# Nottingham Monthly Market Wrap

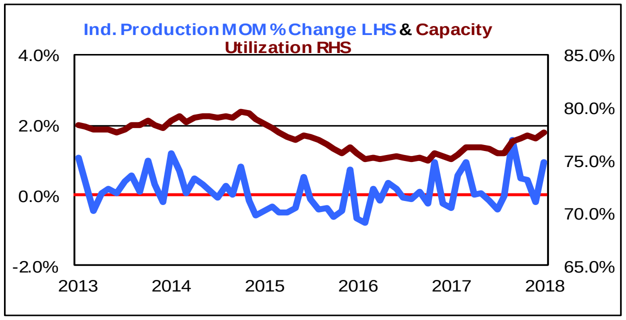
## March 31, 2018

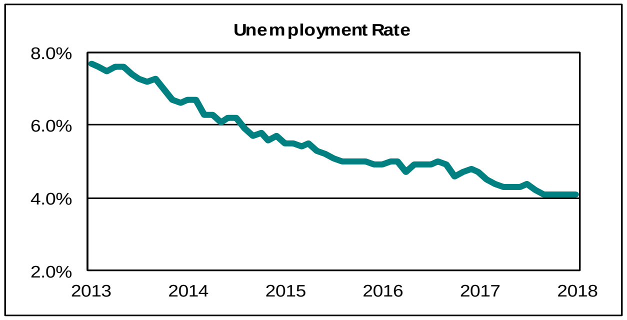
### Economic Overview

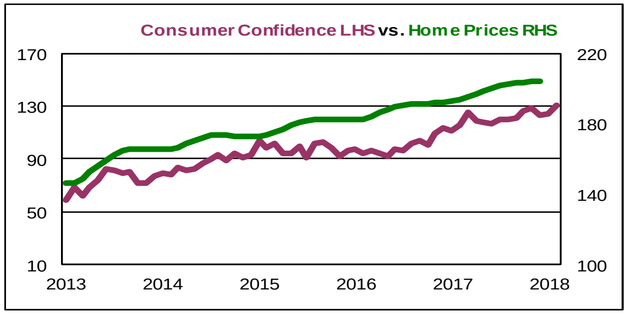
Economic data in the U.S. was somewhat mixed in March, with the benefits of last year's signature tax reform yet to be realized. Taken as a whole, the Citi U.S. Economic Surprise Index, a measure of whether or not key economic data releases are beating or missing market expectations, rose to 49.8 at the end of March, from 32.9 at the end of February. With Q1 in the books, all eyes will turn to earnings season, which kicks off on April 4th with Lennar Corp. reporting after the bell. Our attention will be primarily focused on two things. First, we will be looking for updated management commentary on the current state of the U.S. economy and their planned capital outlays (returns of capital to shareholders and capital expenditures) for the year. Second, we will be watching sell-side analyst earnings revisions and whether they go up or down from here, given what's already been priced in from a tax reform standpoint. These two focuses should help us put the recent market pullback into better context.

The third and final release of Q4 GDP showed the U.S. economy grew at a +2.9% SAAR, an upgrade from last month's +2.5% SAAR (second reading) and ahead of expectations for a +2.7% SAAR. While the last revision was an upgrade, it was still a bit slower than Q3's +3.2% SAAR and Q2's +3.1% SAAR, highlighting how elusive +3.0% GDP can be, especially on an annual basis, when the labor force is shrinking and productivity has stalled. From a consumption standpoint, the U.S. consumer remains resilient, with Personal Consumption Expenditures (PCE) rising at a +4.0% annual rate, up from the previous estimate of +3.8%, which was the highest quarterly reading in three years. With the benefits of one-time bonuses and changes in payroll withholdings unlikely to show up cleanly in upcoming data releases, the PCE will be a key gauge of the health of the consumer as we head into the Spring and Summer.

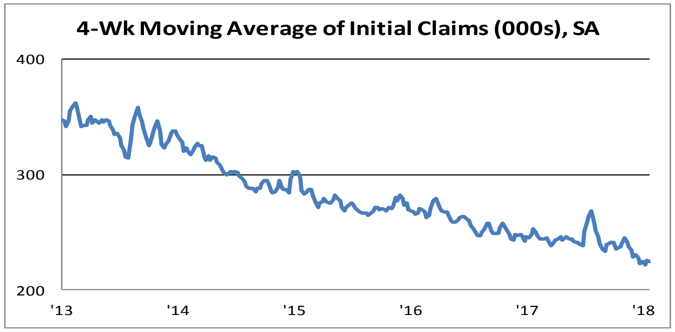
In other economic news, broad housing data remained weak approaching the Spring selling season, while indicators of inflation appear to rising, but in a controlled fashion. On a headline basis, the Consumer Price Index (CPI) rose +2.2% in February, in line with recent trends, while core CPI (ex. Food & Energy) rose +1.8% in February. Producer prices appear to be easing, with the Producer Price Index (PCI) rising +2.7% Y/Y in February, down from +3.0% in January, and +4.3% back in November. With measures of inflation remaining stable at or around the critical +2.0% level, the Federal Reserve should remain on track for two more rate hikes in 2018, with a close call on a fourth hike should inflation and the labor market firm further.

