

### Economic Overview

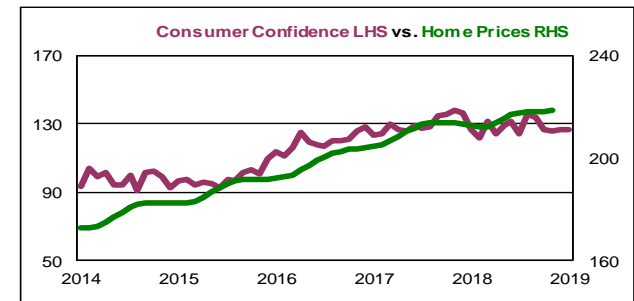
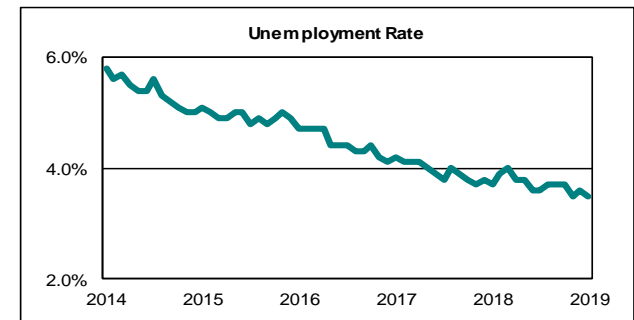
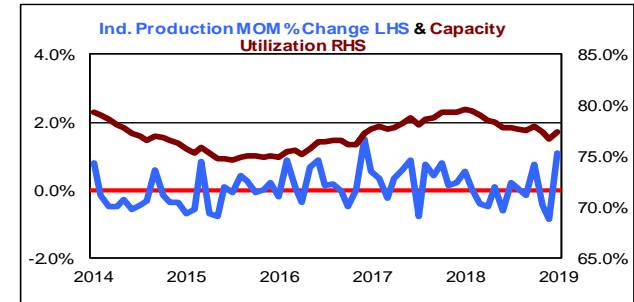
The U.S. economy continued to muddle through in December, buoyed by what appears to be a strong holiday shopping season. Retail Sales ex-Autos rose +0.10% M/M in November, a deceleration from October's +0.30% M/M pace; however, December's sales figures will be telling not only for the health of the consumer, but an early indication of fourth quarter earnings season which is set to begin this month. Expectations are for 2019 S&P 500 earnings to be essentially flat. Consumer Confidence, as measured by the Conference Board, remained elevated, coming in at 126.5 in December, down from 126.8 in November, and largely unchanged from December 2018's reading of 126.6.

Consumer prices ticked up slightly, with the headline Consumer Price Index (CPI) rising +2.1% Y/Y in November, up from +1.8% Y/Y in October, hitting the highest level in a year. Producer prices, as measured by the Producer Price Index (PPI), rose +1.1% Y/Y in November, up from two consecutive months of -0.2% Y/Y readings, putting an end to a string of declining producer prices since July.

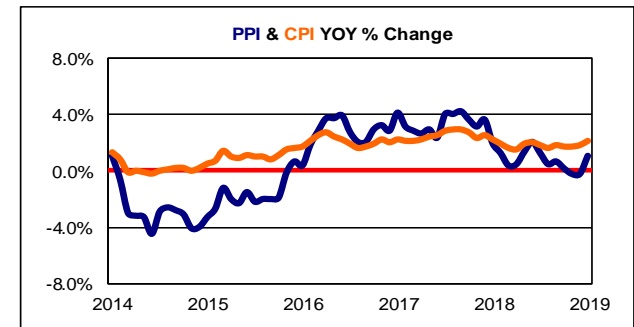
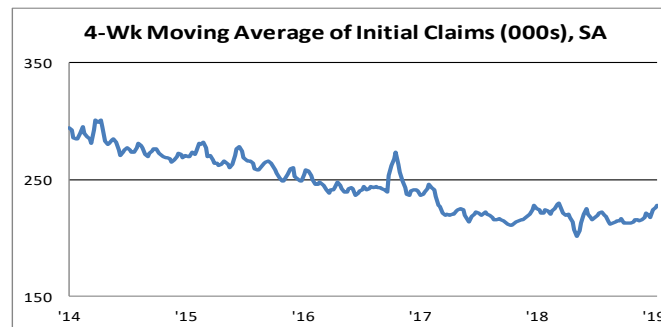
The Unemployment Rate fell one tenth to 3.5% in November, matching multi-decade lows. Initial Jobless Claims rose slightly in December, rising to 228,000, up from 218,000 at the end of November. Both indicators continue to point to a healthy labor market that doesn't appear to be slowing down. Wage growth remains somewhat elevated, with the Atlanta Fed Wage Growth Tracker increasing +3.7% Y/Y in November, up from +3.5% Y/Y in October, but down from +3.9% Y/Y in November 2018.

