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**

Update to Market Value Volatility in 2011: Trends Over the Past Three Months and Their Impact on the Insurance Industry

In August 2011, the NAIC Capital Markets Bureau published a Special Report titled, "Market Value Volatility in 2011: Short-term Trends That May Impact Insurance Company Industry Investment Performance." In the report, we noted relevant trends in specific markets from Jan. 1, 2011, through August 2011. Since then, not much has changed in terms of global market events, in that both the global sovereign debt crisis and the U.S. housing crisis continue. Related to these events, an agreement on Greece's debt restructuring and a second round of support has swung from likely to unlikely several times, increasing volatility in many markets worldwide.

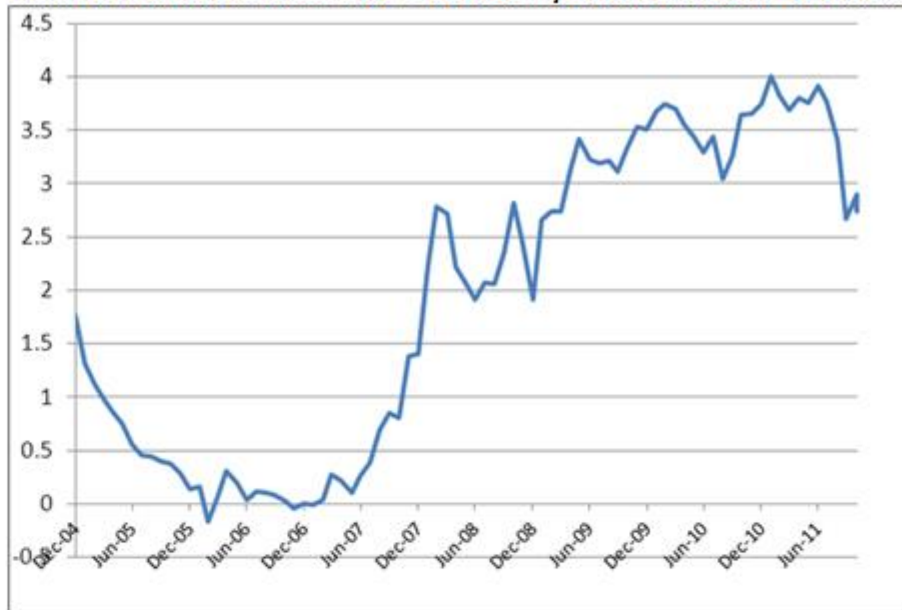
While the bolstering of the European Financial Stability Facility (EFSF, also known as the bailout fund) is a positive development, the sovereign debt crisis continues, and a few European Union countries have had their long-term sovereign debt ratings downgraded by one or more of the nationally recognized statistical rating organizations (NRSROs). In addition, Greece announced that it would hold a referendum regarding this latest agreement, which caused doubts regarding the package's approval, but then rescinded this plan the following day. Domestically, the U.S. housing crisis lingers and the unemployment rate remains high. Financial markets perhaps are on the mend, but time will tell if this is an emerging trend or a short-term development. Recent news, such as growth in the U.S. economy by 2.5% in the third quarter, and a dip in the unemployment rate to 9%, suggests that perhaps the lull in recovery might be over — at least for the time being.

Government Bonds

30-year U.S. Treasury Bond vs. 2- year U.S. Treasury Bond – Spread Differential

In April 2011, the Capital Markets Bureau published a Special Report titled, "The Treasury Yield Curve and Its Impact on Insurance Company Investments," which, in part, explained how the yield curve's shape is indicative of market expectations regarding interest rates. Insurance companies — particularly life companies, which tend to invest in long-term assets to match their long-term liabilities — benefit from a steepening yield curve. This is because they can offer higher and more attractive returns for their long-term investments (when rates are higher on long-term investments) than rates on short-term investments offered by other institutions. Conversely, when the yield curve is flat, insurance companies lose their competitive edge as the rates on long- and short-term investments tend to be similar.

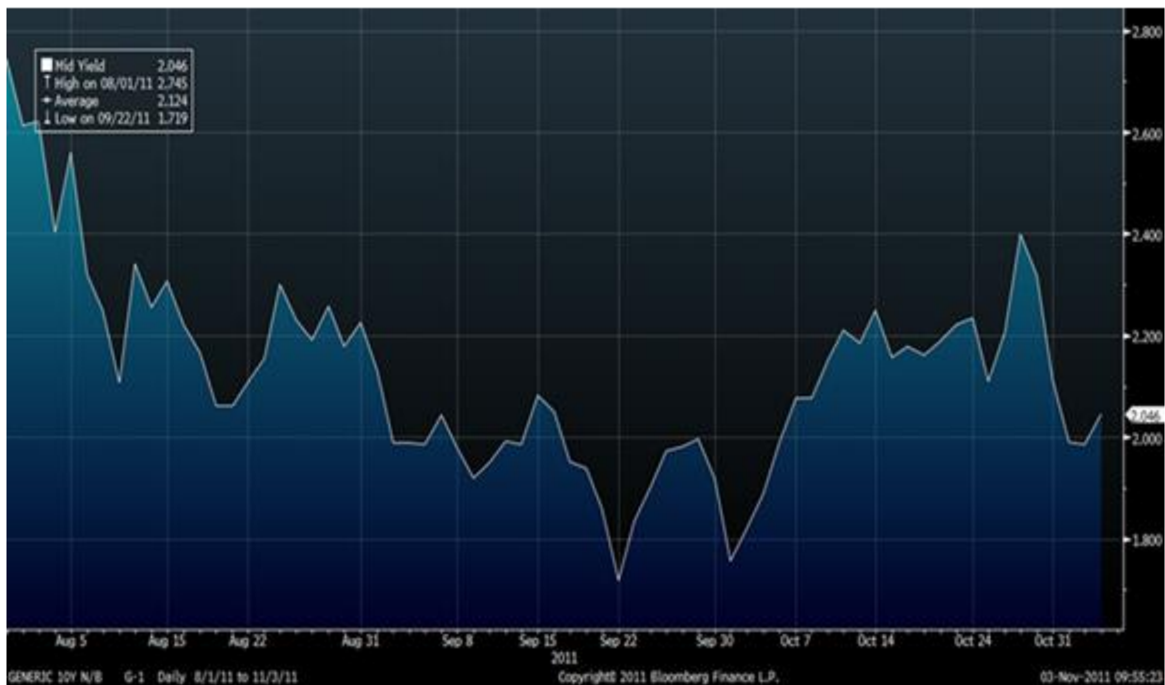
Yield Differential between U.S. 2-Yr Treasury Bond and U.S. 30-Yr Treasury Bond



The graph above shows the yield differential between the generic 30-year U.S. Treasury bond and the generic two-year U.S. Treasury bond from year-end 2004 to Nov. 3, 2011. There are a few points in 2006 where the yield curve was slightly inverted; that is, where the yield on the two-year Treasury exceeded the yield on the 30-year Treasury. However, the yield curve is typically positively sloped and, over this particular time period, the differential averaged 194 basis points. At year-end 2010, the differential was 374 basis points and, on Nov. 3, 2011, it was 274 basis points.

