



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>

Market Volatility - Fall 2013 Update

The NAIC Capital Markets Bureau periodically reviews the status of different market indices to note any noteworthy trends based on recent market events as they pertain to the U.S. insurance industry's investments. With respect to the fall of 2013, we noted a temporary dip in yields and/or spreads occurring in the first two weeks of October — a reaction triggered, for the most part, by disagreement about resolving the U.S. government's funding for fiscal 2014 and whether to raise its debt ceiling.

The debt ceiling — which is the maximum amount of debt that the U.S. Department of the Treasury (Treasury) can issue to the public and to other federal agencies — is set by law and has been increased over the years to finance the government's operations (according to the U.S. Congressional Budget Office (CBO)). The debt limit (which is a limit on the ability to pay obligations already incurred) was suspended on Oct. 16 - or lifted - so that the Treasury could borrow any amounts necessary to meet the government's operating needs and so it would not default on maturing debt. Currently, the debt limit has been suspended until early 2014 at which time a debt limit will be reset reflecting cumulative borrowing through that date. As of the end of November 2013, the CBO tallied the amount of outstanding debt that is subject to the limit at approximately \$17.1 trillion.

As indicated in the graphs below (extracted from Bloomberg), the financial markets did have a brief reaction to the aforementioned events. For the most part there was a decrease in spread or yield occurring mid-October with respect to U.S. 10-year Treasuries and other foreign government 10-year bonds, indicating investor "flight to quality". U.S. and European stock markets also experienced a dip during this time period. As these were reactionary incidents, the respective indices have since improved.

U.S. 10-year Treasury



During the time period analyzed (Sept. 1 through Nov. 30), the yield on the U.S. 10-year Treasury experienced a steep drop mid-September due to the Federal Reserve's surprise decision to not curtail the \$85 billion monthly U.S. Treasury and mortgage-backed securities bond-buying program. Though economic data showed strength in the broader economy, the Federal Open Market Committee is seeking more evidence that progress will be maintained before it considers tapering off this program.

Also during this time period, the yield on the U.S. 10-year Treasury bond decreased to a low of 2.50% on Oct. 23, evidencing increased investor demand and, in turn, higher prices, which usually occurs when there is a flight to "safety." This trend is a result of investors losing some confidence in the status of the economy, as well as the government's ability to resolve the budget and debt ceiling issues. Note, however, that this is somewhat counterintuitive; that is, for the price of U.S. government bonds to increase while investors are concerned about the government's risk of default. Likely, this is because investor expectation is for a short-term effect, but they are concerned for the long-term impact on the overall economy. Since the end of October, however, the yield has, for the most part, reversed direction and has been increasing; the debt ceiling was raised for the time being and talks on the budget are to take place before year-end. In addition, evidence of improving economic data in early December caused Treasury yields to reach their highest levels since September 2013.

U.S. 10-Year Treasury vs. 10-Year German Bund



For comparison purposes, we reviewed the price difference (or spread) between the 10-Year U.S. Treasury and the 10-Year German bund. Germany is Europe's largest economy. Note that the spread was relatively stable until the end of October, when the spread differential reversed, and the price on the U.S. 10-year Treasury surpassed that of the 10-year German bund. The spread between the two bonds also widened more than usual.

U.S. 10-Year Treasury vs. 10-year United Kingdom Gilt



In another comparison, the spread between the 10-Year U.S. Treasury and the 10-year United Kingdom government bonds for the Sept. 1 to Nov. 30 time period was also relatively consistent, for the most part trending together. However, there was a significant dip in spread mid-September, around the time the U.S. announced it would not curtail its bond-buying program.



