Life	101.3%	105.0%	106.6%	103.4%	102.1%	1 00.7 %	88.3%	102.6%	106.5%	109.8%	113.0%
Property/Casualty	102.4%	105.6%	105.4%	101.8%	101.2%	100.5%	91.6%	103. 7 %	106.2%	106.7%	109.1%
Health	104.5%	106.6%	105.8%	102.0%	101.4%	100.3%	90.1%	104.2%	106.3%	106.3%	108.8%
Fraternal	101.0%	104.8%	106.2%	103.3%	102.1%	100.5%	87.7%	100.7%	105.6%	109.6%	114.0%
Title	103. 7 %	107.1%	106.0%	102.5%	101.5%	101.4%	95.2%	105.5%	107.3%	107.7%	110.2%
Average Total	101.8%	105.2%	106.2 %	102.9%	101.8%	100.6%	89.4%	103.0%	106.4%	108.4%	111. 2 %

Investment Risk of Higher Interest Rates in the Future

It is unambiguous that bond prices will decline when interest rates begin to rise, and the longerdated, lower-coupon bonds with longer duration will be impacted the most. Because of an extended period of low interest rates, this problem is exacerbated by the fact that the newest and, on average, longest-maturity bonds in the market (and in insurers' portfolios) will have historically low coupons. In time, their yields will eventually begin to erode, given the future higher interest rate environment. Additionally, the older bonds with higher coupons, which are currently trading at the highest premiums, are at the highest risk of price correction and premium loss. Given the insurance industry's substantial ownership of bonds trading at a significant premium to their par values, the risk of real market value loss to these bond holdings is significant — even if most of the losses will not be reflected in statutory accounting, as neither have been the recent gains. Also, if these bonds had been purchased in the secondary market at a premium, as opposed to near par at new issuance, their future disposition (that is, as a sale or at maturity) will likely result in a real economic loss even under statutory accounting. Nevertheless, the timing of future interest rate increases remains highly uncertain and continues to be postponed as the U.S. economy struggles to show a sustained recovery. As such, the Fed has made it pretty clear that the pace of future rate increases - when they do happen - will be

gradual and measured. Therefore, the impact of falling bond prices is likely to occur incrementally over an extended period of time, rather than suddenly over a short period of time. Therefore, the markets and investors will have time to adapt and adjust their portfolios gradually so as to minimize the negative effect of rising interest rates. Additionally, any new bond issuance occurring during that time should provide increasingly higher yields, helping to mitigate (at least somewhat) the price depreciation of the older bonds.

Summary

Historically low interest rates over the past several years have pushed broad bond market values significantly above their par values, exposing them to a material risk of market value loss when interest rates finally begin to rise. Although the insurance industry's high premium-bond ownership in the past couple of years has increased, these higher bond prices have not been reflected on insurers' balance sheets and earnings as a result of statutory accounting reporting requirements. Therefore, any subsequent future bond market value losses are not likely to directly harm insurers' reported financial results. Moreover, the impact of falling bond market prices is expected to occur incrementally, over a long period of time, giving insurers a chance to adjust their bond portfolios accordingly. The NAIC Capital Markets Bureau will continue to monitor trends surrounding the interest rates trajectory and its impact on the market value of the insurance industry's bond portfolios. We will report on any developments as deemed appropriate.

May 17, 20								
Major Insu	irer Share Prices		С	hange %	6		Prior	
		Close	Week	QTD	YTD	Week	Quarter	Year
Life	Aflac	\$55.24	2.4	6.2	4.4	\$53.95	\$52.02	\$52.8
	Ameriprise	81.69	4.5	10.9	30.8	78.20	73.65	62.4
	Genworth	10.74	2.9	7.4	43.4	10.44	10.00	7.4
	Lincoln	35.25	1.1	8.1	36.8	34.86	32.61	25.7
	MetLife	43.28	5.2	13.8	32.1	41.16	38.02	32.7
	Principal	38.14	2.9	12.1	34.4	37.05	34.03	28.3
	Protective	38.85	1.0	8.5	36.5	38.45	35.80	28.4
	Prudential	68.38	5.1	15.9	28.8	65.05	58.99	53.0
	UNUM	28.45	1.3	0.7	37.2	28.09	28.25	20.7
PC	ACE	\$91.65	0.1	3.0	15.3	\$91.60	\$88.97	\$79.5
	Axis Capital	44.58		7.1	29.4	45.35	41.62	34.4
	Allstate	50.00		1.9	24.9	49.39	49.07	40.0
	Arch Capital	53.57	(0.3)	1.9	22.3	53.74	52.57	43.8
	Cincinnati	49.66		5.2	27.5	49.31	47.22	38.9
	Chubb	89.88	0.8	2.7	19.8	89.14	87.53	75.0
	Everest Re	131.92	(2.9)	1.6	20.3	135.81	129.86	109.6
	Progressive	26.19		3.6	24.7	25.72	25.27	21.0
	Travelers	86.50	0.0	2.7	20.9	86.49	84.19	71.5
	WR Berkley	42.58	0.0	(4.0)	13.3	42.57	44.37	37.5
	XL	32.45	1.6	7.1	30.1	31.93	30.30	24.9
Other	AON	\$66.29	2.8	7.8	19.6	\$64.50	\$61.50	\$55.4
	AIG	45.23		16.5	28.2	44.18	38.82	35.2
	Assurant	49.84	5.2	10.7	44.5	47.38	45.01	34.4
	Fidelity National	25.56	(1.8)	1.3	8.4	26.03	25.23	23.5
	Hartford	31.16	1 N N	20.8	39.2	29.66	25.80	22.3
	Marsh	41.09		8.2	19.8	39.47	37.97	34.3
Health	Aetna	\$60.04	1.6	17.4	30.0	\$59.10	\$51.13	\$46.1
	Cigna	67.90		8.9	27.4	68.82	62.37	53.2
	Humana	80.45		16.4	17.6	80.09	69.11	68.4
	United	62.84		9.8	16.1	62.91	57.21	54.1
	WellPoint	77.81	2.5	17.5	28.1	75.89	66.23	60.7
Monoline	Assured	\$23.95	(0.5)	16.2	69.6	\$24.08	\$20.61	\$14.1
	MBIA	15.35	1 N N	49.5	93.8	15.42	10.27	7.9
	MGIC	6.07	1 N N	22.6	124.8	5.75	4.95	2.7
	Radian	13.69		27.8	122.6	13.26	10.71	6.1
	XL Capital	32.45		7.1	30.1	31.93	30.30	24.9