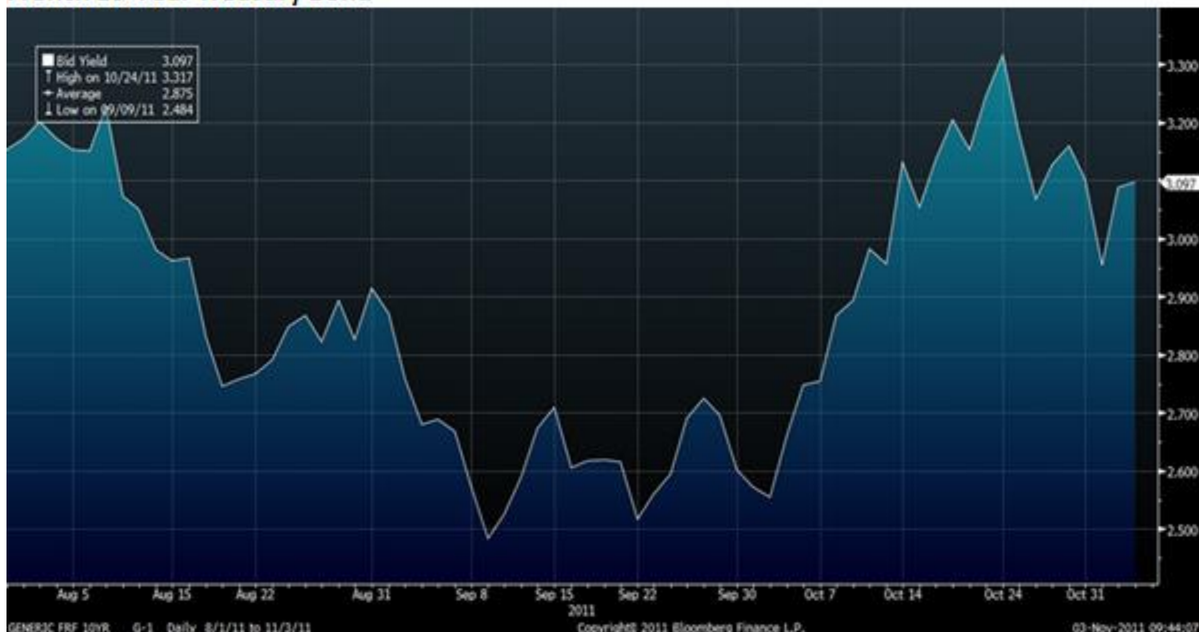
In September 2011, the Federal Reserve announced a policy labeled, “Operation Twist,” whereby it would sell $400 billion in short-term Treasuries and purchase the same amount in longer-term bonds, commencing October 2011 and ending June 2012. This policy is intended to lower yields on long-term bonds, while keeping the rate on short-term bonds relatively unchanged, thereby “twisting” the yield curve. Operation Twist is intended to keep long-term interest rates low to incent borrowing among individuals and companies. This is not, however, beneficial to insurance companies that rely on higher long-term interest rates to be competitive. Since the announcement, the differential between the 30-year Treasury and two-year Treasury narrowed from 340 basis points at the end of August 2011 to 267 basis points at the end of September 2011.

U.S. 10-year Treasury Bond



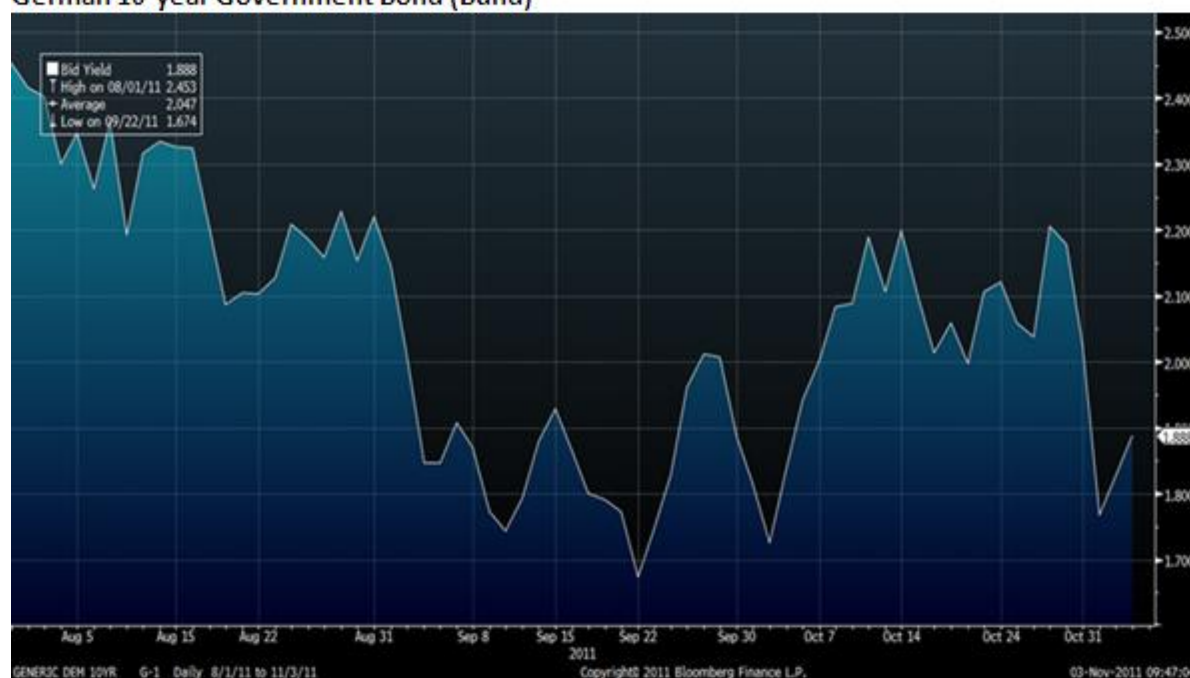
Yields on U.S. Treasuries move in the opposite direction to price. The yield on the U.S. 10-year Treasury bond has been volatile since August 2011, dipping to low points in September 2011, when demand for Treasuries was high (and, therefore, prices increased) as a flight to quality ensued with concerns over the Eurozone crisis and its impact on periphery countries. More recently, yields had increased as third-quarter U.S. gross domestic product (GDP) rose and a bailout agreement had been reached pertaining to Greek debt; however, the announcement by the Greek government that it would call for a vote on the package (the decision since rescinded) caused markets worldwide to plummet, including the yield on U.S. Treasuries, as investors moved to investments with lower volatility.

