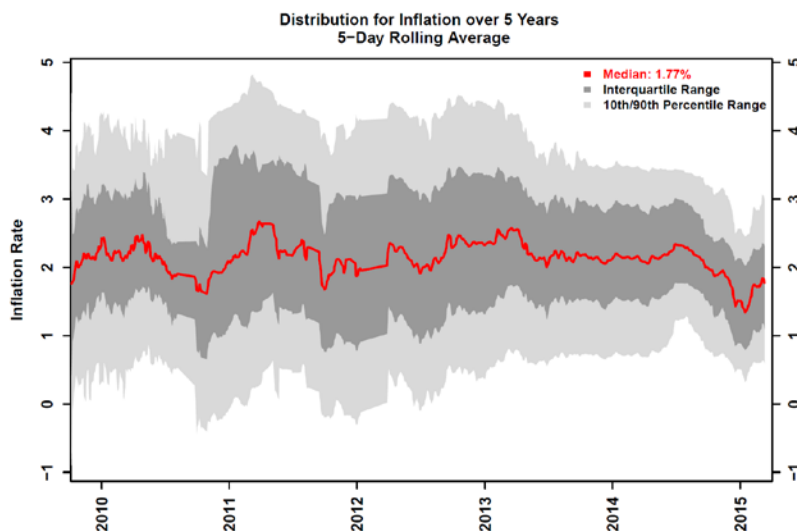


Minneapolis Options Report – March 13th

The positive reversal in median inflation rates that began earlier this year appears to have leveled off, but market-implied uncertainty is increasing in the near tenors (1- and 2-years out), as measured by MPD standard deviations. Both long and short interest rate MPDs suggest a general shift in market sentiment towards higher rates, yet skews in opposing directions suggest the possibility of a flatter yield curve. The dollar has strengthened dramatically against other major currencies, and market-implied uncertainty has increased, which can be seen in dramatically rising MPD standard deviations. The S&P 500 index retreated from all-time highs and investor uncertainty has increased, given the MPD standard deviation we measure from derived options on the index. A number of commodities (WTI crude, gold, silver, and lean hogs) have experienced large negative returns in combination with high MPD standard deviations and decreases in already negative skews, indicating a bias towards expectations of lower future prices.

Inflation

The positive reversal in market-based inflation expectations, as derived from caps and floors on the CPI, has leveled off and the median expectation for inflation over the next five years remains below 2% (see figure below).



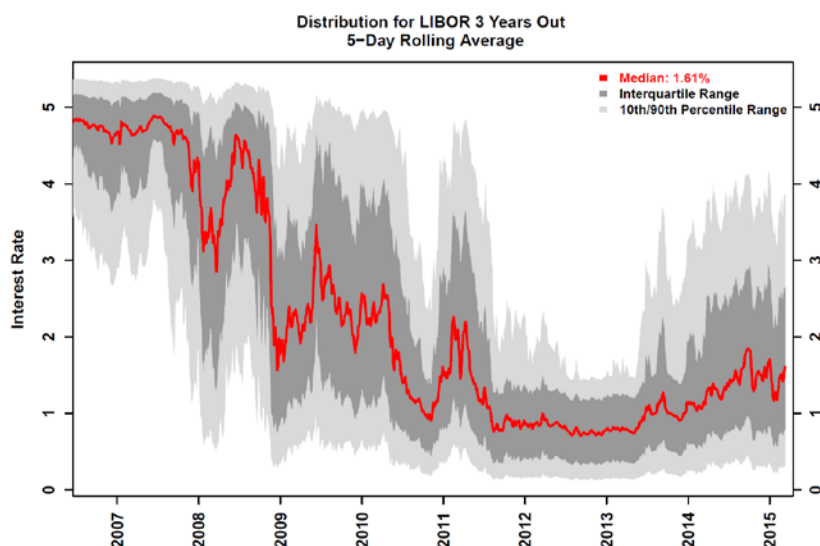
Additional detail:

- Despite recent gains concentrated in near tenors (1- and 2-years out), median expectations for inflation from market-based probability distributions (MPDs) remain low. They now sit at 1.16%, 1.52%, and 1.71% for the 1-, 2-, and 5-year tenors, respectively.
- Uncertainty regarding market-based CPI inflation expectations, as measured by both MPD standard deviation and interquartile range, remains at multi-year lows in the 5-year tenor; however, these measures continue to climb in the 1- and 2-year tenors, approaching their 4-year medians.
- MPD skew is nearing 4-year lows in the near tenors, implying a downward inflation expectation bias.

Interest Rates

Median short-term interest rate expectations, as derived from caps and floors on three month LIBOR, have increased considerably and MPD skew remains low but positive, suggesting shifts in market

expectations toward higher rates (see figure below). Long rates have also increased over the past two weeks with the MPD skew pointing decidedly towards lower rates, suggesting investor bias towards low rates in the longer end of the rate curve.



Additional detail:

- MPD standard deviations remain steady and high for the 10-year treasuries and, to a lesser extent, the three month LIBOR (3-year tenor), implying a high degree of investor uncertainty around future rates.
- MPD skews are uniformly positive and low for treasury prices, meaning that they are negative and high for treasury rates. MPD skews are positive but low for the three month LIBOR rate. This phenomenon of positive rate skews at the short end and negative skews at the long end indicates an increased market-implied likelihood of a flattening of the yield curve.