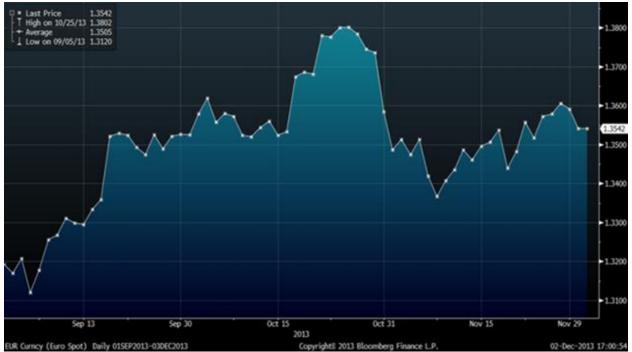
In terms of stock market volatility, the U.S. S&P 500 was on a relatively steady rise when it reacted (and rallied) in response to the Federal Reserve's decision to continue with its bond-buying program in mid-September, as this program is part of the federal government's economic stimulus package that benefits company earnings. The S&P 500's subsequent drop in early October was in response to the budget and debt ceiling issues, which were impediments to economic growth. Since then, however, the S&P 500 has been on a relatively steady rise, reaching a high (within the time period analyzed) of 1,807.23 on Nov. 27. Earlier in that week, the S&P 500 surpassed 1,800 for the first time. The U.S. economy has been growing due, in part, to a pick-up that has occurred in the housing market.



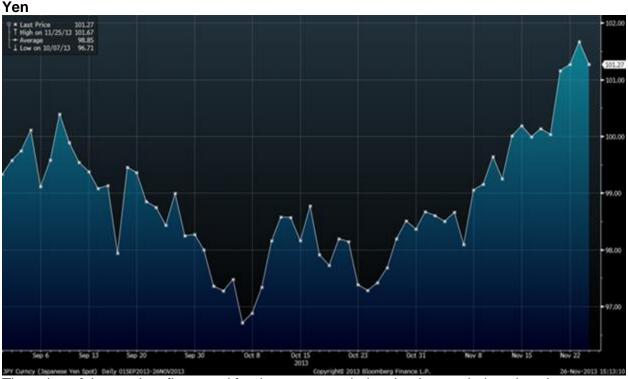


Similar to the S&P 500, the European stock market has also been trending in a positive direction, with the exception of a dip in early October related to events in the U.S. The increase in the price index reflects economic growth within the region overall, including Eurozone countries. As occurrences within the U.S. economy tend to have a global impact — because it is currently the largest economy in the world — negative market events in the U.S. tend to also have an impact on global markets.

Euro



Coinciding with improvements in economic growth for the Eurozone, the euro (that is, the exchange rate of the euro to the U.S. dollar) reached a high for the period analyzed of 1.38 on Oct. 25. From Sept. 1 through Nov. 30, the 17-nation currency has ranged between 1.31 and 1.38, averaging 1.34. The steep incline to 1.38 was likely a reaction to the U.S. agreeing on a (temporary) budget and debt solution.



The value of the yen has fluctuated for the most part during the time period analyzed, experiencing a similar dip as the other aforementioned indices in early October for similar reasons. Since then, however, the yen has been on a relative incline, reaching a high of 101.67

for the period on Nov. 25. In general, the yen has ranged between 96.71 and 101.67 between Sept. 1 and Nov. 30. Japan's economy — which is the world's third largest — has been sluggish in recent years. In early December 2013, the Japanese government announced plans of a "...spending package to mitigate the expected drag on the economy from an upcoming sales tax increase in April..."



The SPDR S&P Insurance ETF (KIE) is an exchange-traded fund that seeks to replicate the performance of the S&P Insurance Select Industry Index. It was formed in November 2005 and measures the performance of insurance companies that are publicly traded in the U.S. As of Dec. 2, approximately 40% of the KIE included property/casualty insurance companies. As shown in the graph above, the KIE has been on an increasing trend despite the dip in early October. It has also performed, for the most part, in tandem with the S&P 500; however, note the spread widening between the two indices beginning in mid-September, which widened even further in November. Since mid-September, the S&P 500 has outperformed the KIE. The KIE reached a high on Nov. 27 (for the Sept. 1 to Nov. 30 time period) compared to a low on Sept. 3.

Markit CDX Investment Grade vs. High Yield Spread



For the six months ending Dec. 3, the spread between the Markit CDX High Yield Index and the Markit CDX Investment Grade Index for the most part paralleled each other. And, as the graph above shows, the spread for both bond types has trended downward. Note that the spread between the two indices has narrowed, indicating that high-yield investors are receiving a lower rate of return for the risk taken.