French 10-Year Treasury Bond



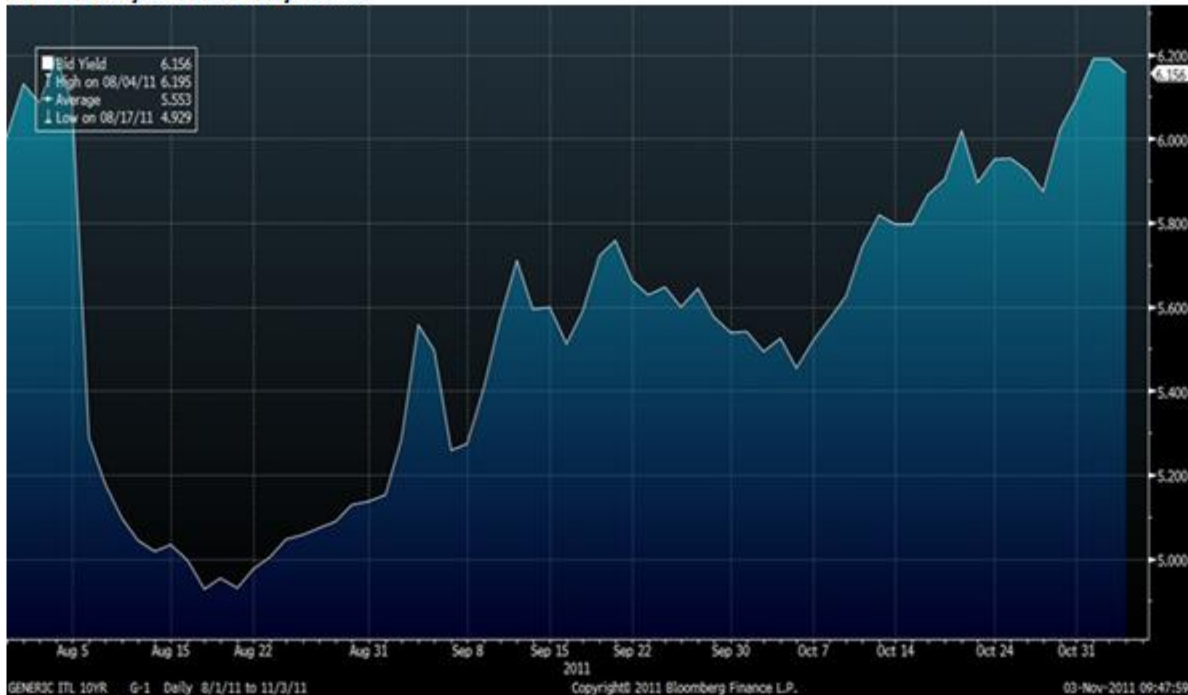
As a country whose banks have significant exposure to Greek debt, France’s yield on 10-year sovereign substantially increased since early October 2011, reaching a high on Oct. 24 as it was announced by France and Germany that the decision regarding the Eurozone rescue package would be postponed. In addition, as of year-end 2010, French banks held €419 billion (approximately $480 billion) in Greek, Irish, Italian, Portuguese and Spanish debt. Lastly, Standard & Poor’s recently published a market commentary suggesting that it might revise its outlook on France’s long-term sovereign debt rating to negative due, in part, to its declining economy and costs related to the Eurozone debt crisis. Since Oct. 24, the yield has decreased, as demand for government bonds has increased (causing the price to increase). As of June 30, 2011, insurance company exposure to French debt was $27 billion, of which $590 million was sovereign debt.

German 10-year Government Bond (Bund)



The volatility of the German 10-year government bond is evidenced by the graph above. In a narrower range, the German Bund has been volatile over the past three months, due, in part, to its role as a leader in the discussions for the Eurozone bailout package. The yield plummeted as a delay in decision-making for the most recent package had been announced, because investor demand for safety (and, therefore, the price of government bonds) increased. After a brief period of relief, as a package was eventually agreed upon, yields once again dropped due to the ongoing instability related to this bailout. As of June 30, 2011, insurance industry exposure to German debt was approximately $13.7 billion, of which about $323 million was sovereign exposure.

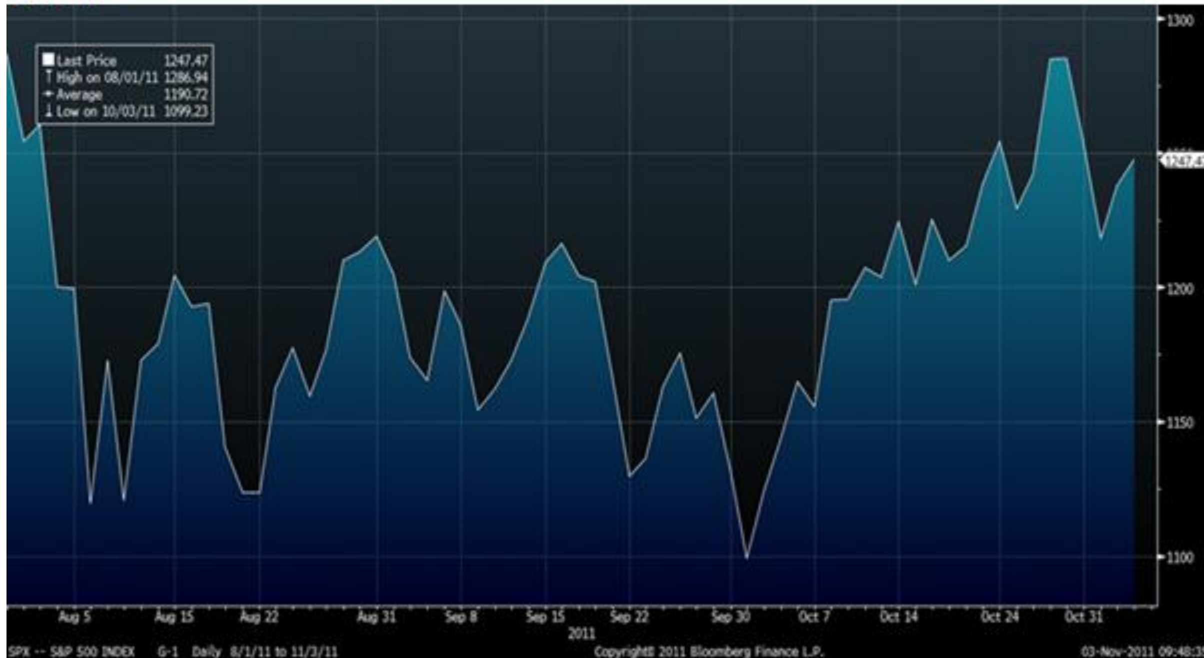
Italian 10-year Treasury Bond



Yields on Italian 10-year government debt reached a high Nov. 1. The yield on Italian government bonds had been increasing since a large decline in August 2011, when the European Central Bank purchased approximately €14.3 billion of the sovereign debt of member states, particularly Spain and Italy, in an effort to reduce yields on the debt of those weakest Eurozone countries most affected by the crisis. Insurance company exposure to Italy was $2.4 billion as of June 30, 2011, including $824 million in sovereign exposure.

