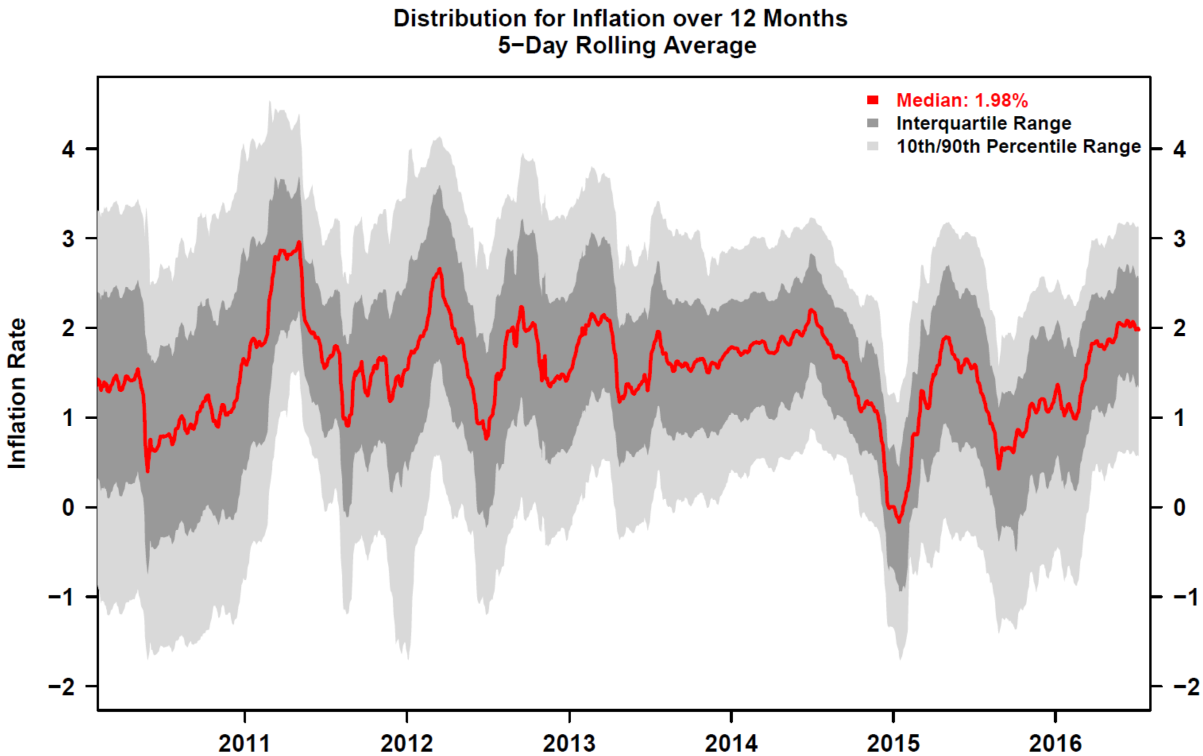
Minneapolis Options Report – July 8th

Over the past two weeks, market-implied inflation expectations decreased for the 1- and 2-year tenors and increased for the 5-year tenor. Treasury prices increased setting new highs for each tenor. The S&P 500 returned 0.70%; the 19 banks and 11 insurance firms we follow underperformed the market returning -7.6% and -4.1% respectively. The dollar strengthened sharply against the pound due to extended uncertainty related to the Brexit vote; the dollar was weaker against the yen. Metals outperformed the S&P 500 over the two week period with gold and silver posting respective gains of 7.7% and 16%; MPD skew for both metals has risen in unison since July 2015 and set historic highs for both metals suggesting market-implied bias toward higher future prices. Agricultural crops suffered large declines with respective MPD standard deviations falling as well.

Inflation
Market-based inflation expectations, derived from caps and floors on the CPI, decreased over the past two weeks for the 1- and 2- year tenors, and rose for the 5-year tenor and currently stand at 1.95%, 1.77%, and 1.67% respectively. The 1-year tenor, which registered the largest absolute change, best, demonstrates the change in expectations (see figure below).



Additional detail:

- The probability of high inflation for the 1-year tenor, as measured by the market probability of more than 3% inflation, fell by -2.6 percentage points.