Both price indices reached a low for the time period analyzed in late November: the Markit CDX investment grade index declined to 68.0 on Nov. 25, while the Markit CDX high-yield index decreased to 332.53 on Nov. 28. Both the high-yield and investment grade Markit CDX price indices reached a high on June 24 for the six months ending Dec. 3, at 477.69 and 97.70, respectively. As prices move inversely to yield and spread, this means that when prices increased, the respective yields reached a low, and spreads in turn compressed, due to an increase in investor demand for bonds. This trend was due in part to the anticipated change in Federal Reserve policy (i.e., related to the bond-buying program), along with a strong year for equities, prompting investors to sell out of the stock market to reap their gains and invest in bonds.

In summary, for the three months to December 2013, various market indices have reacted to the U.S.'s announcement regarding its continuation (for now) of the bond-buying program, as well as the 16-day U.S. government's debate with respect to fiscal spending and the debt ceiling. Overall, however, economic data has shown that the U.S. economy has been growing (as measured by gross domestic product); it grew 3.6% in the third quarter of 2013. In addition the national unemployment rate was 7.3% in October 2013, decreasing from 7.9% at the beginning of the year, and new home sales are also on the rebound.

The NAIC Capital markets Bureau will continue to monitor market volatility and publish additional research as deemed appropriate.

| December | 6, 2013 | | | | | | | |
|----------------------------|-------------------|----------|-------|--------------|-------|----------|---------|------------------|
| Major Insurer Share Prices | | | C | hange 9 | 6 | | Prior | |
| | | Close | Week | QTD | YTD | Week | Quarter | Year |
| | | | | | | | | |
| Life | Aflac | \$66.62 | 0.1 | 4.6 | 26.0 | \$66.57 | \$63.72 | \$52.89 |
| | Ameriprise | 108.90 | | 17.3 | 74.4 | 107.58 | 92.84 | 62.45 |
| | Genworth | 15.20 | (0.5) | 17.8 | 102.9 | 15.28 | 12.91 | 7.49 |
| | Lincoln | 51.40 | | 19.3 | 99.5 | 50.48 | 43.08 | 25.77 |
| | MetLife | 51.54 | (2.1) | 8.1 | 57.3 | 52.65 | 47.66 | 32.76 |
| | Principal | 49.51 | | 14.1 | 74.5 | 50.16 | 43.39 | 28.38 |
| | Protective | 48.32 | | 10.4 | 69.7 | 48.07 | 43.76 | 28.47 |
| | Prudential | 89.00 | (1.2) | 13.5 | 67.6 | 90.07 | 78.39 | 53.09 |
| | UNUM | 34.30 | | 11.7 | 65.5 | 33.93 | 30.72 | 20.73 |
| PC | ACE | \$102.00 | (0.6) | 9.9 | 28.3 | \$102.59 | \$92.78 | \$79.50 |
| | Axis Capital | 47.86 | | 8.0 | 38.9 | 49.14 | 44.30 | 34.46 |
| | Allstate | 54.29 | | 3.7 | 35.6 | 54.71 | 52.33 | 40.05 |
| | Arch Capital | 58.54 | | 6.5 | 33.6 | 58.96 | 54.96 | 43.82 |
| | Cincinnati | 52.21 | | 9.6 | 34.0 | 52.41 | 47.63 | 38.95 |
| | Chubb | 94.79 | | 6.7 | 26.4 | 96.84 | 88.80 | 75.01 |
| | Everest Re | 154.28 | | 4.4 | 40.7 | 157.22 | 147.73 | 109.67 |
| | Progressive | 27.53 | | 0.7 | 31.0 | 27.67 | 27.33 | 21.01 |
| | Travelers | 88.98 | | 5.1 | 24.4 | 90.52 | 84.66 | 71.53 |
| | WR Berkley | 43.17 | | 1.5 | 14.8 | 44.55 | 42.54 | 37.59 |
| | XL | 30.80 | | (1.1) | 23.5 | 31.55 | 31.14 | 24.94 |
| Other | AON | \$82.53 | (0.0) | 13.4 | 48.9 | \$82.55 | \$72.76 | \$55.41 |
| Other | AIG | 49.54 | | 0.1 | 40.4 | 49.59 | 49.48 | 35.28 |
| | Assurant | 65.23 | | 18.1 | 89.2 | 64.04 | 55.23 | 34.48 |
| | Fidelity National | 28.98 | | 10.7 | 22.9 | 28.09 | 26.18 | 23.58 |
| | Hartford | 35.89 | | 13.9 | 60.3 | 35.56 | 31.52 | 22.39 |
| | Marsh | 47.98 | | 10.3 | 39.9 | 47.94 | 43.51 | 34.30 |
| Health | Aetna | \$65.94 | | | 42.8 | \$67.77 | \$66.40 | |
| Health | | 86.40 | | (0.7) 9.1 | 62.1 | 86.62 | 79.22 | \$46.17 53.29 |
| | Cigna Humana | 103.84 | · · · | 7.6 | 51.7 | 101.25 | 96.52 | 68.43 |
| | United | 73.48 | | 0.7 | 35.8 | 73.74 | 73.01 | 54.12 |
| | WellPoint | 90.54 | | 3.8 | 49.1 | 93.03 | 87.24 | 60.73 |
| | | | _ ` | | | | | |
| Monoline | Assured | \$23.88 | | 22.2 | 69.1 | \$23.60 | \$19.54 | \$14.12 |
| | MBIA | 12.24 | | 14.8 | 54.5 | 12.89 | 10.66 | 7.92 |
| | MGIC | 8.33 | | 15.7 | 208.5 | 7.94 | 7.20 | 2.70 |
| | Radian | 14.53 | | 4.0 | 136.3 | 13.66 | 13.98 | 6.15 |
| | XL Capital | 30.80 | (2.4) | (1.1) | 23.5 | 31.55 | 31.14 | 24.94 |