Mortgage applications fell again in December, dropping -5.3% from November, albeit at a slower pace of decline than November's -9.2% fall. The housing market continues to be in a state of undersupply, putting upward pressure on prices, which according to the National Association of Realtors, US Existing Home Sales Median Prices rose +5.4% Y/Y in November. Housing starts, which rose to a 1,365K SAAR in November continue to be well below the run rate needed to meet estimated demand, likely to continue putting upward pressure on prices.

Taken as a whole, the Citi US Economic Surprise Index closed December at -3.1, down from 13.10 at the end of November, highlighting the continued muddle through economy that remains dependent on consumer spending. Readings below zero signal economic data missing market expectations. Stay tuned.



Key Data Points				
Name	Current	For	Previous	For
Retail Sales ex. Autos MOM %	0.10%	November	0.30%	October
Housing Starts	1365K	November	1323K	October
Factory Orders MOM %	0.30%	October	-0.80%	September
Leading Indicators MOM %	0.00%	November	-0.20%	October
Unit Labor Costs	2.50%	Q3 2019	0.10%	Q2 2019
GDP QOQ (Annualized)	2.10%	Q3 2019	2.00%	Q2 2019
Wholesale Inventories	0.00%	November	0.00%	October
MBA Mortgage Applications	-5.30%	December	-9.20%	November



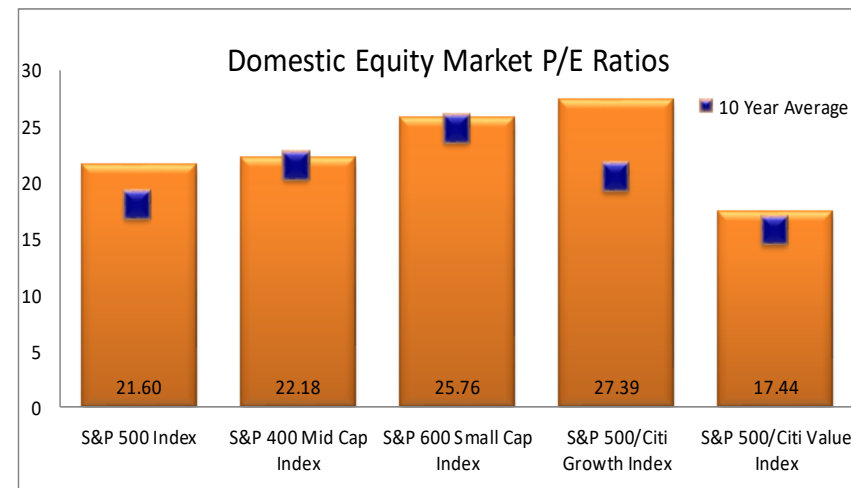
### Domestic Equity

U.S. Equities closed out the decade near all-time highs with the benchmark S&P 500 closing at 3,231, up a stunning +31.48% for the year. A sharp reversal from the Federal Reserve (3 rate *cuts* and a pause) coupled with easing trade tensions overwhelmingly trumped the fact S&P 500 earnings are likely to be *flat* in 2019. Put differently, most all of the S&P 500's gain in 2019 can be attributed to multiple expansion, with the trailing price to earnings multiple now at 21.6x, from just under 14x at the end of 2018, above long term averages. Large-Caps rallied hard in the month of December, adding +3.01%, and a hefty +9.06% for the quarter, surpassing both Small- and Mid-Caps during the respective periods. Small- and Mid-Caps finished the year with strong gains nonetheless, returning +22.74% and +26.17%, respectively.