Interest Rates
Prices for 5- and 10-year Treasury notes increased over the two week period (by 0.92% and 1.8%, respectively) setting new historic highs; yields consequently fell. MPD skews continue to imply neutral bias. Over the 2-week period, the 3- and 5-year LIBOR tenors moved by 4.8 and -1.6 bps respectively. Tail risk for expectations of the 3-month LIBOR for the 3- and 5-year tenors increased: Market-based probabilities for 3-month LIBOR at 3 years out being less than 0.5% and 3-month LIBOR at 5-years out being less than 1% jumped by a respective 4.0 and 6.2 percentage points.

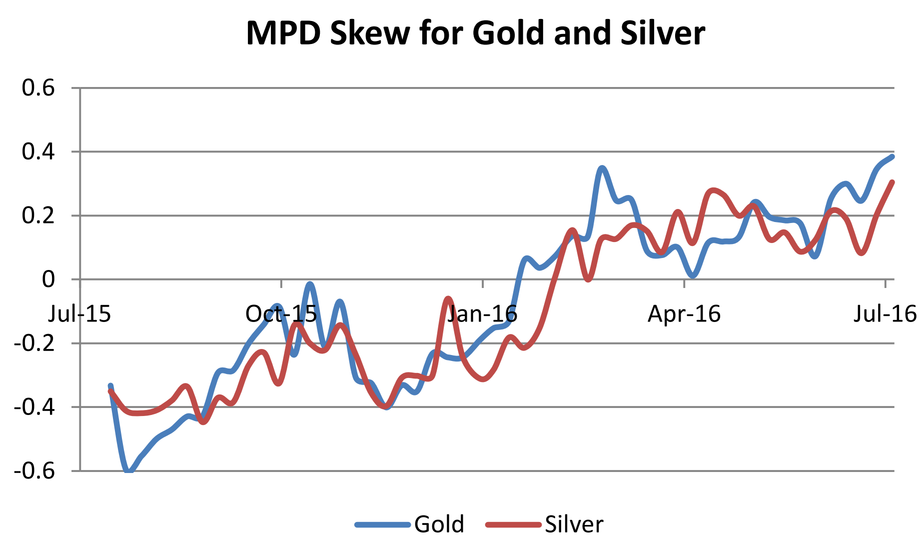
Banks and Insurance Companies
The S&P 500 gained 0.7% over the past two weeks. The 19 domestic bank company stocks we follow underperformed the broader market registering a -7.6% return; the 11 insurance companies we follow underperformed the index as well, returning -4.1%. Investor uncertainty surrounding the bank and insurance companies remained high, as average MPD standard deviations increased by 1.6% and 1.3%, respectively.

Additional details:

- MPD standard deviation for FBOs continues to track higher than other banking firms we follow. DB, BCS and CS posted increases of 6.7, 2.2 and 2.1 percentage points respectively to end at 30.5%, 30.0% and 24.6%. For DB this represents a new 4-year high.
- RF registered a 4.5 percentage point increase in MPD standard deviation which is one of its largest this year.

Other Markets

- The dollar strengthened against the pound and euro and weakened against the yen; notably in the aftermath of the Brexit vote, the USD-Pound currency pair spot fell 16% over the 2 week reporting period. Though changes in MPD skew for the USD-Pound pair moved higher by 0.65, the overall level continues to point to a comparatively stronger dollar in the future.
- Gold and silver returned 7.7% and 16% respectively over the two week period. MPD skews are at 4-year highs for both metals and have trended higher, in unison, for the past 12 months. Levels currently imply investor bias towards higher future prices for each metal.



- WTI crude posted a -2.4% return as MPD standard deviation fell by -1.6 percentage points, continuing a sharp decline which commenced on February 11, 2016.
- The iShares U.S. Real Estate Index outperformed the S&P 500 Index, returning 4.2% and rising to its highest levels in 4 years. The MPD standard deviation for the Real Estate Index remained high relative to its 4-year history, implying elevated levels of investor uncertainty.

- Agricultural crops suffered large losses over the two week period returning, on average, -8.9%; uncertainty, as measured by MPD standard deviation, fell on average by -2.1 percentage points.
- Returns from agricultural livestock were mixed as cattle returned 1.2% while hogs returned -3.7%. MPD standard deviation for hogs has risen sharply and currently stands at 17.8%, well above the 75th percentile for the previous 21-months of observations.