| December 6, 2013 | | | | | | | |
|-------------------------|-----------|----------------|---------|--------|-----------|-----------|-----------|
| Major Market Variables | | Change % | | | Prior | | |
| | Close | Week | QTD | YTD | Week | Quarter | Year |
| Dow Jones Ind | 16,020.20 | (0.3) | 6.3 | 22.3 | 16,064.77 | 15,072.58 | 13,099.80 |
| S&P 500 | 1,803.92 | (0.0) | 6.7 | 26.8 | 1,804.76 | 1,689.92 | 1,422.10 |
| S&P Financial | 287.68 | (0.5) | 6.4 | 30.1 | 289.05 | 270.26 | 221.17 |
| S&P Insurance | 283.48 | (0.6) | 7.3 | 42.0 | 285.29 | 264.30 | 199.67 |
| US Dollar \$ | | Change % | | | Prior | | |
| / Euro | \$1.37 | 1.1 | 1.1 | 3.8 | \$1.35 | \$1.36 | \$1.32 |
| / Crude Oil bbl | 97.65 | 3.0 | (5.7) | 6.6 | 94.80 | 103.60 | 91.62 |
| / Gold oz | 1,230.30 | (0.9) | (6.1) | (26.5) | 1,242.00 | 1,309.80 | 1,673.70 |
| Treasury Ylds % | % | C | hange b | p | % | 9/0 | % |
| 1 Year | 0.12 | 0.00 | 0.02 | (0.02) | 0.12 | 0.10 | 0.14 |
| 10 Year | 2.86 | 0.11 | 0.21 | 1.10 | 2.75 | 2.65 | 1.76 |
| 30 Year | 3.89 | 0.06 | 0.17 | 0.94 | 3.84 | 3.72 | 2.95 |
| Corp Credit Spreads -bp | | Change % Prior | | | | | |
| CDX.IG | 19.25 | (9.5) | (23.1) | (66.3) | 21.27 | 25.04 | 57.04 |