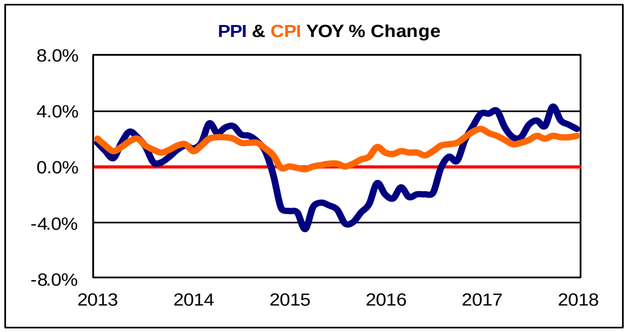



| Key Data Points | | | | |
|---|---|---|---|---|
| **Name** | **Current** | **For** | **Previous** | **For** |
| Retail Sales ex. Autos MOM % | 0.20% | February | 0.10% | January |
| Housing Starts | 1236K | February | 1329K | January |
| Factory Orders MOM % | -1.40% | January | 1.80% | December |
| Leading Indicators MOM % | 0.60% | February | 0.80% | January |
| Unit Labor Costs | 2.50% | Q4 2017 | 1.00% | Q3 2017 |
| GDP QOQ (Annualized) | 2.90% | Q4 2017 | 3.20% | Q3 2017 |
| Wholesale Inventories | 1.10% | February | 1.00% | January |
| MBA Mortgage Applications | 4.80% | March | 2.70% | February |



# Nottingham Monthly Market Wrap
## March 31, 2018

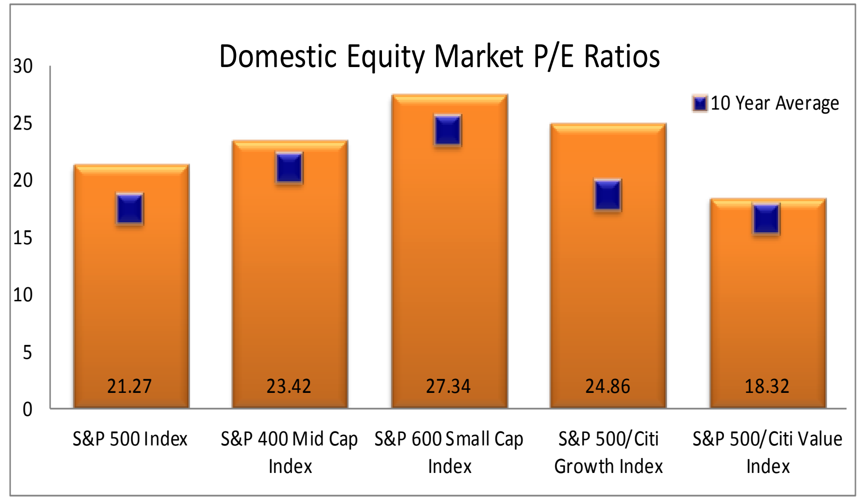
### Domestic Equity

U.S. equities took investors on a roller coaster ride in March, as volatility spiked and fund flows out of Technology favorites caused the S&P 500 to post a monthly return of -2.54%. What's more, U.S. Large-Cap equities posted their first quarterly loss in 10 quarters, a streak that includes 442 straight daily closes above the 200 day moving average, according to Strategas. Mid- and Small-Caps fared much better, with the Mid-Cap 400 Index gaining +0.93% and the Small-Cap 600 Index adding a healthy +2.04%. Talks of tariffs and a global trade war should help those companies that are more domestically focused outperform on a relative basis. Furthermore, Mid- and Small-Caps likely have more to gain from lower corporate tax rates in 2018.

From a sector standpoint, defensive sectors caught a bid, with those most sensitive to interest rates outperforming. Real Estate Investment Trusts (REITs) and Utilities were the top performers, posting gains of +3.78% and +3.76% respectively on the month. Interestingly, Telecoms did not follow suit, and instead shed -1.0% on the month. The lone other positive performing sector was Energy, as oil prices rallied. Energy has been the worst performing S&P 500 sector over the past 5 years, posting negative annual returns of -0.41%.

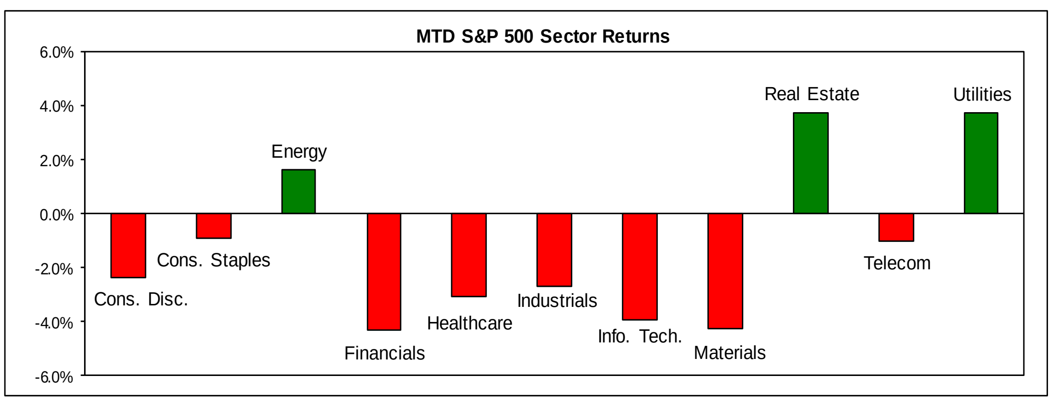
Technology stocks were a slight underperformer during the month, with the Sector giving back -3.90%, underperforming the S&P by 1.44%. While this is noteworthy in the short-term (simply for the fact that Technology stocks *can* post negative returns), the long-term outperformance of Technology stocks has been dramatic (+20.8% vs. +13.1% on a 5yr annualized return basis), meaning March's performance is likely not the last we've seen of Technology volatility. A broad measure of high flying tech stocks known as the NYSE FANG+ Index (an equal dollar weighted index of highly traded tech and consumer discretionary growth stocks) lost -6.93% on the month. Tech stocks caught a bid during the last few trading days of the month, framing their performance as *less bad* than it actually was. This may also be evidenced by the fact that Technology as a sector was one of only two sectors positive on the quarter (+3.53%), along with Consumer Discretionary (+3.08%).

At the industry level, Banks suffered as interest rates fell, losing -7.44% on the month. Banks have been a strong outperformer over the past 9 months, only to underperform in March. On a go forward basis, Banks remain poised to outperform, as beneficiaries from lower corporate tax rates, increased lending activity, rising interest rates, and continued capital returns to shareholders.