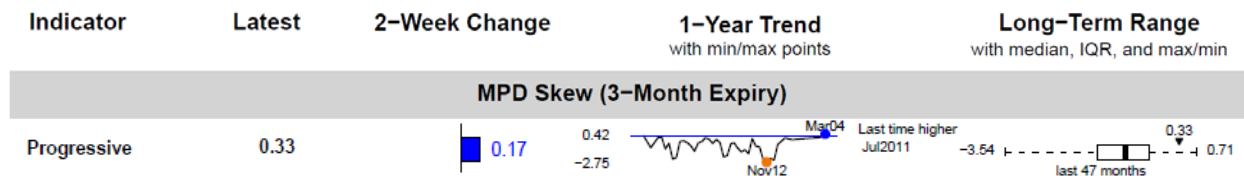
Banks and Insurance Companies

Over the past two weeks, the S&P 500 retreated -3.5% from its all-time high, and price changes in bank (17) and insurance (11) company stocks we follow generally moved in the same direction, though to a lesser degree. A number of banks had substantial negative returns over this period, particularly BCS (-6.6%), STT (-5.8%), and MS (-4.5%). CCAR results were not released until after market close on the 11th of March, so none of our data include the impacts of disclosure of results on bank equities. Insurance company equity returns were slightly higher on average than banks, and fewer firms had substantially negative returns.

Across the universe of monitored financial company equities, both MPD standard deviations and MPD skews increased. This indicates both an increase in market participant uncertainty and an expectation shift toward higher future returns. The average standard deviation derived from options on US bank equities increased 0.8%. The same average based on options on US insurance company equities increased 1.2%.

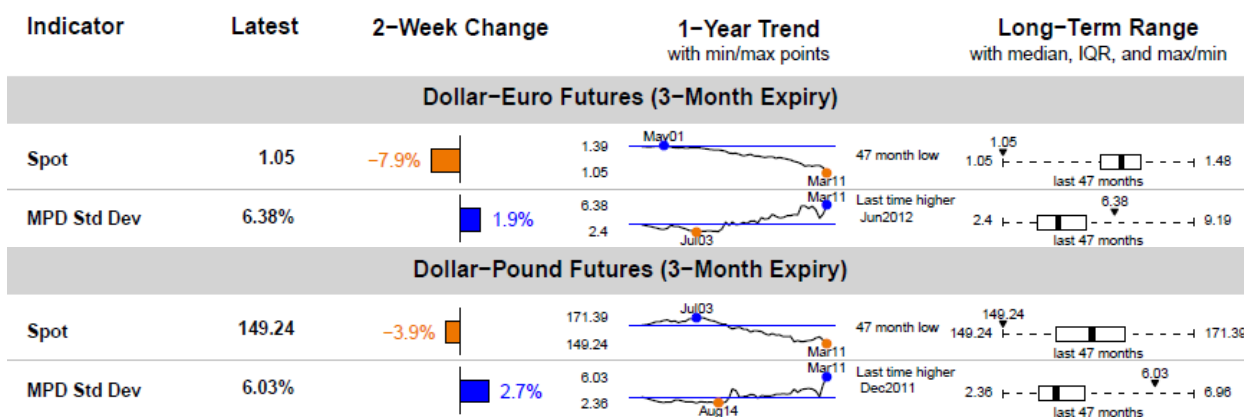
Additional details:

- MPD skew on PFG rose considerably over the past two weeks and is highly positive (see figure below). This coincides with better than average equity returns over the same period (-0.9%). This is indicative of higher market-based probabilities of positive future returns.



Other Markets

- The S&P 500 price retreated from its all-time high. At the same time, the MPD standard deviations derived from both 6- and 12-month-out options on the index price have increased, suggesting an increase in investor uncertainty with regards to domestic equity markets.
- The iShares U.S. Real Estate Index continued its decline and the MPD standard deviation rose, suggesting increased market-implied uncertainty.
- The dollar continued its ascent against the suite of currencies we follow. This was particularly evident for the Euro-USD exchange rate, which fell by -7.9%. MPD standard deviations increased substantially over the last two weeks, signaling an increase in investor uncertainty (see chart below).




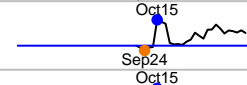

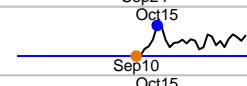

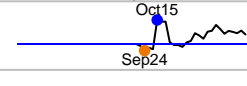

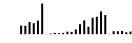

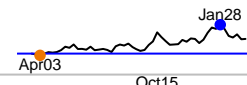

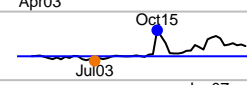

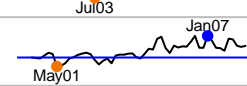

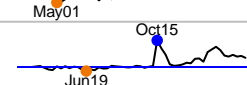




- Both gold and silver have fallen to near multi-year lows. In addition, both commodities saw increases in MPD standard deviations and already negative skews fell further. These are all indicators of increasing tail risk in these commodities.
- Trading in options on WTI crude oil was light again, consistent with the seasonal activity we see in the data. Spot prices fell (-3.6%), MPD standard deviation remains high, and the MPD skew remains negative. This indicates both continued bias towards lower future prices of WTI crude and high levels of market-implied uncertainty.
- There was a large decline in lean hog spot prices (-7.6%) over the past two weeks. This was accompanied by an increase in the MPD standard deviation and a decrease in an already negative MPD skew, indicating growing levels of investor uncertainty and increasing tail risk.