Equity indices

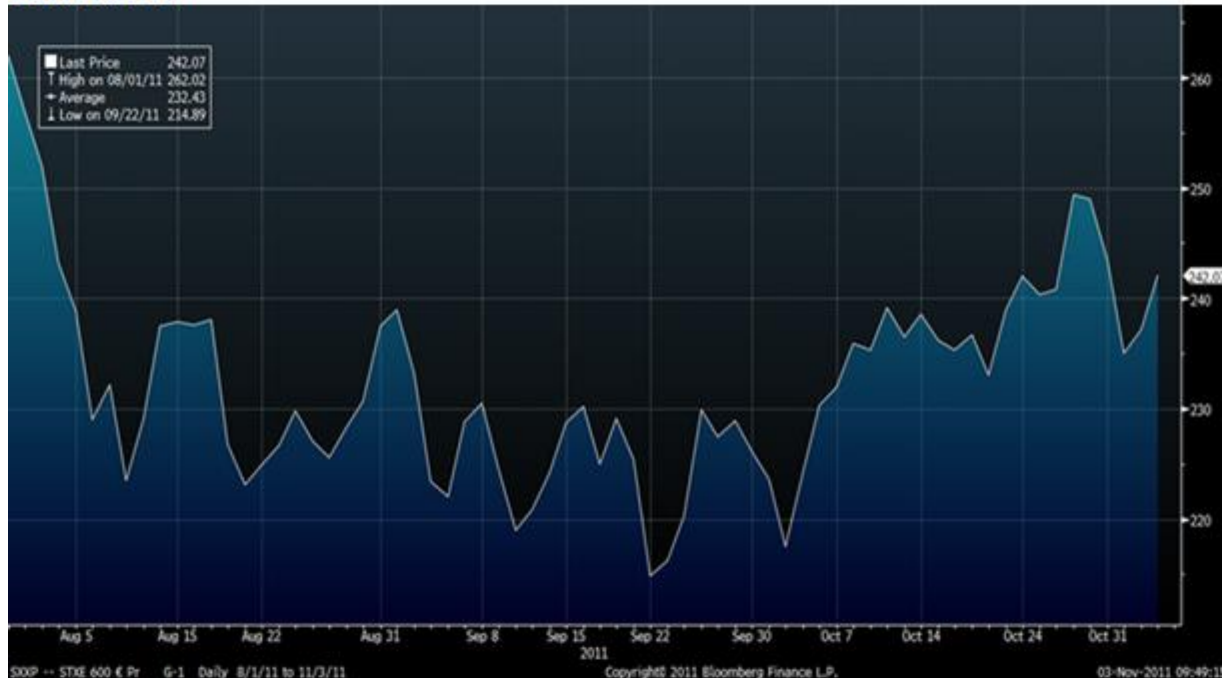
S&P 500



The volatility of the Standard & Poor's 500 Index (S&P 500), which tracks the most widely traded 500 stocks on the New York Stock Exchange, is indicative of the sensitivity of the U.S.

equity markets to global economic events. As the graph above shows, there were several peaks and troughs from August 2011 through Nov. 3, 2011. However, since early October, the index has generally been on the rise. This is due, in part, to meetings and subsequent agreements among Eurozone leaders regarding the Greek sovereign debt bailout, as well as acceleration in U.S. economic growth. The decline in price at the end of October is due mostly to concern over whether the Greek bailout is in jeopardy of not being implemented.

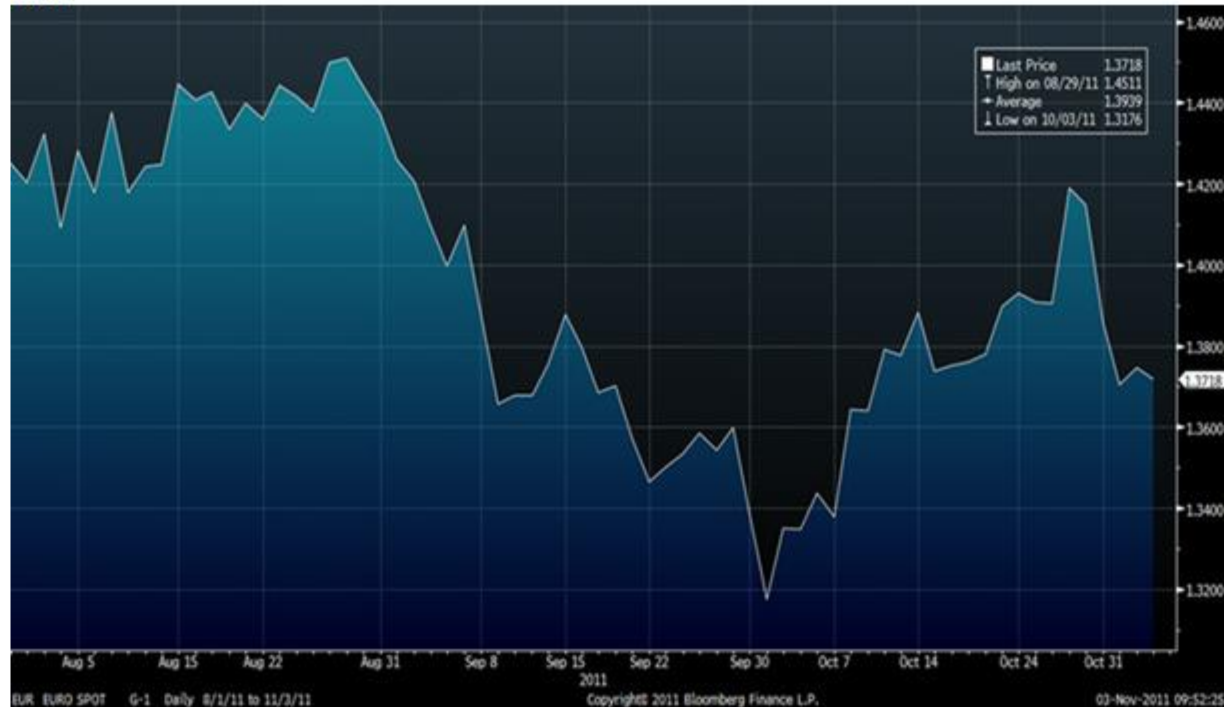
Stoxx Euro 600



The Stoxx Euro 600 (Price) Index is a broad-based capitalization-weighted index of European stocks that is designed to provide a broad, but liquid, representation of European region companies. As of Nov. 1, 2011, it declined 3.5%, representing the biggest drop in almost six weeks, due mostly to concern over the implementation of the most recent bailout package for Greece, which was agreed upon Oct. 27, 2011. In addition, other European stock indices also lost value for the same reason.