**Domestic Equity Returns**

| Name | MTD | QTD | YTD | 1 Year | 3 Year | 5 Year |
|---|---|---|---|---|---|---|
| S&P 500 Index | -2.54% | -0.76% | -0.76% | 13.98% | 10.78% | 13.28% |
| S&P 400 Mid Cap Index | 0.93% | -0.77% | -0.77% | 10.96% | 8.96% | 11.93% |
| S&P 600 Small Cap Index | 2.04% | 0.55% | 0.55% | 12.59% | 10.70% | 13.49% |
| S&P 500/Citi Growth Index | -2.98% | 1.93% | 1.93% | 19.68% | 12.66% | 15.35% |
| S&P 500/Citi Value Index | -2.04% | -3.58% | -3.58% | 7.68% | 8.40% | 10.85% |




**S&P 500 Sector Returns**

| Sector | MTD | QTD | YTD | 1 Year | 3 Year | 5 Year | % of S&P 500 |
|---|---|---|---|---|---|---|---|
| Consumer Discretionary | -2.33% | 3.08% | 3.08% | 16.89% | 12.20% | 15.65% | 13.16% |
| Consumer Staples | -0.88% | -7.12% | -7.12% | -0.90% | 5.45% | 8.61% | 8.40% |
| Energy | 1.66% | -5.88% | -5.88% | -0.16% | -1.23% | -0.41% | 5.58% |
| Financials | -4.31% | -0.95% | -0.95% | 17.99% | 14.29% | 15.41% | 14.30% |
| Healthcare | -3.07% | -1.22% | -1.22% | 11.27% | 5.60% | 13.92% | 13.53% |
| Industrials | -2.68% | -1.56% | -1.56% | 13.93% | 11.65% | 13.98% | 10.19% |
| Information Technology | -3.90% | 3.53% | 3.53% | 27.68% | 19.91% | 20.62% | 24.64% |
| Materials | -4.24% | -5.52% | -5.52% | 10.54% | 7.40% | 9.89% | 2.82% |
| Real Estate | 3.78% | -5.02% | -5.02% | 1.69% | 1.58% | 4.91% | 2.75% |
| Telecommunications | -1.00% | -7.48% | -7.48% | -4.86% | 4.74% | 4.11% | 1.86% |
| Utilities | 3.76% | -3.30% | -3.30% | 1.89% | 8.16% | 9.15% | 2.77% |

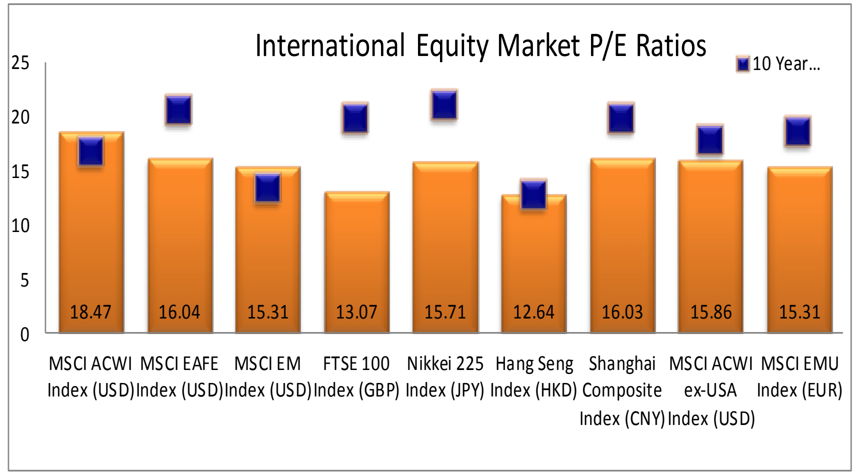
## International Equity

International equities were also hard hit by March's global selloff; however, their relative performance against U.S. equities may give investors comfort. Developed International equities, as measured by the MSCI EAFE Index, lost -1.73% on the month and -1.41% on the quarter. Emerging Markets equities, as measured by the MSCI Emerging Markets Index, lost -1.87% on the month, but gained +1.38% during the quarter. Talks of trade wars and tariffs roiled markets, but their bark is likely larger than their bite (at least at this juncture). The absolute value of tariffs announced thus far are easily dwarfed by benefits from U.S. tax reform, increased government spending, repatriation, and potential capital deployment (returns to shareholders and/or capital spending).

At the regional level, the Eurozone lost -2.19% in EUR terms (-1.13% in USD terms) as economic data softened; however, the Euro remained relatively strong against the U.S. Dollar, gaining +0.95% during the month, benefitting USD investors. Moving forward, the Euro's strength could become a headwind should the bloc's currency begin to negatively impact export oriented countries such as Germany. This remains to be seen, but nonetheless stands as a significant risk to future returns.

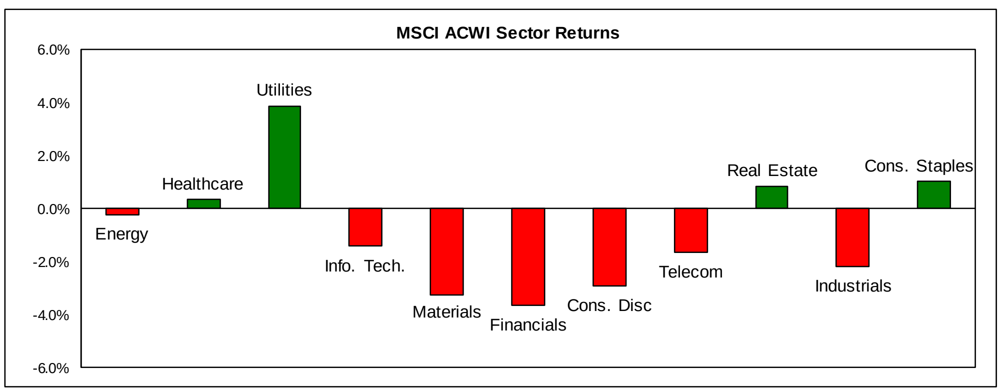
Chinese equities continue to tell two different stories, with the Shanghai Composite (a benchmark that can be viewed as "old" China) losing -2.78%, and the Technology heavy MSCI China Index, losing -3.94% on the month (in CNY terms). It should be noted that the "old" versus "new" China theme isn't new, but continues to deliver starkly different return streams to investors. For example, over the past three years, the Shanghai Composite has returned -4.63%, versus +10.30% for the MSCI China Index on an annualized basis.