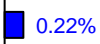

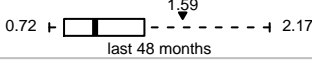
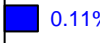
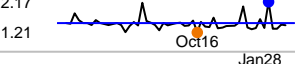
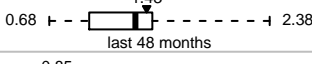


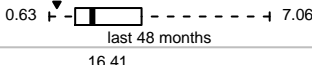

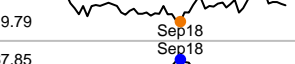
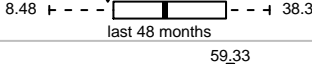

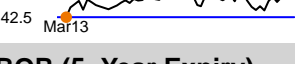
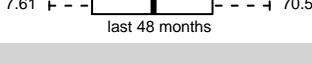


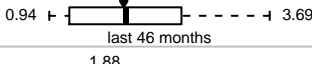

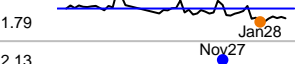
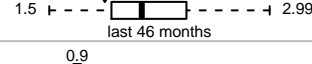

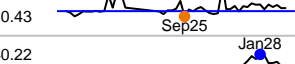
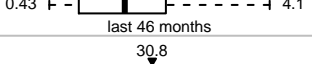


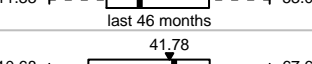


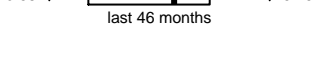
Inflation MPD Statistics as of March 11, 2015

| Indicator | Latest | 2-Week Change | 1-Year Trend with min/max points | Long-Term Range with median, IQR, and max/min |
|---------------------------------------|--------|---------------|-------------------------------------|--|
| Inflation (1-Year Expiry) | | | | |
| Median | 1.16% | 0.36% | | |
| MPD Std Dev | 1.21% | 0.069% | | |
| MPD Skew | -0.49 | -0.33 | | |
| Market Prob of Less Than 1% Inflation | 44.38% | -13% | | |
| Market Prob of More Than 3% Inflation | 5.21% | 2.4% | | |
| Inflation (2-Year Expiry) | | | | |
| Median | 1.52% | 0.27% | | |
| MPD Std Dev | 1.17% | 0.045% | | |
| MPD Skew | -0.29 | -0.26 | | |
| Market Prob of Less Than 1% Inflation | 33.09% | -7% | | |
| Market Prob of More Than 3% Inflation | 8.81% | 2.2% | | |
| Inflation (5-Year Expiry) | | | | |
| Median | 1.71% | 0.031% | | |
| MPD Std Dev | 1.01% | 0.056% | | |
| MPD Skew | 0.12 | -0.079 | | |
| Market Prob of Less Than 1% Inflation | 24.16% | -0.22% | | |
| Market Prob of More Than 3% Inflation | 9.02% | 1.2% | | |

Medium-to-Long Bond Price MPD Statistics as of March 11, 2015

| Indicator | Latest | 2-Week Change | 1-Year Trend with min/max points | Long-Term Range with median, IQR, and max/min |
|--|--------|---|---|--|
| 5 Year Treasury (3-Month Expiry) | | | | |
| Spot | 118.74 | -0.58%  | 120.99 118.05  | 118.05 - 118.74 - 120.99 last 6 months |
| MPD Std Dev | 1.92% | -0.012%  | 2.3 1.41  | 1.41 - 1.92 - 2.3 last 6 months |
| MPD Skew | 0.07 | 0.036  | 0.36 -0.5  | -0.5 - 0.07 - 0.36 last 6 months |
| Market Prob of -3% or More Decline | 5.75% | -0.26%  | 8.74 2.44  | 2.44 - 5.75 - 8.74 last 6 months |
| Volume | 31758 | -21%  | 377550 0  | 2054 - 31758 - 377550 last 6 months |
| 10 Year Treasury (3-Month Expiry) | | | | |
| Spot | 126.98 | -0.87%  | 130.47 122.97  | 122.97 - 126.98 - 130.47 last 17 months |
| MPD Std Dev | 2.96% | -0.045%  | 3.8 2.17  | 2.17 - 2.96 - 3.8 last 17 months |
| MPD Skew | 0.1 | -0.0012  | 0.31 -0.34  | -0.75 - 0.1 - 0.31 last 17 months |
| Market Prob of -5% or More Decline | 4.57% | -0.28%  | 8.48 1.62  | 1.62 - 4.57 - 8.48 last 17 months |
| Volume | 161539 | -31%  | 1185098 0  | 5226 - 161539 - 1185098 last 17 months |

Short Interest Rates MPD Statistics as of March 11, 2015

| Indicator | Latest | 2-Week Change | 1-Year Trend with min/max points | Long-Term Range with median, IQR, and max/min |
|--------------------------------------|--------|--|--|---|
| 3 Month LIBOR (3-Year Expiry) | | | | |
| Median | 1.59% |  0.22% |  |  |
| MPD Std Dev | 1.43% |  0.11% |  |  |
| MPD Skew | 0.85 |  -0.34 |  |  |
| Market Prob of Less Than 0.5% LIBOR | 16.41% |  -1.3% |  |  |
| Market Prob of More Than 1% + Spot | 59.33% |  4.2% |  |  |
| 3 Month LIBOR (5-Year Expiry) | | | | |
| Median | 1.87% |  0.39% |  |  |
| MPD Std Dev | 1.88% |  -0.0046% |  |  |
| MPD Skew | 0.9 |  -0.17 |  |  |
| Market Prob of Less Than 1% LIBOR | 30.8% |  -4% |  |  |
| Market Prob of More Than 2% + Spot | 41.78% |  4.2% |  |  |