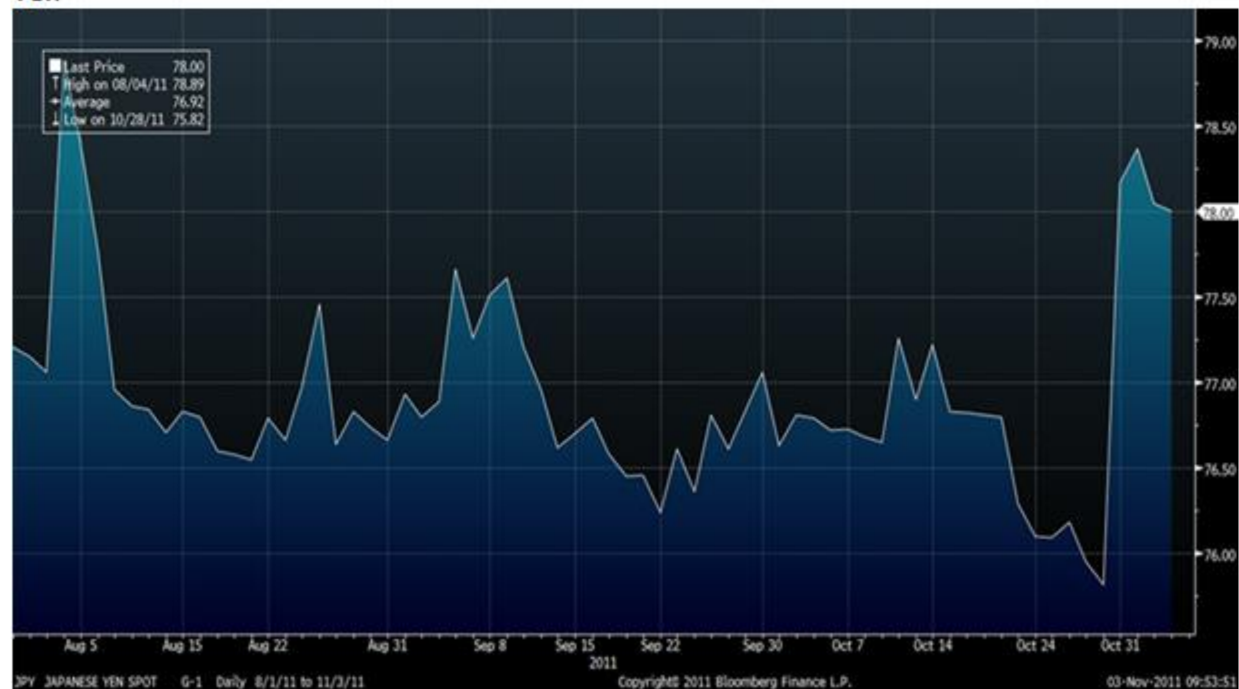
Currencies

Euro



As concern has intensified over the Eurozone bailout, the euro, as it is valued against the dollar, has declined. The euro had been on a declining trend since late August, decreasing from a high of 1.4511 Aug. 29, to a low of 1.3176 Oct. 3, due to an increase in the likelihood of a Greek bond default because the country is not expected to meet its 2011 deficit target. Since then, the value of the euro increased briefly, until recently falling again as turmoil in this region persists.

Yen

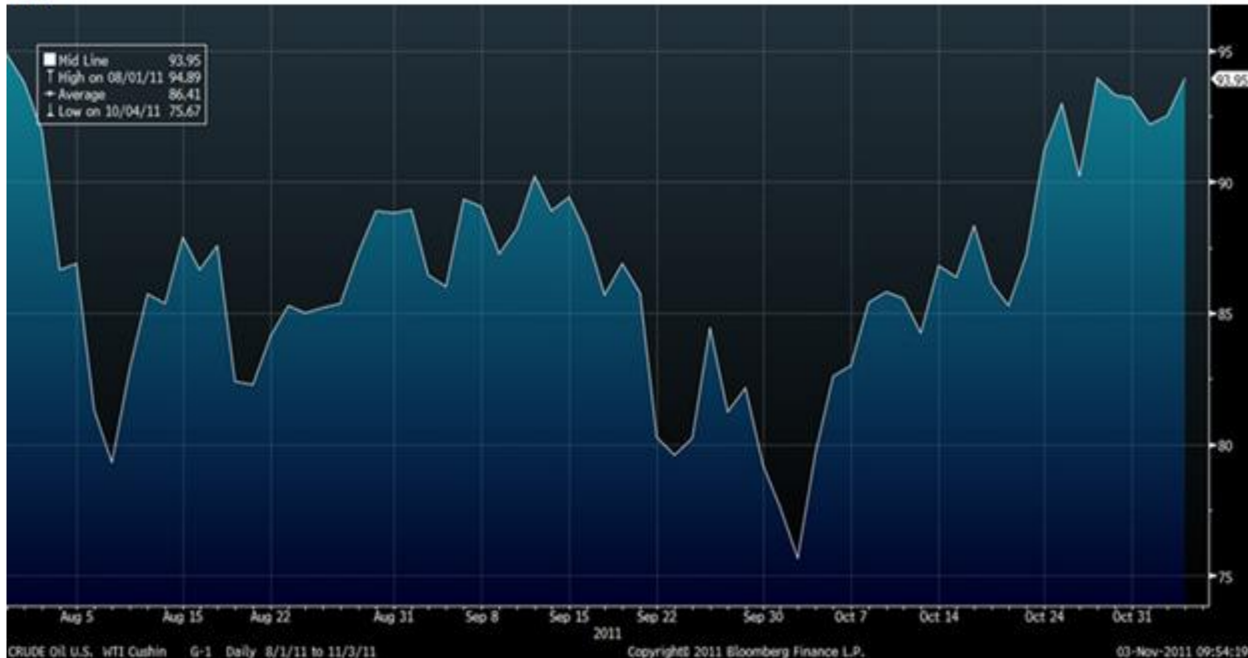


For the first time since Aug. 4, 2011, the Japanese central government intervened to weaken the value of the yen in an effort to make the currency more attractive for exports. Contrary to its efforts, in August, the yen spiked to a high of 78.89. On Monday, Oct. 31, the Japanese

government was believed to have sold about ¥7 trillion to keep the value of the yen down; however, due likely to the European sovereign debt crisis, the value of the yen peaked again, to 75.25, just shy of its high for the year so far. Investors typically buy yen when global financial markets are in turmoil.