Lastly, it is important to note that International Equities continue to provide strong diversification benefits to investors. Cheaper valuations, strong fundamentals, easy monetary policy, and stronger relative growth rates should continue to give International Equities an edge over U.S. equities going forward. While the ride may be bumpy, the opportunities should not go understated. We've spent a lot of time talking about different returns in different currencies (above and in past editions of the *Market Wrap*), which could be added benefits to investors investing in U.S. Dollars. This provides opportunity in the Developed International world, but more importantly underscores the opportunities abound in Emerging Markets, where the above mentioned fundamentals should help EM currencies strengthen further, potentially boosting U.S. investors' total returns in the future.




**International Equity Returns**

| Name | MTD | QTD | YTD | 1 Year | 3 Year | 5 Year |
|---|---|---|---|---|---|---|
| MSCI ACWI Index (USD) | -2.09% | -0.85% | -0.85% | 15.44% | 8.73% | 9.81% |
| MSCI EAFE Index (USD) | -1.73% | -1.41% | -1.41% | 15.35% | 6.11% | 7.08% |
| MSCI EM Index (USD) | -1.87% | 1.38% | 1.38% | 25.31% | 9.25% | 5.37% |
| FTSE 100 Index (GBP) | -2.03% | -7.20% | -7.20% | 0.22% | 5.42% | 5.83% |
| Nikkei 225 Index (JPY) | -2.12% | -5.06% | -5.06% | 15.50% | 5.68% | 13.56% |
| Hang Seng Index (HKD) | -2.33% | 0.92% | 0.92% | 29.44% | 10.47% | 10.15% |
| Shanghai Composite Index (CNY) | -2.78% | -4.17% | -4.17% | 0.35% | -3.64% | 9.80% |
| MSCI ACWI ex-USA Index (USD) | -1.71% | -1.10% | -1.10% | 17.05% | 6.73% | 6.44% |
| MSCI EMU Index (EUR) | -2.08% | -2.72% | -2.72% | 2.84% | 2.77% | 10.64% |




**MSCI ACWI Ex U.S. Sector Returns**

| Sector | MTD | QTD | YTD | 1 Year | 3 Year | 5 Year | % of ACWI Ex. USA |
|---|---|---|---|---|---|---|---|
| Energy | -0.23% | -1.66% | -1.66% | 16.34% | 7.76% | 0.87% | 7.08% |
| Healthcare | 0.33% | 0.05% | 0.05% | 9.68% | -0.05% | 6.44% | 6.35% |
| Utility | 3.86% | -0.97% | -0.97% | 6.32% | 5.74% | 6.44% | 5.49% |
| Information Technology | -1.42% | 1.73% | 1.73% | 34.49% | 16.39% | 15.79% | 11.47% |
| Materials | -3.29% | -2.79% | -2.79% | 18.88% | 9.38% | 3.02% | 7.38% |
| Financials | -3.64% | -1.01% | -1.01% | 16.48% | 6.49% | 6.44% | 21.06% |
| Consumer Discretionary | -2.92% | -1.09% | -1.09% | 18.89% | 5.58% | 8.55% | 11.48% |
| Telecommunications | -1.64% | -4.06% | -4.06% | 4.13% | 0.31% | 4.63% | 5.08% |
| Real Estate* | 0.83% | -1.55% | N/A | N/A | N/A | N/A | 3.55% |
| Industrials | -2.18% | -1.53% | -1.53% | 16.64% | 8.02% | 7.58% | 11.26% |
| Consumer Staples | 1.01% | -2.71% | -2.71% | 11.46% | 6.56% | 5.12% | 9.80% |

## Fixed Income

On March 21st, the Federal Reserve raised the fed funds discount rate by 25 bps, as expected. The vote to increase the rate was unanimous, and the board's economic outlook and inflation expectation remained quite positive. Chairman Powell tried to reduce the weight that Fed watchers put on the board member's published forecasts, saying, "Like any set of forecasts, those forecasts will change over time. It could change up. It could change down."

The month of March brought a flatter U.S. Treasury curve, as yields of near-term maturities pushed marginally higher, while yields of intermediate and longer-term maturities decreased. Global sovereign yields have also trended lower in the last 30 days. Germany's ten year bond, which had yielded as much as 76 bps in February, has fallen by a third, now yielding only 49 bps.

Investment grade corporate spreads, which had been generally decreasing since February of 2016, reversed course and widened by roughly 17 basis points. High yield spreads have followed the same calendar of tightening, and now most recently gave up some ground, widening by 20 bps in the month of March (less noticeable due to the percentage change being significantly less than the spread move in IG). Month to month, corporate exposure has become marginally more attractive, but on a historical basis, it would be hard to argue that it currently offers a significant buying opportunity, particularly as non-financial corporate debt as a percentage of GDP has breached a record high of 73.3%. Some positive spin can be put on that statistic by noting that the debt load is more evenly spread than prior to the financial crisis, with roughly a quarter of companies being highly levered (defined as a debt-to-earnings ratio higher than five) vs. 42% in 2007.