Equity Index MPD Statistics as of March 11, 2015

| Indicator | Latest | 2-Week Change | 1-Year Trend with min/max points | Long-Term Range with median, IQR, and max/min |
|--|---------|---------------|-------------------------------------|---|
| S&P 500 (6-Month Expiry) | | | | |
| Spot | 2040.24 | -3.5% | 2113.86 1862.49 | 48 month high 1131.42 - - - - - 2040.24 last 48 months 2113.86 |
| MPD Std Dev | 12.18% | 1% | 14.77 8.87 | 12.18 8.87 - - - - - 24.27 last 48 months |
| MPD Skew | -1.35 | 0.18 | -1.02 -1.54 | -1.35 -1.54 - - - - - -0.86 last 48 months |
| Market Prob of -20% or More Decline | 7.22% | 1.3% | 10.32 3.65 | 7.22 3.65 - - - - - 17.56 last 48 months |
| Volume | 44979 | 2.8% | 203412 0 | 44979 13428 - - - - - 347919 last 48 months |
| S&P 500 (12-Month Expiry) | | | | |
| Spot | 2040.24 | -3.5% | 2113.86 1862.49 | 48 month high 1131.42 - - - - - 2040.24 last 48 months 2113.86 |
| MPD Std Dev | 17.15% | 1.1% | 20.23 15.02 | 17.15 10.5 - - - - - 32.71 last 48 months |
| MPD Skew | -1.38 | 0.11 | -1.13 -1.57 | -1.38 -1.57 - - - - - -0.98 last 48 months |
| Market Prob of -20% or More Decline | 11.68% | 1.2% | 16.05 10.07 | 11.68 5.51 - - - - - 23.65 last 48 months |
| Volume | 57889 | -15% | 90557 0 | 57889 3174 - - - - - 161766 last 48 months |
| iShares US Real Estate Index (3-Month Expiry) | | | | |
| Spot | 76.83 | -3% | 82.44 67.4 | 50.57 - - - - - 76.83 last 48 months 82.44 |
| MPD Std Dev | 8.72% | 0.96% | 9.69 5.22 | 8.72 4.77 - - - - - 21.53 last 48 months |
| MPD Skew | -0.93 | 0.15 | -0.35 -1.55 | -0.93 -2.09 - - - - - -0.35 last 48 months |
| Market Prob of -10% or More Decline | 12.93% | 2.7% | 13.97 4.45 | 12.93 3.43 - - - - - 25.19 last 48 months |
| Volume | 48649 | 860% | 122800 0 | 48649 62 - - - - - 122800 last 48 months |

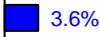
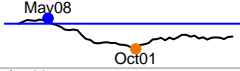
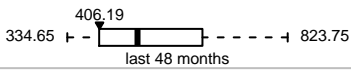

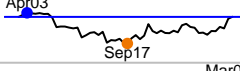
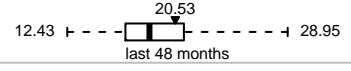

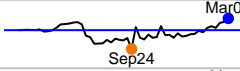



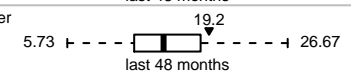




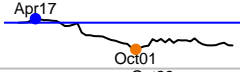


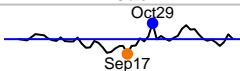
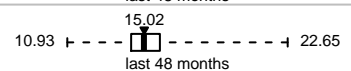

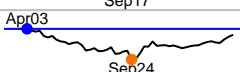
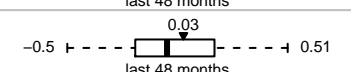

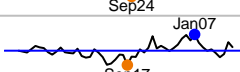
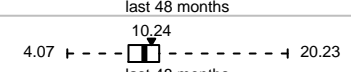


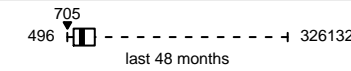

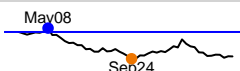
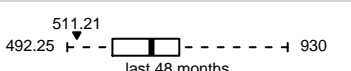


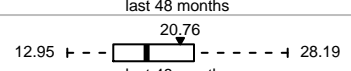

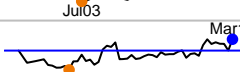
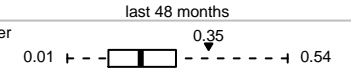

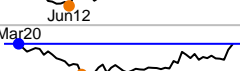
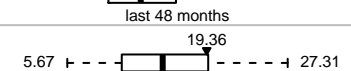


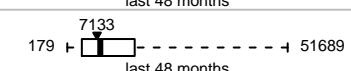
Exchange Rate MPD Statistics as of March 11, 2015