May 17, 2013							
Major Market Variables		C	hange %	ó		Prior	
	Close	Week	QTD	YTD	Week	Quarter	Year
Dow Jones Ind	15,354.40	1.6	5.3	17.2	15,118.49	14,578.54	13,099.80
S&P 500	1,667.47	2.1	6.3	17.3	1,633.70	1,569.19	1,422.10
S&P Financial	268.47	3.7	9.4	21.4	258.95	245.41	221.17
S&P Insurance	248.66	2.0	8.7	24.5	243.77	228.71	199.67
US Dollar \$		C	hange %	ó		Prior	
/ Euro	\$1.28	(1.2)	0.2	(2.7)	\$1.30	\$1.28	\$1.32
/ Crude Oil bbl	96.02	0.1	(1.2)	4.8	95.89	97.23	91.62
/ Gold oz	1,364.70	(5.7)	(14.4)	(18.5)	1,446.80	1,594.80	1,673.70
Treasury Ylds %	%	C	hange bj	þ	%	%	%
1 Year	0.11	(0.01)	(0.03)	(0.04)	0.11	0.13	0.14
10 Year	1.95	0.05	0.10	0.19	1.90	1.85	1.76
30 Year	3.17	0.07	0.06	0.22	3.09	3.10	2.95
Corp Credit Spreads -bp		C	hange %	ó		Prior	
CDX.IG	30.81	4.4	(28.9)	(46.0)	29.53	43.33	57.04

May 17,									
Major I	nsurer Bond Yields					ekly Chan	~		YTD
					Price		-	over UST	Spread
	Company	Coupon	Maturity	Current	Change	Yield	B.P.	Change	Change
Life	Aflac	8.500%	5/15/2019	\$134.96	(\$0.11)	2.22%	109	(5)	(19)
	Ameriprise	5.300%	3/15/2020	\$119.41	(\$0.22)	2.21%	87	(3)	(31)
	Genworth	6.515%	5/15/2018	\$118.15	(\$0.55)	2.61%	171	4	(219)
	Lincoln National	8.750%	7/15/2019	\$135.19	(\$0.38)	2.50%	131	1	(53)
	MassMutual	8.875%	6/15/2039	\$158.22	(\$0.60)	4.89%	190	(4)	(58)
	MetLife	4.750%	2/15/2021	\$115.55	(\$0.67)	2.52%	99	2	(9)
	New York Life	6.750%	11/15/2039	\$134.63	(\$1.64)	4.50%	147	(1)	(16)
	Northwestern Mutual	6.063%	3/15/2040	\$125.04	(\$1.30)	4.45%	139	(2)	(6)
	Pacific Life	9.250%	6/15/2039	\$147.74	(\$0.21)	5.71%	271	(5)	(60)
	Principal	6.050%	10/15/2036	\$124.77	(\$1.18)	4.35%	148	(6)	(34)
	Prudential	4.500%	11/15/2020	\$112.85	(\$0.42)	2.60%	106	(2)	(35)
	TIAA	6.850%	12/15/2039	\$134.41	(\$1.11)	4.59%	156	(4)	(14)
P&C	ACE INA	5.900%	6/15/2019	\$124.10	(\$0.05)	1.70%	53	(3)	(24)
	Allstate	7.450%	5/15/2019	\$130.86	(\$0.30)	1.96%	81	(1)	(30)
	American Financial	9.875%	6/15/2019	\$136.51	\$0.10	3.20%	200	Ö	(113)
	Berkshire Hathaway	5.400%	5/15/2018	\$119.02	(\$0.17)	1.43%	53	(1)	(10)
	Travelers	3.900%	11/15/2020	\$112.26	(\$0.56)	2.11%	62	1	(3)
	XL Group	6.250%	5/15/2027	\$122.36	(\$1.12)	4.13%	178	(4)	(63)
Other	AON	5.000%	9/15/2020	\$115.35	(\$0.47)	2.68%	120	0	(12)
	AIG	5.850%	1/15/2018	\$116.79	(\$0.19)	2.04%	124	(2)	3
	Fidelity National	7.875%	7/15/2020	\$137.75	(\$2.00)	-2.47%	(339)	23	(208)
	Hartford	5.500%	3/15/2020	-	(\$0.46)	2.58%	121	4	(52)
	Marsh	9.250%	4/15/2019		(\$0.46)	2.71%	157	(0)	(40)
	Nationwide	9.375%	8/15/2039		(\$1.23)	5.65%	264	Ő	(58)
Health	Aetna	3.950%	9/15/2020	\$108.84	(\$0.69)	2.61%	114	2	(6)
	CIGNA	5.125%	6/15/2020	-	(\$0.30)	2.69%	127	0	(16
	United Healthcare	3.875%	10/15/2020	-	(\$0.43)	2.48%	102	(1)	5
	Wellpoint	4.350%	8/15/2020		(\$0.58)	2.71%	125	(1)	(13

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

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