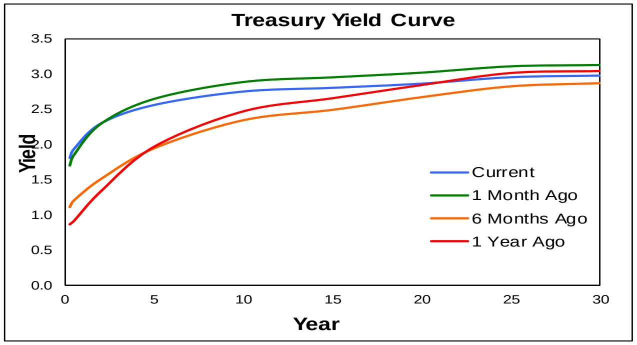
Municipal bonds have become cheaper relative to Treasury bonds over the last month, with their yield as a percentage of treasury yields rising from 87% to 91% for 10 year maturities, and from 99% to 101% for 30 year maturities. Issuance continues to run significantly below past year's volume, which should provide support for municipal bond valuations. They have slightly outperformed treasuries YTD, and handily outperformed over the prior 12 months.

**Central Bank Activity**

| Name | Current | 1 Month Ago | 6 Months Ago | 1 Year Ago |
|---|---|---|---|---|
| Fed Funds Rate | 1.75% | 1.50% | 1.25% | 1.00% |
| Bank of Japan Target Rate | 0.10% | 0.10% | 0.10% | 0.10% |
| European Central Bank Rate | 0.00% | 0.00% | 0.00% | 0.00% |
| Bank of England Official Bank Rate | 0.50% | 0.50% | 0.25% | 0.25% |

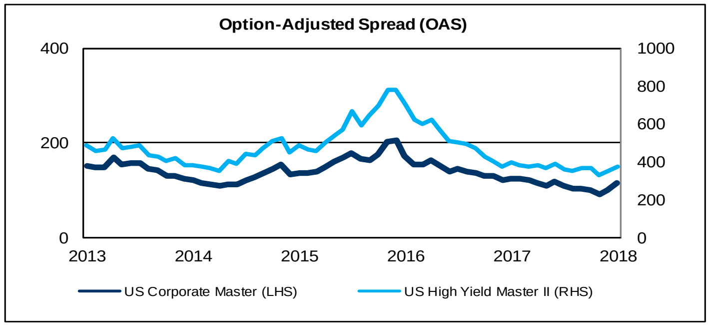
**Fixed Income Returns**

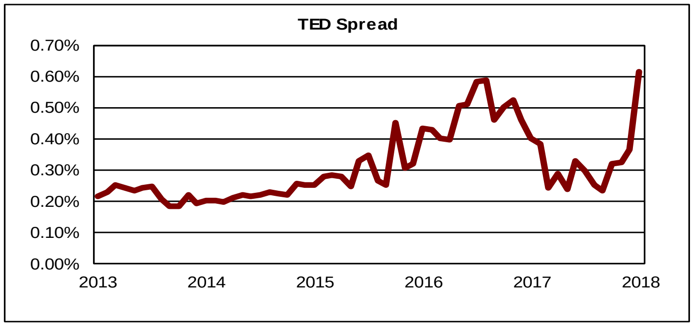
| Name | MTD | QTD | YTD | 1 Year |
|---|---|---|---|---|
| Bloomberg Barclays US Government Index | 0.93% | -1.15% | -1.15% | 0.44% |
| Bloomberg Barclays US Agg Index | 0.64% | -1.46% | -1.46% | 1.20% |
| Bloomberg Barclays US Corporate Index | 0.25% | -2.32% | -2.32% | 2.70% |
| Bloomberg Barclays US Corporate High Yield Index | -0.60% | -0.86% | -0.86% | 3.78% |
| Bloomberg Barclays EM USD Agg Index | 0.06% | -1.48% | -1.48% | 3.18% |
| Bloomberg Barclays Global Agg Treasuries USD Index | 1.13% | 0.57% | 0.57% | 2.66% |
| Bloomberg Barclays Municipal Index | 0.37% | -1.11% | -1.11% | 2.66% |

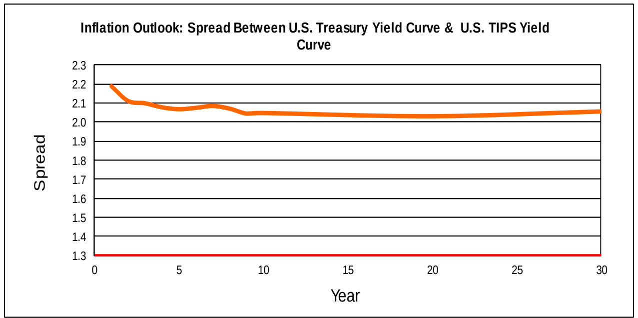



**U.S. Treasury Yields**

| Period | 3 Month | 6 Month | 2 Year | 5 Year | 10 Year | 15 Year | 20 Year | 25 Year | 30 Year |
|---|---|---|---|---|---|---|---|---|---|
| Current | 1.81% | 1.94% | 2.30% | 2.56% | 2.75% | 2.80% | 2.86% | 2.95% | 2.98% |
| 1 Month Ago | 1.70% | 1.85% | 2.29% | 2.65% | 2.89% | 2.95% | 3.02% | 3.11% | 3.13% |
| 6 Months Ago | 1.11% | 1.21% | 1.51% | 1.94% | 2.34% | 2.49% | 2.67% | 2.82% | 2.87% |
| 1 Year Ago | 0.86% | 0.91% | 1.33% | 1.97% | 2.47% | 2.66% | 2.84% | 3.01% | 3.04% |



## Alternative Investments

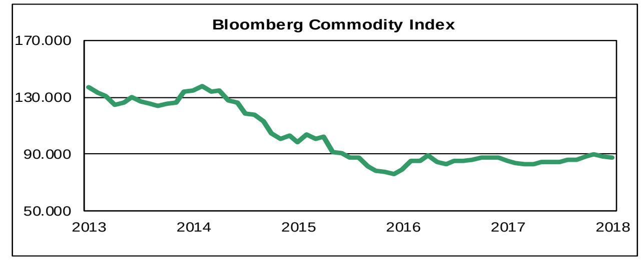
Alternative investments posted mixed results in March as volatility rose and talks of trade wars and tariffs riddled global headlines. Typically a market ripe with volatility and geopolitical headlines is a boon for alternative investments, as was the case in March. The current level of volatility remains in line with long-term averages; however, volatility spent much of 2017 near historical lows. The volatility regime has clearly changed in 2018, and heightened volatility is likely to be a prevailing theme.