| Indicator | Latest | 2-Week Change | 1-Year Trend with min/max points | Long-Term Range with median, IQR, and max/min |
|--|--------|---------------|-------------------------------------|--|
| Dollar-Euro Futures (3-Month Expiry) | | | | |
| Spot | 1.05 | -7.9% | | 47 month low 1.05 Last time higher Jun2012 1.05 [] 1.48 last 47 months |
| MPD Std Dev | 6.38% | 1.9% | | Last time higher Jun2012 2.4 [] 9.19 last 47 months |
| MPD Skew | -0.27 | -0.092 | | Last time lower Sep2013 -0.85 [] 0.16 last 47 months |
| Market Prob of -10% or More Decline | 6.61% | 4.8% | | Last time higher Jun2012 0.02 [] 13.01 last 47 months |
| Volume | 56852 | 7.4% | | 2039 [] 83954 last 47 months |
| Dollar-Pound Futures (3-Month Expiry) | | | | |
| Spot | 149.24 | -3.9% | | 47 month low 149.24 Last time higher Dec2011 149.24 [] 171.39 last 47 months |
| MPD Std Dev | 6.03% | 2.7% | | Last time higher Dec2011 2.36 [] 6.96 last 47 months |
| MPD Skew | -0.63 | -0.58 | | Last time higher Oct2011 -0.92 [] 0.1 last 47 months |
| Market Prob of -10% or More Decline | 6.39% | 6.1% | | Last time higher Oct2011 0.01 [] 8.51 last 47 months |
| Volume | 13575 | -36% | | 104 [] 36353 last 47 months |
| Dollar-Yen Futures (3-Month Expiry) | | | | |
| Spot | 82.39 | -2.1% | | 47 month low 82.39 Last time higher Dec10 82.39 [] 130.66 last 47 months |
| MPD Std Dev | 5.24% | 1.1% | | Last time higher Dec10 2.76 [] 8.02 last 47 months |
| MPD Skew | -0.12 | -0.25 | | Last time higher Dec10 -0.44 [] 0.91 last 47 months |
| Market Prob of -10% or More Decline | 3.52% | 2.6% | | Last time higher Dec10 0.02 [] 10.78 last 47 months |
| Volume | 9088 | -8.9% | | 306 [] 42005 last 47 months |

Metal and Energy Commodity MPD Statistics as of March 11, 2015

| Indicator | Latest | 2-Week Change | 1-Year Trend with min/max points | Long-Term Range with median, IQR, and max/min |
|---|---------|---------------|-------------------------------------|--|
| Gold (6-Month Expiry) | | | | |
| Spot | 1152.44 | -4.1% | 1340.6 1145.55 | 1152.44 1145.55 1859.2 |
| MPD Std Dev | 12.97% | 0.58% | 13.85 9.39 | 12.97 9.39 23.3 |
| MPD Skew | -0.32 | -0.34 | 0.02 -0.42 | -0.32 -0.71 0.25 |
| Market Prob of -20% or More Decline | 6.99% | 0.88% | 7.8 2.39 | 6.99 2.39 21.03 |
| Volume | 9357 | 2400% | 31121 0 | 9357 378 93550 |
| Silver (6-Month Expiry) | | | | |
| Spot | 15.44 | -6.3% | 21.57 15.44 | 15.44 48 month low 15.44 48.61 |
| MPD Std Dev | 21.8% | 0.067% | 22.59 13.16 | 21.8 13.16 40.41 |
| MPD Skew | -0.28 | -0.12 | 0.15 -0.57 | -0.28 -0.63 0.15 |
| Market Prob of -20% or More Decline | 18.16% | 0.74% | 19.35 6.54 | 18.16 6.54 32.41 |
| Volume | 81 | -95% | 9415 0 | 81 81 27970 |
| West Texas Intermediate Crude (6-Month Expiry) | | | | |
| Spot | 54.9 | -3.6% | 102.41 48.55 | 54.9 48.55 114.82 |
| MPD Std Dev | 28.67% | -0.81% | 32.63 10.25 | 28.67 10.25 34 |
| MPD Skew | -0.66 | 0.043 | -0.1 -0.76 | -0.66 -0.81 0 |
| Market Prob of -20% or More Decline | 23.03% | 0.5% | 26.53 3.65 | 23.03 3.65 26.53 |
| Volume | 14854 | 270% | 99667 0 | 14854 165 180997 |

Agricultural Crop Commodity MPD Statistics as of March 11, 2015

| Indicator | Latest | 2-Week Change | 1-Year Trend with min/max points | Long-Term Range with median, IQR, and max/min |
|-------------------------------------|--------|---|--|--|
| Corn (6-Month Expiry) | | | | |
| Spot | 406.19 |  3.6% |  513.25 (May08), 334.65 (Oct01) |  334.65 (min), 406.19 (median), 823.75 (max) |
| MPD Std Dev | 20.53% |  2.6% |  21.43 (Apr03), 14.45 (Sep17) |  12.43 (min), 20.53 (median), 28.95 (max) |
| MPD Skew | 0.35 |  0.044 |  0.37 (Mar04), -0.19 (Sep24) |  48 month high: -0.19 (min), 0.35 (median), 0.37 (max) |
| Market Prob of -20% or More Decline | 19.2% |  5.9% |  19.2 (Mar11), 8.57 (Aug14) |  Last time higher: May 2013 (min), 19.2 (median), 26.67 (max) |
| Volume | 30379 |  -23% |  216660 (May08), 0 (Mar11) |  6059 (min), 30379 (median), 472954 (max) |
| Soybeans (6-Month Expiry) | | | | |
| Spot | 980.48 |  -3.2% |  1298.25 (Apr17), 934.57 (Oct01) |  934.57 (min), 980.48 (median), 1691.25 (max) |
| MPD Std Dev | 15.02% |  0.56% |  17.52 (Oct29), 12.54 (Sep17) |  10.93 (min), 15.02 (median), 22.65 (max) |
| MPD Skew | 0.03 |  0.098 |  0.17 (Apr03), -0.5 (Sep24) |  -0.5 (min), 0.03 (median), 0.51 (max) |
| Market Prob of -20% or More Decline | 10.24% |  1.4% |  12.79 (Jan07), 6.65 (Sep17) |  4.07 (min), 10.24 (median), 20.23 (max) |
| Volume | 705 |  -98% |  238213 (Apr17), 0 (Sep17) |  496 (min), 705 (median), 326132 (max) |
| Wheat (6-Month Expiry) | | | | |
| Spot | 511.21 |  2.2% |  743.75 (May08), 492.25 (Sep24) |  492.25 (min), 511.21 (median), 930 (max) |
| MPD Std Dev | 20.76% |  2.7% |  21.56 (Mar20), 14.22 (Jul03) |  12.95 (min), 20.76 (median), 28.19 (max) |
| MPD Skew | 0.35 |  0.048 |  0.35 (Mar11), 0.03 (Jun12) |  Last time higher: Oct 2013 (min), 0.35 (median), 0.54 (max) |
| Market Prob of -20% or More Decline | 19.36% |  5.6% |  19.59 (Mar20), 8.35 (Jul03) |  5.67 (min), 19.36 (median), 27.31 (max) |
| Volume | 7133 |  -77% |  46977 (Mar20), 0 (Jul03) |  179 (min), 7133 (median), 51689 (max) |