From a style perspective, Value stocks (S&P 500/Citi Value Index) *finally* outperformed Growth stocks (S&P 500/Citi Growth Index) during the month, returning +3.11% while Growth returned +2.93%. Value outperformed Growth on the quarter with a +9.92% return compared to Growth's +8.32% gain. For the year, both indices returned greater than +31%, with Value edging Growth by +0.79% for a +31.92% gain.

Environmental, Social, and Governance (ESG) had another strong showing, with the MSCI USA Extended ESG Focus Index gaining +3.10% on the month, +9.66% during the quarter, and +32.52% for the year, outperforming the benchmark S&P 500 Index over all periods.

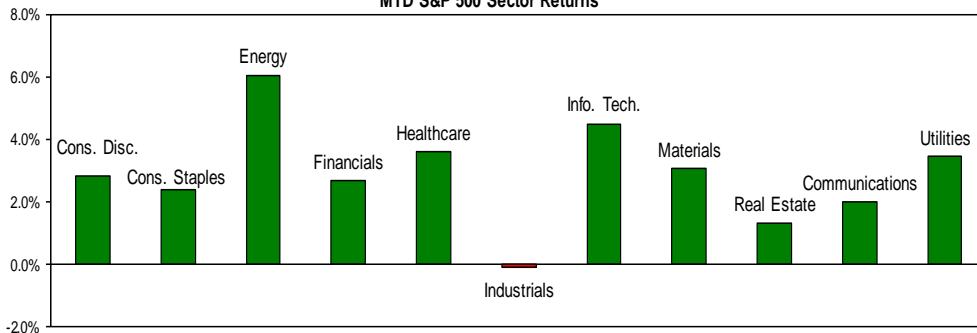
From a sector standpoint, Energy was the top performing sector in December, returning +6.03%; however, energy ended the year as not only the worst performing sector (+11.81%), but the worst performing sector of the past decade, returning 3.31% per annum compared to 13.54% for the S&P 500. On the flip side, Technology was the best performing sector in 2019, returning an eye popping +50.29%, thanks to Apple (+88.97%) and Microsoft (+57.57%). Those two stocks account for 39.0% of the Technology sector and 9.0% of the S&P 500, and remain the only companies in the *trillion dollar market cap* club. Technology was also the best performing sector of the decade, returning 17.48% vs. 13.54% per annum for the S&P 500. Perhaps more interesting is the fact that the S&P 500 Internet & Direct Marketing Retail Industry returned a cumulative +1,210%, or +29.32% per annum thanks to the rise of e-commerce, which remains a sliver of retail sales in 2019.



### Domestic Equity Returns

Name	MTD	QTD	YTD	1 Year	3 Year	5 Year
S&P 500 Index	3.01%	9.06%	31.48%	31.48%	15.25%	11.68%
MSCI USA Extended ESG Focus Index	3.10%	9.66%	32.52%	32.52%	15.68%	N/A
S&P 400 Mid Cap Index	2.81%	7.05%	26.17%	26.17%	9.23%	9.01%
S&P 600 Small Cap Index	2.99%	8.20%	22.74%	22.74%	8.30%	9.50%
S&P 500/Citi Growth Index	2.93%	8.32%	31.13%	31.13%	18.64%	13.50%
S&P 500/Citi Value Index	3.11%	9.92%	31.92%	31.92%	11.46%	9.51%