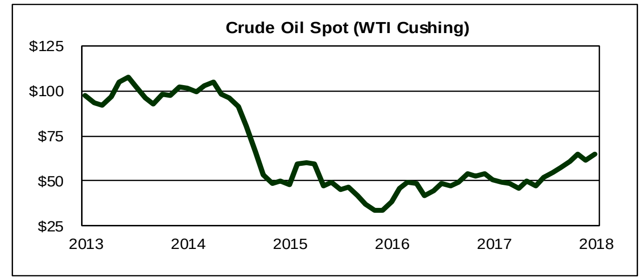
The increase in volatility provided a bid for Gold, which rose +0.5% on the month to close at $1,325/ounce. While the absolute increase in the price of Gold was not that overwhelming, it served its purpose from an asset allocation standpoint by providing a hedge to an equity market decline. Furthermore, Gold's +1.7% gain on the year is meaningful in the context of rising interest rates and heightened equity market levels. Over the past nine quarters, Gold has been a positive performer, rising +8.36% in 2016, +13.1% in 2017, and +1.7% in Q1 2018, showing resilience in the face of rising interest rates, and it's benefits to a portfolio's asset allocation.

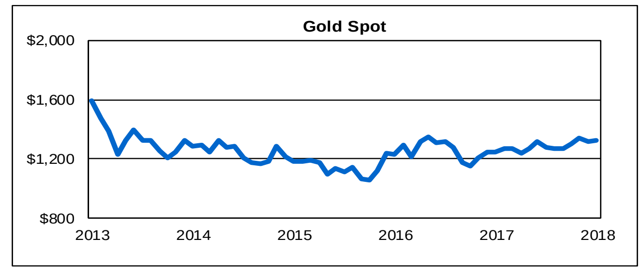
As market volatility spiked, bonds caught a bid, pushing the yield on the benchmark 10-year U.S. Treasury bond to 2.75%. The drop in yields caused a rally in yield sensitive assets such as Real Estate, as measured by the FTSE NAREIT All REIT Index, which gained +3.0% on the month. The drop in yields likely contributed to a slightly weaker U.S. Dollar, as measured by the DXY Index, which lost -0.7% on the month. For the year, the Dollar has lost -2.3%, continuing a trend seen in 2017 when the DXY Index fell -9.9%.

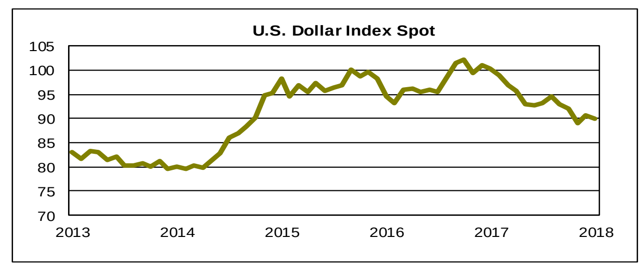
Commodities also served as a relative hedge, even as the Bloomberg Commodities Index lost -0.8% on the month, despite a +5.4% gain in West Texas Intermediate (WTI) crude oil during the month. WTI gained more than $3/barrel to close near $65/barrel, the highest monthly closing level since November 2015. Gains in WTI come as overseas tensions are rising and global growth picks up, despite record production (over 10 million barrels per day) in the U.S. However, a recent survey from the Federal Reserve Bank of Dallas highlighted respondent's breakeven prices for new well drilling, with average prices $47-52/bbl in the Permian and $50-55/bbl in other shale formations, underscoring that breakeven levels are 10-20% *lower* than current prices, which could renew downward pressure on WTI as production continues to increase.

Lastly, to highlight an alternative hedge fund strategy, Merger Arbitrage funds were flat on average in March. According to AQR Capital Management, median annualized arbitrage spreads continue to widen in 2018. With more than $1 Trillion in global deals already announced YTD according to *The Wall Street Journal*, Merger Arbitrage strategies should have a favorable backdrop moving forward, namely increased levels of volatility, rising interest rates, and a wide swath of deals to invest in.



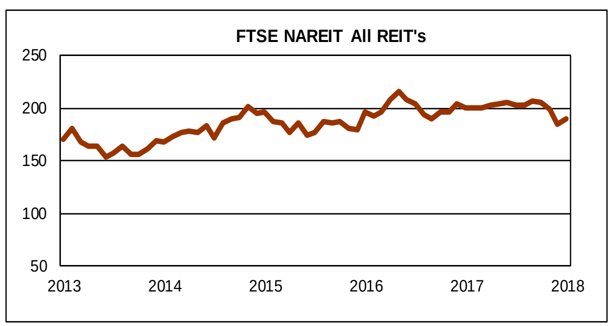




**Hedge Funds**

| Name | MTD | QTD | YTD | 1 Year | 3 Year | 5 Year |
|---|---|---|---|---|---|---|
| Global Hedge | -1.13% | -1.16% | -1.16% | 3.05% | 0.46% | 1.26% |
| Convertible Arbitrage | -0.40% | 0.04% | 0.04% | 4.66% | 3.73% | 1.81% |
| Distressed Securities | -5.32% | -4.98% | -4.98% | -3.53% | 1.24% | 1.71% |
| Equity Hedge (L/S) | -1.26% | 0.59% | 0.59% | 7.73% | 1.91% | 3.00% |
| Equity Market Neutral | -0.57% | 0.32% | 0.32% | 0.54% | 0.15% | 1.38% |
| Event Driven | -2.36% | -5.00% | -5.00% | -1.75% | 1.02% | 1.64% |
| Macro | -0.30% | -1.54% | -1.54% | 1.70% | -2.43% | -0.15% |
| Merger Arbitrage | -0.01% | -1.25% | -1.25% | 0.85% | 3.63% | 3.75% |
| Relative Value Arbitrage | -0.40% | 0.92% | 0.92% | 3.70% | 0.31% | 0.12% |
| Absolute Return | -0.07% | 0.38% | 0.38% | 3.11% | 1.74% | 2.10% |