Agricultural Livestock Commodity MPD Statistics as of March 11, 2015

| Indicator | Latest | 2-Week Change | 1-Year Trend with min/max points | Long-Term Range with median, IQR, and max/min |
|------------------------------------|--------|--|-------------------------------------|--|
| Cattle (6-Month Expiry) | | | | |
| Spot | 144.68 | 3.7% | 170.32 132.82 | 129.05 - 144.68 - 170.32 last 20 months |
| MPD Std Dev | 10.06% | -0.82% | 12.2 4.23 | 3.6 - 10.06 - 12.2 last 20 months |
| MPD Skew | -0.42 | -0.069 | -0.17 -0.72 | -0.94 - -0.42 - -0.17 last 20 months |
| Market Prob of -5% or More Decline | 28.19% | -1.9% | 31.3 11.44 | 8.46 - 28.19 - 31.3 last 20 months |
| Volume | 6614 | 41% | 33850 0 | 1263 - 6614 - 33850 last 20 months |
| Hogs (6-Month Expiry) | | | | |
| Spot | 78.01 | -7.6% | 94.48 78.01 | 78.01 - 78.01 - 94.48 last 5 months |
| MPD Std Dev | 17.56% | 1.4% | 17.56 13.88 | 13.88 - 17.56 - 17.56 last 5 months |
| MPD Skew | -0.22 | -0.095 | 0.17 -0.37 | -0.37 - -0.22 - 0.17 last 5 months |
| Market Prob of -5% or More Decline | 14.24% | 3.1% | 14.24 8.05 | 8.05 - 14.24 - 14.24 last 5 months |
| Volume | 2509 | -40% | 6204 0 | 53 - 2509 - 6204 last 5 months |

Bank MPD Statistics as of March 11, 2015

| Indicator | Latest | 2-Week Change | 1-Year Trend with min/max points | Long-Term Range with median, IQR, and max/min |
|--|--------|---------------|-------------------------------------|--|
| MPD Standard Deviation (3-Month Expiry) | | | | |
| American Express | 10.67% | 0.59% | | |
| Bank of America | 12.71% | 1.5% | | |
| BB&T | 9.38% | 0.57% | | |
| Barclays | 15.99% | 0.95% | | |
| Bank of NY Mellon | 10.97% | 1.2% | | |
| Citigroup | 12.45% | 1.6% | | |
| Capital One | 9.93% | 0.3% | | |
| Credit Suisse | 15.04% | 0.7% | | |
| Deutsche Bank | 13.76% | 0.51% | | |
| Fifth Third | 11.3% | 1.4% | | |
| Goldman Sachs | 10.51% | 1.6% | | |
| JP Morgan | 10.93% | 1.1% | | |
| Keycorp | 12.09% | -0.6% | | |
| Morgan Stanley | 12.47% | 1.6% | | |
| PNC Financial | 9.3% | 1% | | |
| Regions Financial | 13.2% | -0.86% | | |
| SunTrust | 10.41% | 1.2% | | |
| State Street | 11.45% | 0.68% | | |
| UBS | 13.36% | | | |
| US Bancorp | 9.23% | 0.54% | | |
| Wells Fargo | 9.5% | 0.97% | | |

Bank MPD Statistics as of March 11, 2015

| Indicator | Latest | 2-Week Change | 1-Year Trend with min/max points | Long-Term Range with median, IQR, and max/min |
|----------------------------------|--------|---------------|-------------------------------------|--|
| MPD Skew (3-Month Expiry) | | | | |
| American Express | -0.45 | -0.078 | | |
| Bank of America | -0.27 | 0.16 | | |
| BB&T | -0.57 | 0.51 | | |
| Barclays | -0.52 | 2 | | |
| Bank of NY Mellon | -0.39 | 0.32 | | |
| Citigroup | -0.54 | 0.21 | | |
| Capital One | -0.51 | 0.18 | | |
| Credit Suisse | -0.75 | 0.43 | | |
| Deutsche Bank | -0.94 | -0.38 | | |
| Fifth Third | -0.22 | 0.87 | | |
| Goldman Sachs | -0.66 | 0.059 | | |
| JP Morgan | -0.74 | 0.021 | | |
| Keycorp | -0.62 | 0.87 | | |
| Morgan Stanley | -0.63 | 0.037 | | |
| PNC Financial | -0.79 | 0.11 | | |
| Regions Financial | -0.35 | 1.2 | | |
| SunTrust | -0.83 | 0.11 | | |
| State Street | -0.7 | 0.13 | | |
| UBS | -0.04 | | | |
| US Bancorp | -0.68 | 0.22 | | |
| Wells Fargo | -0.92 | -0.25 | | |