### MTD S&P 500 Sector Returns



### S&P 500 Sector Returns

Sector	MTD	QTD	YTD	1 Year	3 Year	5 Year	% of S&P 500
Consumer Discretionary	2.80%	4.47%	27.94%	27.94%	16.61%	13.11%	10.21%
Consumer Staples	2.37%	3.51%	27.61%	27.61%	9.87%	8.30%	7.88%
Energy	6.03%	5.49%	11.81%	11.81%	-3.21%	-1.85%	4.21%
Financials	2.66%	10.44%	32.09%	32.09%	11.94%	11.13%	12.58%
Healthcare	3.59%	14.37%	20.82%	20.82%	16.22%	10.31%	13.90%
Industrials	-0.09%	5.50%	29.32%	29.32%	10.69%	9.45%	9.07%
Information Technology	4.49%	14.40%	50.29%	50.29%	27.63%	20.19%	22.99%
Materials	3.05%	6.38%	24.58%	24.58%	9.58%	7.06%	2.62%
Real Estate	1.31%	-0.54%	29.01%	29.01%	11.81%	7.43%	2.85%
Communication Services*	1.98%	9.00%	32.69%	32.69%	4.65%	7.91%	10.49%
Utilities	3.44%	0.80%	26.40%	26.40%	13.82%	10.29%	3.35%

\*The S&P 500 Communication Services Sector was reclassified from the Telecommunications Sector on September 21st, 2018

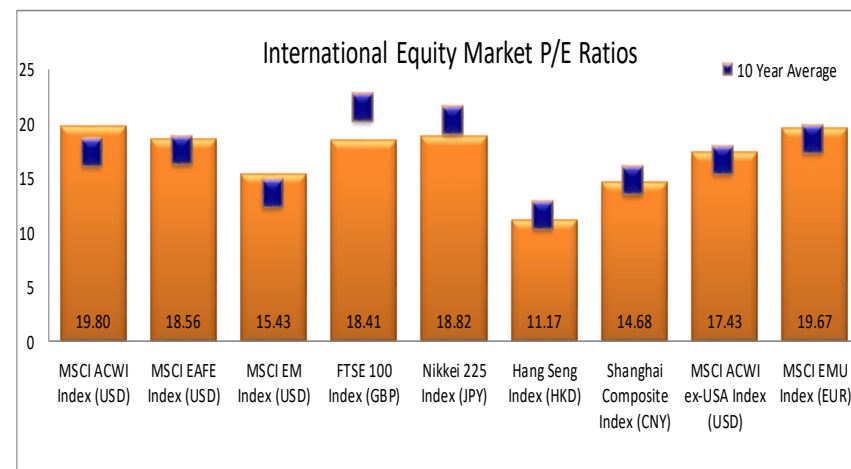
### International Equity

International equities finished 2019 firmly in positive territory with both Emerging Markets and Developed Markets posting strong returns. During the period Emerging Markets, as measured by the MSCI EM Index rose sharply, climbing +7.35% during the month. Developed Markets also performed well, rising +3.27% during the month. Both indices outperformed the S&P 500, which rose +3.01% during December, thanks in part to a weaker US Dollar and the announcement that Presidents Trump and Xi will sign a Phase 1 trade deal on January 15<sup>th</sup>. For the year, International returns were strong across the board, with Developed Markets returning +22.77% and Emerging Markets returning +18.63% during the period. While Emerging Markets lagged Developed Markets for the year, they had a great quarter, outperforming Developed Markets by +3.51% during the period.

Environmental, Social, and Governance (ESG) had another strong showing, with ESG indices outperforming their non-ESG counterparts. The MSCI EAFE Ext. ESG Focus Index returned +3.35% during December, +8.39% during the quarter, and +23.49% for the year, outperforming the broad MSCI EAFE Index over all periods. The same can be said for the MSCI EM Ext. ESG Focus Index, which returned +7.44%, +12.05%, and +19.48%, respectively during the same periods, outperforming the MSCI EM Index during all periods.

From a regional and country standpoint, UK equities, as measured by the FTSE 100 Index rose +2.78% in GBP terms, while Hong Kong equities rallied with Emerging Markets, as the Hang Seng Index rose +7.02% in HKD terms. Japanese equities, as measured by the Nikkei 225 Index, rose +1.59% in JPY terms, as economic data remained mixed.