Note: Price Return, Returns as of 03/28/18




**Spot Rates**

| Description | Current | 1 Month Ago | 3 Months Ago | 6 Months Ago | 1 Year Ago |
|---|---|---|---|---|---|
| CAD / USD | 1.29 | 1.28 | 1.26 | 1.25 | 1.33 |
| JPY / USD | 106.28 | 106.68 | 112.69 | 112.51 | 111.39 |
| USD / GBP | 1.40 | 1.38 | 1.35 | 1.34 | 1.26 |
| USD / EUR | 1.23 | 1.22 | 1.20 | 1.18 | 1.07 |

**S&P 500 Index (SPX) –** Standard and Poor's 500 Index is a capitalization-weighted index of 500 stocks. The index is designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries.

**S&P 500 Sector Indices (S5COND, S5CONS, S5ENRS, S5FINL, S5HLTH, S5INDU, S5INFT, S5MATR, S5TELS, S5UTIL) –** The S&P 500 is broken down into ten sub-indices according to the Global Industry Classification Standard (GICS) sectors. These ten sectors include Consumer Discretionary, Consumer Staples, Energy, Financials, Health Care, Industrials, Information Technology, Materials, Telecommunication Services, and Utilities.

**S&P 400 Mid Cap Index (MID) –** Standard and Poor's Mid Cap 400 Index is a capitalization-weighted index, which measures the performance of the mid-range sector of the U.S. stock market.

**S&P 600 Small Cap Index (SML) –** Standard & Poor's Small Cap 600 Index is a capitalization-weighted index that measures the performance of selected U.S. stocks with a small market capitalization.

**S&P 500/Citigroup Growth Index (SGX) –** The S&P 500/Citigroup Growth Index is a market capitalization-weighted index. All the stocks in the underlying parent index are allocated into value or growth. Stocks that do not have pure value or pure growth characteristics have their market caps distributed between the value & growth indices.

**S&P 500/Citigroup Value Index (SVX) –** The S&P 500/Citigroup Value Index is a market capitalization-weighted index. All the stocks in the underlying parent index are allocated into value or growth. Stocks that do not have pure value or pure growth characteristics have their market caps distributed between the value & growth indices.

**MSCI AC World Index (MXWD) –** The MSCI AC World Index is a free float-weighted equity index. The index includes both emerging and developed world markets.

**MSCI EAFE Index (MXEA) –** The MSCI EAFE Index is a capitalization-weighted index that monitors the performance of stocks from developed markets in Europe, Australia-Asia, and the Far East.

**MSCI Emerging Market Index (MXEF) –** The MSCI Emerging Market Index is a free-float weighted index that is designed to measure the equity performance of international emerging markets.

**FTSE 100 Index (UKX) –** The FTSE 100 Index is a capitalization-weighted index of the 100 most highly capitalized companies traded on the London Stock Exchange. The equities use an investability quotient weighting in the index calculation.

**Nikkei 225 Stock Average Index (NKY) –** The Nikkei-225 Stock Average is a price-weighted average of 225 top-rated Japanese companies listed in the First Section of the Tokyo Stock Exchange.

**Hang Seng Index (HSI) –** The Hang Seng is a free-float capitalization-weighted index of selected companies from the Stock Exchange of Hong Kong. The components of the index are divided into four sub-indexes: Commerce and Industry, Finance, Utilities, and Properties.

**Shanghai Stock Exchange Composite Index (SHCOMP) –** The Shanghai Stock Exchange Composite Index is a capitalization-weighted index. The index tracks the daily price performance of all A-shares and B-shares listed on the Shanghai Stock Exchange.

**S&P Global 1200 Index (SPGLOB) –** The S&P Global 1200 Index is a composite index, comprised of seven regional and country indices – S&P 500, S&P Europe 350, S&P/TOPIX 150 (Japan), S&P TSX 60 (Canada), S&P/ASX 50 (Australia), S&P Asia 50, and S&P Latin America 50. The S&P Global 1200 is calculated in US dollars. The index is market-cap weighted.

**Bloomberg Barclays Global Treasuries USD Hedged Index (LGTRTRUH)–** The Bloomberg Barclays Global Treasury Index tracks fixed-rate, local currency government debt of investment grade countries. The index represents the treasury sector of the Global Aggregate Index and contains issues from 37 countries denominated in 24 currencies.

**Bloomberg Barclays Municipal Bond Index (LMBITR)–** The Bloomberg Barclays Municipal Bond Index covers the USD-denominated long-term tax exempt bond market. The index has four main sectors: state and local general obligation bonds, revenue bonds, insured bonds, and prerefunded bonds.

**Bloomberg Barclays EM Hard Currency Aggregate Index (LG20TRUU)-** The Bloomberg Barclays Emerging Markets Hard Currency Aggregate Index is a hard currency Emerging Markets debt benchmark that includes USD-denominated debt from sovereign, quasi-sovereign, and corporate EM issuers.

**Bloomberg Barclays U.S. Government Index-** Bloomberg Barclays US Government Bond Index is compromised of the US Treasury and US Agency Indices. The index includes US dollar-denominated, fixed-rate, nominal US Treasuries and US agency debentures (securities issued by US government owned or government sponsored entities, and debt explicitly guaranteed by the US government).

**Bloomberg Barclays U.S. Aggregate Bond Index (LBUSTRUU)-** The Bloomberg Barclays US Aggregate Bond Index is a broad-based benchmark that measures the investment grade, US dollar-denominated, fixed-rate taxable bond market. The index includes Treasuries, government-related and corporate securities, MBS (agency fixed-rate and hybrid ARM pass-throughs), ABS and CMBS (agency and non-agency).