| | er 6, 2013 | | | | | | | | |
|---------------------------|---------------------|--------|------------|----------|----------|----------|--------|----------|--------|
| Major Insurer Bond Yields | | | | | | kly Chan | | | YTD |
| | | | | | Price | | Spread | over UST | Spread |
| | Company | Coupon | Maturity | Current | Change | Yield | B.P. | Change | Change |
| | | | | | | | | | |
| Life | Aflac | 8.500% | 5/15/2019 | \$129.08 | (\$0.76) | 2.70% | 103 | (1) | (24) |
| | Ameriprise | 5.300% | 3/15/2020 | \$113.09 | (\$0.32) | 2.99% | 101 | (6) | (17) |
| | Genworth | 6.515% | 5/15/2018 | \$114.98 | (\$0.54) | 2.90% | 161 | 1 | (230) |
| | Lincoln National | 8.750% | 7/15/2019 | \$129.54 | (\$0.92) | 2.95% | 121 | 1 | (63) |
| | MassMutual | 8.875% | 6/15/2039 | \$143.58 | (\$0.97) | 5.63% | 192 | (2) | (56) |
| | MetLife | 4.750% | 2/15/2021 | \$108.92 | (\$1.00) | 3.34% | 106 | 2 | (2) |
| | New York Life | 6.750% | 11/15/2039 | \$122.17 | (\$1.03) | 5.19% | 144 | (1) | (19) |
| | Northwestern Mutual | 6.063% | 3/15/2040 | \$113.81 | (\$0.03) | 5.10% | 136 | (5) | (9) |
| | Pacific Life | 9.250% | 6/15/2039 | \$139.61 | \$0.39 | 6.15% | 243 | (13) | (88) |
| | Principal | 6.050% | 10/15/2036 | \$113.49 | (\$0.46) | 5.05% | 145 | (9) | (36 |
| | Prudential | 4.500% | 11/15/2020 | \$107.77 | (\$0.69) | 3.24% | 101 | (2) | (40) |
| | TIAA | 6.850% | 12/15/2039 | \$123.39 | (\$0.30) | 5.20% | 148 | (6) | (22) |
| P&C | ACE INA | 5.900% | 6/15/2019 | \$117.55 | (\$0.94) | 2.47% | 75 | 2 | (2) |
| | Allstate | 7.450% | 5/15/2019 | \$126.03 | (\$0.48) | 2.32% | 63 | (6) | (48) |
| | American Financial | 9.875% | 6/15/2019 | \$130.46 | (\$1.02) | 3.71% | 197 | 4 | (116 |
| | Berkshire Hathaway | 5.400% | 5/15/2018 | \$114.87 | (\$0.49) | 1.88% | 61 | (1) | (1) |
| | Travelers | 3.900% | 11/15/2020 | \$105.95 | (\$0.77) | 2.94% | 71 | 0 | 7 |
| | XL Group | 6.250% | 5/15/2027 | \$111.91 | (\$1.48) | 5.02% | 190 | (4) | (51) |
| Other | AON | 5.000% | 9/15/2020 | \$110.45 | (\$0.07) | 3.27% | 110 | (8) | (22) |
| | AIG | 5.850% | 1/15/2018 | \$115.01 | (\$0.48) | 2.01% | 89 | (0) | (32) |
| | Hartford | 5.500% | 3/15/2020 | \$112.49 | (\$0.58) | 3.29% | 124 | (7) | (48) |
| | Marsh | 9.250% | 4/15/2019 | \$130.68 | (\$0.20) | 2.99% | 130 | (8) | (66 |
| | Nationwide | 9.375% | 8/15/2039 | \$140.48 | (\$1.13) | 6.20% | 249 | 1 | (72 |
| Health | Aetna | 3.950% | 9/15/2020 | \$104.30 | (\$0.55) | 3.23% | 107 | (2) | (13 |
| | CIGNA | 5.125% | 6/15/2020 | | (\$0.37) | 3.20% | 107 | (8) | (37 |
| | United Healthcare | 3.875% | 10/15/2020 | | (\$0.13) | 3.03% | 86 | (12) | (10 |
| | Wellpoint | 4.350% | 8/15/2020 | | (\$0.18) | 3.28% | 114 | (10) | (24 |

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

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