Bank MPD Statistics as of March 11, 2015

| Indicator | Latest | 2-Week Change | 1-Year Trend with min/max points | Long-Term Range with median, IQR, and max/min |
|--|--------|---------------|-------------------------------------|--|
| Market Probability of -20% or More Decline (3-Month Expiry) | | | | |
| American Express | 5.15% | 1.6% | 7.79 1.53 | 1.53 - 5.15 - 17.67 last 48 months |
| Bank of America | 6.91% | 1.8% | 10.91 3.13 | 3.13 - 6.91 - 27.24 last 48 months |
| BB&T | 3.51% | 0.46% | 8.19 1.68 | 1.68 - 3.51 - 34.9 last 48 months |
| Barclays | 12.74% | 5.4% | 18.72 2.33 | 2.33 - 12.74 - 30.94 48 month low |
| Bank of NY Mellon | 5.19% | 0.89% | 8.35 1.31 | 1.31 - 5.19 - 21.34 last 48 months |
| Citigroup | 6.56% | 1.6% | 9.93 1.93 | 1.93 - 6.56 - 24.59 last 48 months |
| Capital One | 4.24% | 0.35% | 7.94 1.64 | 1.64 - 4.24 - 21.29 last 48 months |
| Credit Suisse | 12.42% | 3.1% | 12.84 2.87 | 2.87 - 12.42 - 28.61 last 48 months |
| Deutsche Bank | 8.06% | 1.7% | 14.97 5.74 | 4.99 - 8.06 - 29.63 last 48 months |
| Fifth Third | 5.12% | 0.88% | 11.8 0.99 | 0.99 - 5.12 - 21.5 last 48 months |
| Goldman Sachs | 4.57% | 1.8% | 8.27 1.79 | 1.79 - 4.57 - 21.46 last 48 months |
| JP Morgan | 5.45% | 1.4% | 6.95 1.31 | 1.31 - 5.45 - 20.52 last 48 months |
| Keycorp | 6.67% | 0.71% | 9.67 1.92 | 1.92 - 6.67 - 27.26 last 48 months |
| Morgan Stanley | 7.36% | 2.9% | 13.03 3.21 | 3.21 - 7.36 - 26.47 last 48 months |
| PNC Financial | 3.35% | 0.75% | 6.3 1.43 | 1.43 - 3.35 - 17.91 last 48 months |
| Regions Financial | 6.01% | -0.75% | 14.66 4.26 | 3.64 - 6.01 - 29.69 last 47 months |
| SunTrust | 4.87% | 1.7% | 10.15 1.73 | 1.73 - 4.87 - 26.4 last 48 months |
| State Street | 5.58% | 0.34% | 9.04 2.26 | 2.26 - 5.58 - 19.69 last 48 months |
| UBS | 7.28% | | 18.15 1.53 | 1.53 - 7.28 - 27.33 46 month low |
| US Bancorp | 3.3% | 0.38% | 6.91 0.74 | 0.74 - 3.3 - 18.85 last 48 months |
| Wells Fargo | 3.89% | 1.5% | 7.53 1.3 | 1.3 - 3.89 - 20.71 last 48 months |

Bank MPD Statistics as of March 11, 2015

| Indicator | Latest | 2-Week Change | 1-Year Trend with min/max points | Long-Term Range with median, IQR, and max/min |
|--------------------------------|--------|---------------|-------------------------------------|--|
| Volume (3-Month Expiry) | | | | |
| American Express | 7920 | -70% | 28004 0 | 623 - 7920 - 28004 last 48 months |
| Bank of America | 86998 | -35% | 133777 0 | 7419 - 86998 - 363160 last 48 months |
| BB&T | 2073 | 12% | 6490 0 | 190 - 2073 - 6903 last 48 months |
| Barclays | 1550 | 380% | 11011 0 | 13 - 1550 - 15208 last 48 months |
| Bank of NY Mellon | 6402 | 270% | 15678 0 | 59 - 6402 - 17091 last 48 months |
| Citigroup | 17151 | -22% | 140439 0 | 1104 - 17151 - 150972 last 48 months |
| Capital One | 625 | 83% | 5543 0 | 164 - 625 - 16299 last 48 months |
| Credit Suisse | 250 | -0.4% | 15145 0 | 0 - 250 - 15145 last 48 months |
| Deutsche Bank | 1200 | -60% | 25112 0 | 76 - 1200 - 29575 last 48 months |
| Fifth Third | 1880 | -59% | 6299 0 | 28 - 1880 - 19127 last 48 months |
| Goldman Sachs | 2672 | -53% | 15721 0 | 296 - 2672 - 43413 last 48 months |
| JP Morgan | 15939 | 19% | 79587 0 | 943 - 15939 - 119246 last 48 months |
| Keycorp | 639 | 21% | 3300 0 | 44 - 639 - 76270 last 48 months |
| Morgan Stanley | 7056 | -48% | 48955 0 | 327 - 7056 - 84281 last 48 months |
| PNC Financial | 1102 | -34% | 4810 0 | 83 - 1102 - 12224 last 48 months |
| Regions Financial | 876 | -74% | 4635 0 | 20 - 876 - 19649 last 47 months |
| SunTrust | 4808 | 470% | 4808 0 | 61 - 4808 - 13788 last 48 months |
| State Street | 563 | 140% | 5339 0 | 42 - 563 - 5370 last 48 months |
| UBS | 124 | | 2034 0 | 6 - 124 - 6502 last 46 months |
| US Bancorp | 1296 | 310% | 9006 0 | 172 - 1296 - 29201 last 48 months |
| Wells Fargo | 4214 | -53% | 62697 0 | 950 - 4214 - 167820 last 48 months |