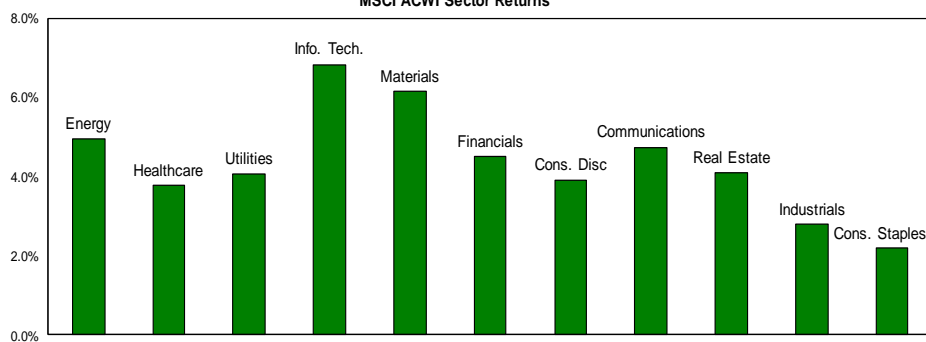
Looking ahead, after a decade of underperformance against US equities, both Developed and Emerging Markets equities have a lot of positives on their side. International markets remain attractive on a relative valuation basis, and may get an additional tailwind from a falling US Dollar in the new decade. Signs of mean reversion and a reversal in asset flows could prove a tailwind in 2020.



### International Equity Returns

Name	MTD	QTD	YTD	1 Year	3 Year	5 Year
MSCI ACWI Index (USD)	3.54%	9.05%	27.30%	27.30%	13.05%	9.02%
MSCI EAFE Index (USD)	3.27%	8.23%	22.77%	22.77%	10.18%	6.27%
MSCI EAFE Ext. ESG Focus Index (USD)	3.35%	8.39%	23.49%	23.49%	10.18%	N/A
MSCI EM Index (USD)	7.35%	11.74%	18.63%	18.63%	11.89%	5.98%
MSCI EM Ext. ESG Focus Index (USD)	7.44%	12.05%	19.48%	19.48%	12.20%	N/A
FTSE 100 Index (GBP)	2.78%	2.69%	17.22%	17.22%	6.18%	7.07%
Nikkei 225 Index (JPY)	1.69%	8.88%	20.69%	20.69%	9.52%	8.34%
Hang Seng Index (HKD)	7.02%	8.35%	13.01%	13.01%	12.60%	7.42%
Shanghai Composite Index (CNY)	6.21%	5.01%	25.30%	25.30%	1.73%	0.93%
MSCI ACWI ex-USA Index (USD)	4.32%	8.95%	22.14%	22.14%	10.42%	6.06%
MSCI EMU Index (EUR)	1.16%	5.14%	26.64%	26.64%	8.11%	8.12%

### MSCI ACWI Sector Returns



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

Sector	MTD	QTD	YTD	1 Year	3 Year	5 Year	% of ACWI
Energy	4.95%	6.68%	15.83%	15.83%	7.98%	5.56%	11.12%
Healthcare	3.78%	12.54%	28.48%	28.48%	12.91%	6.00%	5.90%
Utility	4.08%	2.41%	22.29%	22.29%	12.93%	7.32%	5.77%
Information Technology	6.83%	15.36%	41.13%	41.13%	20.85%	14.22%	8.08%
Materials	6.14%	10.76%	19.22%	19.22%	10.13%	6.61%	6.66%
Financials	4.49%	8.16%	17.91%	17.91%	7.72%	4.25%	20.53%
Consumer Discretionary	3.92%	11.39%	28.16%	28.16%	9.76%	5.57%	11.46%
Communication Services*	4.74%	7.02%	12.52%	12.52%	4.70%	1.31%	6.83%
Real Estate**	4.10%	7.36%	17.52%	17.52%	9.80%	N/A	3.44%
Industrials	2.79%	9.63%	24.40%	24.40%	11.20%	7.28%	10.73%
Consumer Staples	2.19%	1.89%	17.96%	17.96%	9.42%	6.35%	9.49%