Commodities – Oil

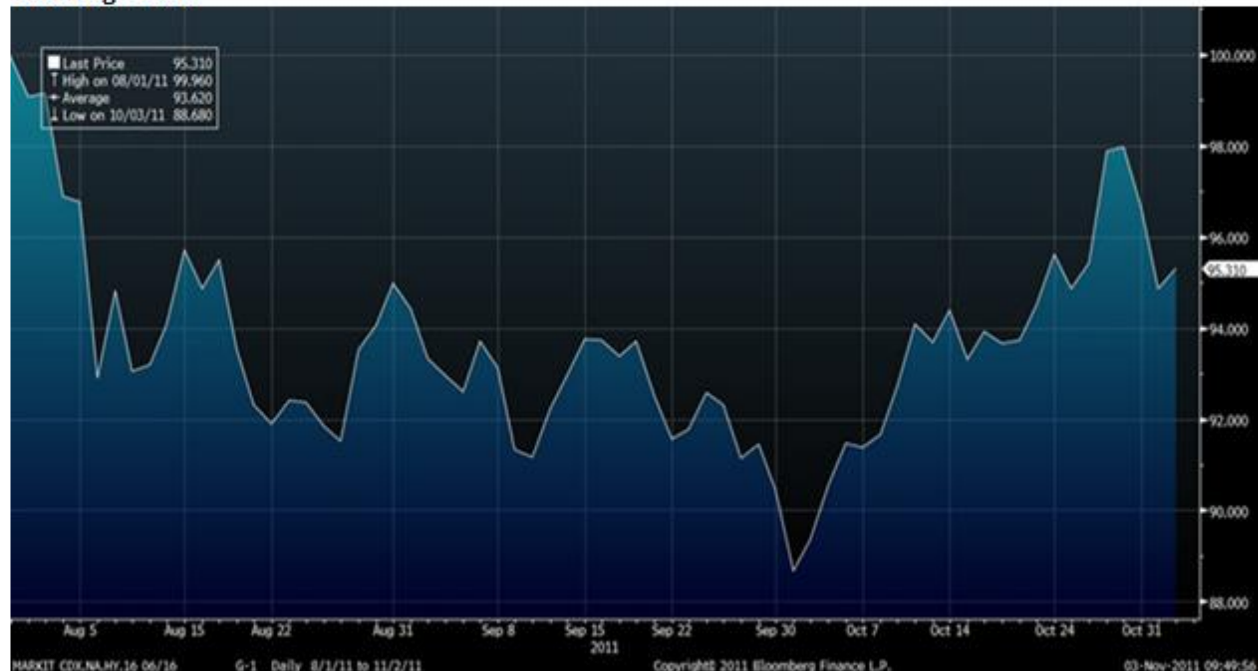
WTI



The West Texas Intermediate Crude Oil Spot Price (WTI) is a benchmark used to price a light, sweet crude oil produced in the United States. The decreases in oil prices are due in part to a strengthening U.S. dollar (which typically happens with commodities), as well as an expected decrease in demand, especially as the U.S. economy continues to be weak and turmoil continues among the Eurozone nations. It is not unusual for prices to increase in anticipation of a higher demand during winter months, although this might be offset by concerns about the strength of the overall economy.

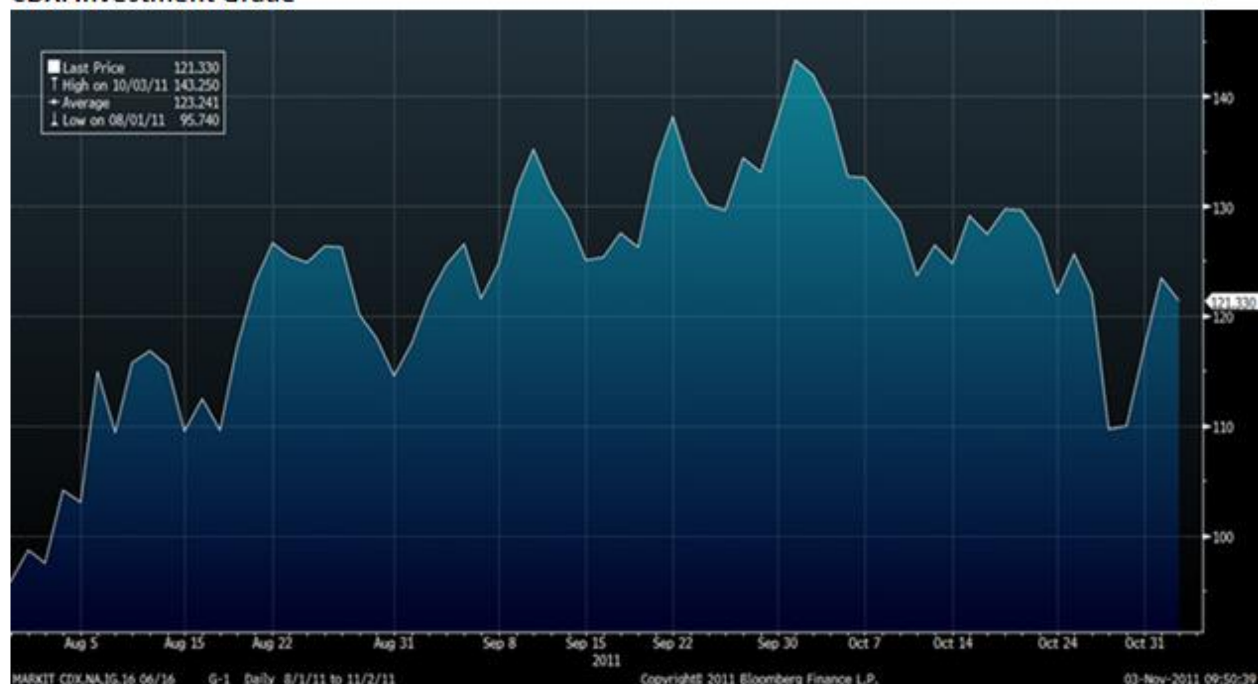
Corporate Securities

CDX: High Yield



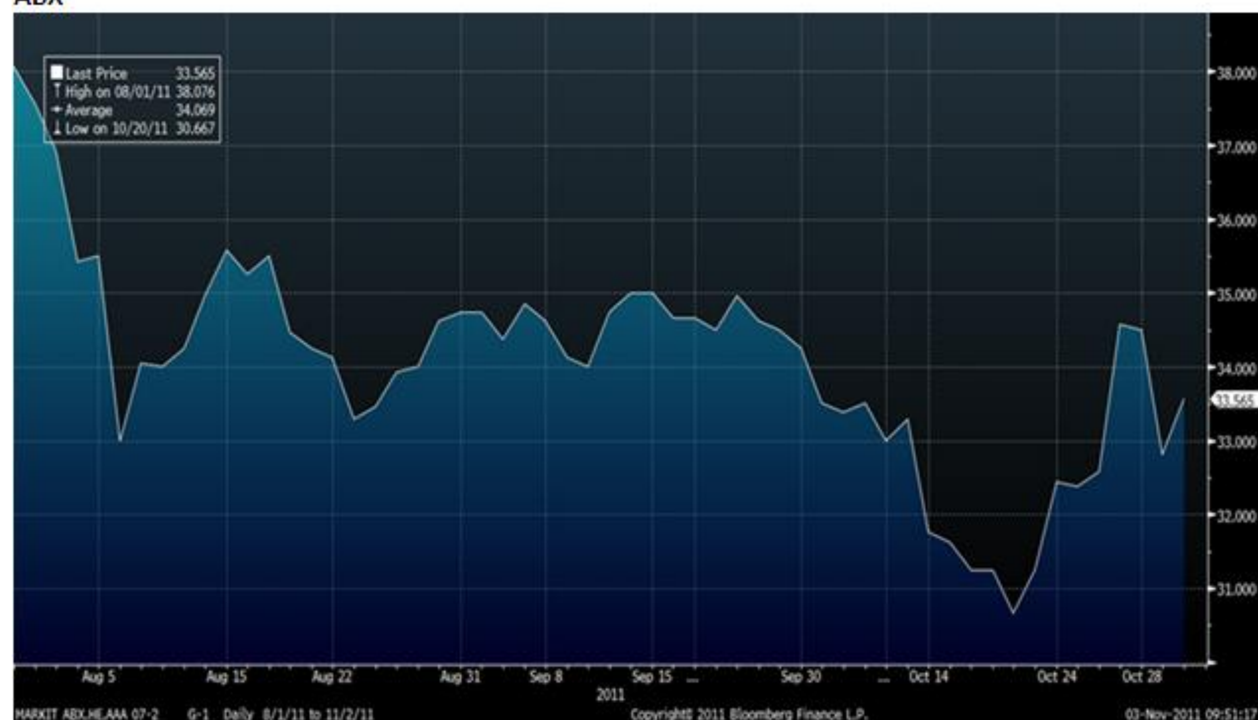
The Markit CDX North America High Yield Index (CDX HY), a more recently developed index that measures bond market activity, is specifically composed of 100 non-investment grade corporate entities domiciled in North America. Often, the CDX HY is used as a hedging tool, and it provides a general sense of market sentiment. As the graph above shows, there has been some volatility in the high-yield bond market, whereby a year-to-date low was reached Oct. 3, only two months after a high for the year was reached in August. Below investment-grade bonds tend to have more credit risk and, therefore, are more volatile than investment-grade bonds. Continued sovereign debt concerns, as well as a struggling U.S. economy, has put pressure on prices of high-yield bonds.