Insurance Company MPD Statistics as of March 11, 2015

| Indicator | Latest | 2-Week Change | 1-Year Trend with min/max points | Long-Term Range with median, IQR, and max/min |
|--|--------|---------------|-------------------------------------|--|
| MPD Standard Deviation (3-Month Expiry) | | | | |
| Aflac | 8.28% | 0.87% | | |
| AIG | 10.53% | 1.3% | | |
| Allstate | 8.29% | 1.4% | | |
| Ameriprise | 11.47% | 0.29% | | |
| Chubb | 7.66% | 1.2% | | |
| Hartford Financial | 10.26% | -0.067% | | |
| Lincoln National | 13.67% | 2.2% | | |
| Met Life | 12.15% | 1.5% | | |
| Principal Financial | 12.53% | 2.3% | | |
| Progressive | 8.81% | 0.69% | | |
| Prudential | 12.85% | 1.6% | | |

Insurance Company MPD Statistics as of March 11, 2015

| Indicator | Latest | 2-Week Change | 1-Year Trend with min/max points | Long-Term Range with median, IQR, and max/min |
|----------------------------------|--------|---------------|--|--|
| MPD Skew (3-Month Expiry) | | | | |
| Aflac | -0.72 | 0.18 | -0.32 -1.08 Jun19 Oct29 | -1.24 --- -0.32 last 48 months -0.72 |
| AIG | -0.54 | 0.2 | -0.23 -0.84 Dec31 Feb18 Last time lower Oct2013 | -1.23 --- 0.98 last 48 months -0.54 |
| Allstate | -0.52 | 0.14 | -0.31 -1.5 Jul31 Nov12 Dec31 | -1.5 --- -0.12 last 48 months -0.52 |
| Ameriprise | -0.66 | 0.039 | -0.11 -1.44 Oct15 Dec31 | -4.03 --- 0.33 last 48 months -0.66 |
| Chubb | -0.76 | -0.26 | -0.21 -1.15 Aug14 Dec24 | -1.56 --- -0.21 last 48 months -0.76 |
| Hartford Financial | -0.99 | 0.27 | -0.2 -1.59 Jul17 Oct29 | -1.59 --- -0.2 last 48 months -0.99 |
| Lincoln National | -0.88 | -0.016 | 0.15 -1.02 May01 Nov19 | -1.59 --- 0.15 last 48 months -0.88 |
| Met Life | -0.6 | 0.024 | -0.35 -0.82 Jul31 Dec10 | -1.52 --- -0.23 last 48 months -0.6 |
| Principal Financial | -0.6 | 0.16 | 0.21 -2.87 Oct15 Aug21 | -2.95 --- 0.24 last 48 months -0.6 |
| Progressive | 0.33 | 0.17 | 0.42 -2.75 Mar04 Nov12 Last time higher Jul2011 | -3.54 --- 0.71 last 47 months 0.33 |
| Prudential | -0.59 | 0.14 | -0.36 -0.82 May01 Nov05 | -1.45 --- -0.36 last 48 months -0.59 |

Insurance Company MPD Statistics as of March 11, 2015

| Indicator | Latest | 2-Week Change | 1-Year Trend with min/max points | Long-Term Range with median, IQR, and max/min |
|--|--------|---------------|-------------------------------------|--|
| Market Probability of -20% or More Decline (3-Month Expiry) | | | | |
| Aflac | 2.21% | 0.45% | | |
| AIG | 4.2% | 1.2% | | |
| Allstate | 2.08% | 0.9% | | |
| Ameriprise | 6.14% | 0.25% | | |
| Chubb | 1.99% | 1.4% | | |
| Hartford Financial | 4.36% | -0.42% | | |
| Lincoln National | 9.64% | 4.2% | | |
| Met Life | 6.38% | 1.1% | | |
| Principal Financial | 8.36% | 4% | | |
| Progressive | 1.61% | 0.57% | | |
| Prudential | 8.09% | 2.6% | | |

Insurance Company MPD Statistics as of March 11, 2015

| Indicator | Latest | 2-Week Change | 1-Year Trend with min/max points | Long-Term Range with median, IQR, and max/min |
|--------------------------------|--------------|---------------|-------------------------------------|--|
| Volume (3-Month Expiry) | | | | |
| Aflac | 3089 | -76% | 13324 0 | 3089 405 22718 last 48 months |
| AIG | 2808 | -96% | 69392 0 | 2808 432 103998 last 48 months |
| Allstate | 63 | -95% | 2913 0 | 63 63 68926 last 48 months |
| Ameriprise | 162 | 300% | 1071 0 | 162 5 1114 last 48 months |
| Chubb | 73 | -99% | 9027 0 | 73 11 11114 last 48 months |
| Hartford Financial | 1151 | 190% | 13441 0 | 1151 65 37285 last 48 months |
| Lincoln National | 510 | -66% | 8403 0 | 510 51 10682 last 48 months |
| Met Life | 11021 | 220% | 29248 0 | 11021 319 161416 last 48 months |
| Principal Financial | 70 | -87% | 545 0 | 70 2 3846 last 48 months |
| Progressive | 9 | -10% | 474 0 | 9 0 4283 last 47 months |
| Prudential | 2109 | 16% | 13225 0 | 2109 222 13225 last 48 months |