**Bloomberg Barclays U.S. Corporate Index (LUACTRUU)-** The Bloomberg Barclays US Corporate Bond Index measures the investment grade, fixed-rate, taxable corporate bond market. It includes USD denominated securities publicly issued by US and non-US industrial, utility and financial issuers.

**Bloomberg Barclays U.S. Corp High Yield Index (LFTR**
**ML U.S. Corporate Index (C0A0) –** The Bloomberg Barclays US Corporate High Yield Bond Index measures the USD-denominated, high yield, below-investment grade fixed-rate corporate bond market.

**ML U.S. Corporate Index (C0A0) –** The Merrill Lynch U.S. Corporate Index tracks the performance of U.S. dollar denominated investment grade corporate debt publicly issued in the U.S. domestic market.

**ML U.S. High Yield Index (H0A0) –** The Merrill Lynch U.S. High Yield Index tracks the performance of U.S. dollar denominated below investment grade corporate debt publicly issued in the U.S. domestic market.

**FTSE NAREIT All REITs Index (FNAR) –** The FTSE NAREIT All REITs Index is a free float adjusted market capitalization-weighted index that includes all tax qualified REITs listed in the NYSE, AMEX, and NASDAQ National Market.

**Dow Jones UBS Commodity Index (DJUBS) –** The Dow Jones UBS Commodity Index is composed of futures contracts on 19 physical commodities. It reflects the return of underlying commodity futures price movements only. Previously, the index was the Dow Jones AIG Commodity Index.

**U.S. Dollar Index (DXY) –** The U.S. Dollar Index (USDX) indicates the general int'l value of the USD. The USDX does this by averaging the exchange rates between the USD and 6 major world currencies. The ICE US computes this by using the rates supplied by some 500 banks.

**HFRX Global Hedge Fund Index (HFRXGL) –** The HFRX Global Hedge Fund Index is designed to be representative of the overall composition of the hedge fund universe. It is comprised of all eligible hedge fund strategies.

**HFRX Convertible Arbitrage Index (HFRXCA) –** The HFRX Convertible Arbitrage Index is designed to reflect the general performance of strategies in which the investment thesis is predicated on realization of a spread between related instruments in which one or multiple components of the spread is a convertible fixed income instrument.

**HFRX Distressed Securities Index (HFRXDS) –** The HFRX Distressed Securities Index is designed to reflect the general performance of strategies focused on corporate fixed income instruments, primarily on corporate credit instruments of companies trading at significant discounts to their value at issuance of obliged (par value) at maturity as a result of either formal bankruptcy proceeding or financial market perception of near term proceedings.

**HFRX Macro Index (HFRXM) –** The HFRX Macro Index reflects the general performance of strategies in which the investment process is predicated on movements in underlying economic variables and the impact these have on equity, fixed income, hard currency, and commodity markets.

**HFRX Equity Hedge Index (HFRXEH) –** The HFRX Equity Hedge Index is designed to reflect the general performance of strategies that maintain both long and short positions in primarily equity and equity derivative securities. A wide variety of investment processes can be employed to arrive at an investment decision, including both quantitative and fundamental techniques. Strategies can be broadly diversified or narrowly focused.

**HFRX Equity Market Neutral Index (HFRXEMN) –** The HFRX Equity Market Neutral Index is designed to reflect the general performance of strategies that employ sophisticated quantitative techniques of analyzing price data to ascertain information about future price movement and relationships between securities.

**HFRX Event Driven Index (HFRXED) –** The HFRX Event Driven Index reflects the general performance of strategies that maintain positions in companies currently or prospectively involved in corporate transactions of a wide variety including, but not limited to, mergers, restructurings, financial distress, tender offers, shareholder buybacks, debt exchanges, security issuance, or other capital structure adjustments.

**HFRX Merger Arbitrage Index (HFRXMA) –** The HFRX Merger Arbitrage Index reflects the general performance of strategies which employ an investment process primarily focused on opportunities in equity and equity related instruments of companies which are current engaged in a corporate transaction.

**HFRX Relative Value Arbitrage Index (HFRXRVA) –** The HFRX Relative Value Arbitrage Index reflects the general performance of strategies that maintain positions in which the investment thesis is predicated on realization of a valuation discrepancy in the relationship between multiple securities.

**Economic Data Sources:**
**PPI & CPI –** Bureau of Labor Statistics
**Unemployment Rate –** Bureau of Labor Statistics
**Consumer Confidence –** Conference Board
**S&P/Case-Shiller Composite 20 –** Case-Shiller
**Industrial Production –** Federal Reserve
**Capacity Utilization –** Federal Reserve
**Retail Sales –** U.S. Census Bureau
**Housing Starts –** U.S. Department of Commerce
**Factory Orders –** U.S. Census Bureau
**Leading Indicators –** Conference Board
**Unit Labor Costs –** Bureau of Labor Statistics
**GDP –** Bureau of Economic Analysis
**Wholesale Inventories –** U.S. Census Bureau
**MBA Mortgage Applications –** Mortgage Bankers Association
**4-Week Moving Average of Initial Claims, SA –** Bureau of Labor Statistics

If you have any questions or comments, please feel free to contact any member of our investment team:

**Tom Quealy**, *Chief Executive Officer* – tom.quealy@nottinghamadvisors.com
**Larry Whistler**, CFA, *President/Chief Investment Officer* – larry.whistler@nottinghamadvisors.com
**Nick Verbanic**, CFP® *V.P./Portfolio Manager* – nick.verbanic@nottinghamadvisors.com
**Matthew Krajna**, CFA, *Senior Portfolio Manager, Director of Equity Research* – matthew.krajna@nottinghamadvisors.com
**Tim Calkins**, CFA, *Senior Portfolio Manager, Director of Fixed Income* – timothy.calkins@nottinghamadvisors.com