CDX: Investment Grade



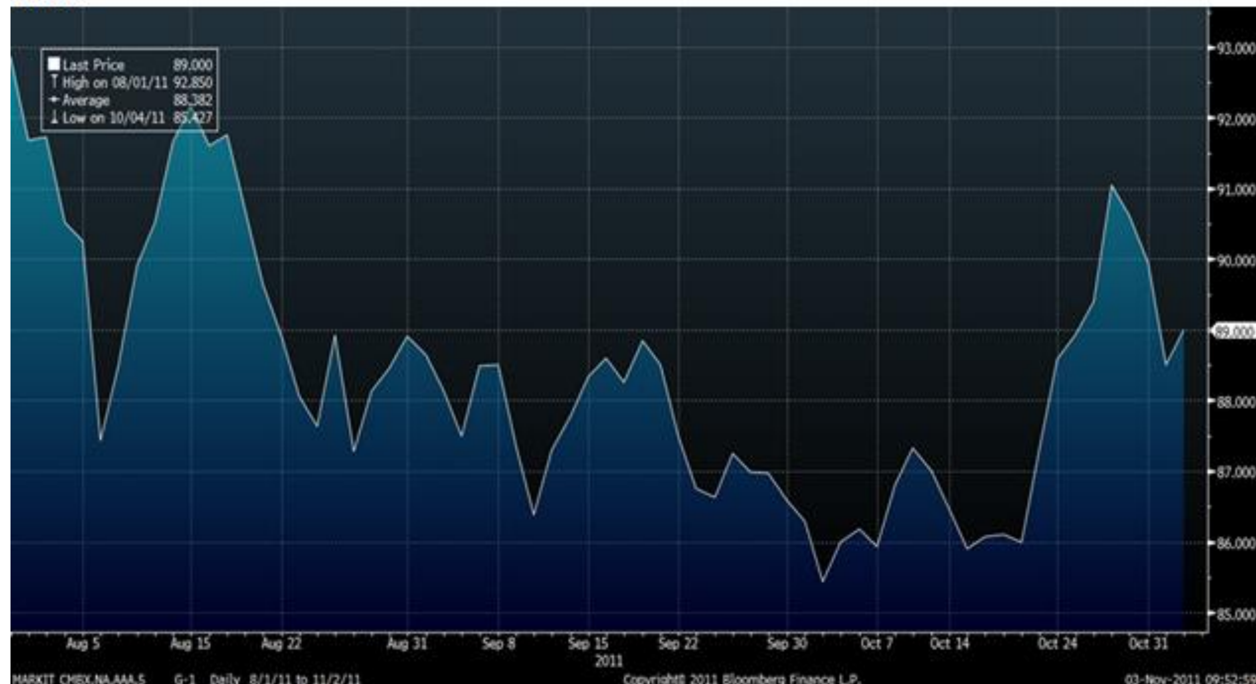
The Markit CDX North America Investment Grade Index (CDX IG) consists of 125 investment-grade entities domiciled in North America. As the graph above shows, there has been some volatility in this market due, in part, to investor anxiety. Many investment-grade bonds have been trading at a premium because of lower interest rates. Corporate bond offerings in the third quarter of 2011 have also been at the lowest level since Lehman Brothers Holdings Inc.'s failure in September 2008. However, despite the lack of fundamental issues with corporate credit, investors are demanding extra yield to own investment-grade corporate bonds globally. As such, the spread to U.S. Treasuries grew to its widest level since July 2009. As of year-end 2010, corporate bonds were almost 50% of insurance industry total cash and invested assets, the majority of which were investment grade.

Structured Securities



The Markit ABX index consists of reference obligations in 20 non-agency residential mortgage-backed securities (RMBS) issuers. Weakness in the housing sector continues in the United States, resulting in downward pressure on the price of RMBS issues. The sharp decline toward the end of October was due, in part, to an announcement by the Federal Housing Administration, along with Fannie Mae and Freddie Mac, regarding changes to the Home Affordable Refinance Program. The changes will increase the number of borrowers eligible to refinance existing mortgages at current, low interest rates and, as a result, increase prepayments on higher coupon RMBS. As of year-end 2010, the insurance industry had almost $130 billion invested in non-agency RMBS.

CMBX



The Markit CMBX index is composed of 25 reference obligations that are tranches of commercial mortgage-backed securities (CMBS). During 2011, prices on CMBS have been volatile and have been trading below par. Delinquencies on U.S. commercial real estate loans (that is, loans that are 30 or more days past due) have been increasing at least since August 2011. Layoff announcements by investment banks have impacted already negative investor sentiment. As of October 2011, the delinquency rate for commercial mortgage loans was 9.77% — the second-highest level in the history of the market according to Trepp, a commercial mortgage and CMBS data provider. A slight uptick occurred as of Nov. 3, due in part to Federal Reserve Chairman Ben Bernanke announcing that additional steps would be taken to assist the U.S. economy. Nevertheless, CMBS new issuance is expected to remain low for the remainder of the year, as loan originations have fallen sharply. As of year-end 2010, insurance industry exposure to CMBS was $172 billion, and direct investment in commercial mortgage loans was almost $322 billion.

Summary

Since our initial report on volatility within the financial markets in August 2011, what remains consistent is instability and volatility. Sentiment toward the sovereign debt crisis seems to change almost daily, and it has impacted debt and equity markets worldwide. Despite the establishment of the EFSF to assist Greece with restructuring its debt (as well as to assist in the financial needs of periphery Eurozone countries), discussions continue among political leaders regarding additional funding and devising a more permanent solution. In addition, for the first half of the year, it appeared that the U.S. economy was finally emerging from financial distress; however, continued high unemployment rates — along with a persistent housing sector crisis — have slowed steps toward recovery. More recently, announcements regarding layoffs among investment banks have also negatively impacted investor sentiment.

The NAIC Capital Markets Bureau will continue to monitor market volatility and publish additional research on this topic as deemed appropriate.

October 28, 2011								
Major Insurer Share Prices			Change %			Prior		
		Close	Week	QTD	YTD	Week	Quarter	Year
Life	Aflac	$46.82	10.5	34.0	(17.0)	$42.38	$34.95	$56.43
	Ameriprise	48.90	13.3	24.2	(15.0)	43.16	39.36	57.55
	Genworth	6.86	14.3	19.5	(47.8)	6.00	5.74	13.14
	Lincoln	21.44	13.7	37.2	(22.9)	18.86	15.63	27.81
	MetLife	36.87	10.8	31.6	(17.0)	33.29	28.01	44.44
	Principal	26.96	4.7	18.9	(17.2)	25.75	22.67	32.56
	Protective	19.56	8.2	25.1	(26.6)	18.07	15.63	26.64
	Prudential	57.40	8.7	22.5	(2.2)	52.82	46.86	58.71
	UNUM	24.32	0.7	16.0	0.4	24.15	20.96	24.22
PC	ACE	$73.05	4.3	20.5	17.3	$70.06	$60.60	$62.25
	Axis Capital	31.27	5.1	20.5	(12.8)	29.76	25.94	35.88
	Allstate	27.21	1.7	14.9	(14.6)	26.76	23.69	31.88
	Arch Capital	36.61	1.9	12.0	24.7	35.92	32.68	29.35
	Cincinnati	29.45	3.7	11.8	(7.1)	28.39	26.33	31.69
	Chubb	68.77	0.5	14.6	15.3	68.46	59.99	59.64
	Everest Re	90.98	7.6	14.6	7.3	84.53	79.38	84.82
	Progressive	19.48	5.5	9.7	(2.0)	18.46	17.76	19.87
	Travelers	59.52	4.4	22.1	6.8	57.02	48.73	55.71
	WR Berkley	35.15	7.6	18.4	28.4	32.66	29.69	27.38
	XL	22.63	5.1	20.3	3.7	21.52	18.80	21.82
Other	AON	$47.91	(2.5)	14.1	4.1	$49.13	$41.98	$46.01
	AIG	26.39	11.0	20.2	(45.3)	23.79	21.95	48.27
	Assurant	39.30	0.6	9.8	2.0	39.06	35.80	38.52
	Fidelity National	15.63	3.5	3.0	14.3	15.10	15.18	13.68
	Hartford	20.35	6.8	26.1	(23.2)	19.05	16.14	26.49
	Marsh	31.01	2.8	16.8	13.4	30.18	26.55	27.34
Health	Aetna	$40.67	7.1	11.9	33.3	$37.99	$36.34	$30.51
	Cigna	46.68	4.7	11.3	27.3	44.59	41.94	36.66
	Humana	80.29	5.8	10.4	46.7	75.88	72.73	54.74
	United	48.94	2.5	6.1	35.5	47.76	46.12	36.11
	WellPoint	68.70	3.6	5.2	20.8	66.34	65.28	56.86
Monoline	Assured	$13.45	8.2	22.4	(24.0)	$12.43	$10.99	$17.70
	MBIA	8.68	5.2	19.4	(27.6)	8.25	7.27	11.99
	MGIC	2.74	19.7	46.5	(73.1)	2.29	1.87	10.19
	PMI	0.31	0.0	53.8	(90.7)	0.31	0.20	3.30
	Radian	2.58	6.0	17.6	(68.1)	2.43	2.19	8.07
	XL Capital	22.63	5.1	20.3	3.7	21.52	18.80	21.82

October 28, 2011 Major Market Variables	Close	Change % Week	QTD	YTD	Prior Week	Quarter	Year
Dow Jones Ind	12,231.11	3.6	12.1	5.6	11,808.79	10,913.38	11,577.51
S&P 500	1,285.08	3.8	13.6	2.2	1,238.23	1,131.42	1,257.64
S&P Financial	188.86	7.0	18.7	(12.1)	176.56	159.05	214.77
S&P Insurance	180.68	4.5	18.2	(4.0)	172.97	152.88	188.22
US Dollar $		Change %			Prior		
/ Euro	$1.42	1.9	5.7	5.8	$1.39	$1.34	$1.34
/ Crude Oil bbl	93.47	6.7	18.6	1.4	87.61	78.80	92.22
/ Gold oz	1,744.60	6.4	7.6	22.8	1,640.00	1,621.20	1,420.78
Treasury Ylds %	%	Change			%	%	%
1 Year	0.12	0.00	0.01	(0.16)	0.12	0.11	0.27
10 Year	2.32	0.10	0.40	(0.98)	2.22	1.91	3.30
30 Year	3.37	0.10	0.46	(0.97)	3.28	2.91	4.34
Corp Credit Spreads -bp		Change %			Prior		
CDX.IG	110.51	(9.0)	(10.6)	30.0	121.49	123.58	85.00

October 28, 2011 Major Insurer Bond Yields				Price			Spread	
	Company	Coupon	Maturity	Current	Change	Yield	B.P.	Change
Life	Aflac	8.500%	5/15/2019	$124.80	$1.99	4.57%	257	(37)
	Ameriprise	5.300%	3/15/2020	$108.32	($0.43)	4.11%	196	(1)
	Genworth	6.515%	5/15/2018	$91.10	$1.46	8.30%	628	(59)
	Lincoln National	8.750%	7/15/2019	$122.85	$3.41	5.11%	305	(58)
	MassMutual	8.875%	6/15/2039	$147.51	$1.81	5.51%	213	(5)
	MetLife	4.750%	2/15/2021	$108.15	$1.20	3.70%	133	(28)
	Mutual of Omaha	6.800%	6/15/2036	$113.36	$2.16	5.78%	266	(25)
	New York Life	6.750%	11/15/2039	$121.64	$1.78	5.26%	190	(21)
	Northwestern Mutual	6.063%	3/15/2040	$117.09	$1.53	4.94%	156	(8)
	Pacific Life	9.250%	6/15/2039	$132.49	$3.29	6.66%	318	(21)
	Principal	6.050%	10/15/2036	$106.03	($0.50)	5.60%	238	(12)
	Prudential	4.500%	11/15/2020	$102.89	$1.90	4.11%	179	(31)
	TIAA	6.850%	12/15/2039	$123.06	$5.51	5.27%	183	(49)
P&C	ACE INA	5.900%	6/15/2019	$117.21	$0.71	3.32%	134	(19)
	Allstate	7.450%	5/15/2019	$123.72	$2.17	3.80%	191	(29)
	American Financial	9.875%	6/15/2019	$118.89	($0.56)	6.67%	470	(1)
	Berkshire Hathaway	5.400%	5/15/2018	$114.23	$0.53	2.99%	130	(14)
	Travelers	3.900%	11/15/2020	$104.63	$1.71	3.30%	104	(26)
	XL Group	6.250%	5/15/2027	$101.88	$0.21	6.06%	339	(11)
Other	AON	5.000%	9/15/2020	$109.70	$2.33	3.71%	154	(27)
	AIG	5.850%	1/15/2018	$101.21	$2.77	5.61%	398	(57)
	Fidelity National	7.875%	7/15/2020	$108.44	($0.69)	6.58%	469	(13)
	Hartford	5.500%	3/15/2020	$102.24	$2.68	5.17%	302	(51)
	Marsh	9.250%	4/15/2019	$130.61	$0.11	4.39%	225	(21)
	Nationwide	9.375%	8/15/1939	$119.67	$5.31	7.65%	421	(47)
Health	Aetna	3.950%	9/15/2020	$102.84	($0.28)	3.57%	136	(7)
	CIGNA	5.125%	6/15/2020	$107.44	($0.04)	4.09%	195	(10)
	United Healthcare	3.875%	10/15/2020	$104.41	$0.12	3.30%	114	(10)
	Wellpoint	4.350%	8/15/2020	$106.19	$1.40	3.52%	134	(28)

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