\*The MSCI ACWI Ex U.S. Communication Services Sector was reclassified on November 30th, 2018 \*\*The MSCI ACWI Ex. USA Real Estate Sector was developed on August 31st, 2016

### Fixed Income

The Federal Reserve's December meeting came and went without much fanfare. Expectations are that rates will hold steady in 2020, after being lowered three times in 2019. The FOMC views the reductions as a mid-cycle adjustment that will support continued economic strength and expansion, while of course, reserving the right to react to changes in economic conditions. The December dot plot chart of member's future rate projections were muted (4 of 17 members expecting a rate increase in 2020) compared to the September version (9 of 17 members expecting a rate increase in 2020).

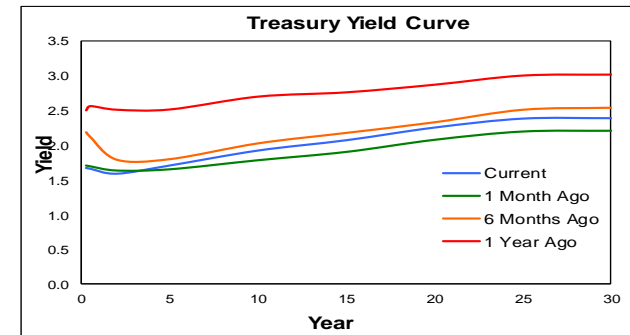
The three rate cuts that Jerome Powell's Federal Reserve approved in 2019 helped fuel the bond market rally that provided exceptional performance over the past twelve months. Performance was driven by portfolio risk factors-Duration and Credit. The more risk in your portfolio in 2019, the higher your return. High quality Government and Municipal bond indices returned 6-7%, while Investment Grade, High Yield, and Emerging Markets indices returned 13-14%. The Green Bond index also had a strong year, supported by declining global yields, a 7+ duration, and high quality holdings. This kind of performance is certainly unusual from fixed income, which is typically expected to be a less exciting portfolio allocation.

Investment Grade corporate bonds saw their yield spread (the additional yield they offer over a similar maturity Treasury bond) shrink throughout 2019, ending the year very near their lowest level in a decade. High Yield spreads also contracted during the year, adding to performance. This spread contraction boosted credit returns in 2019, but due to current levels being so low, we are unlikely to see a similar benefit in 2020.

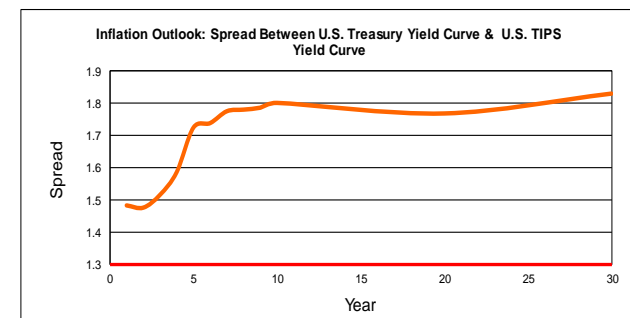
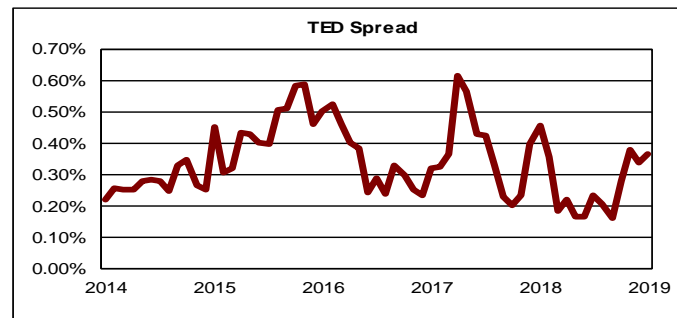
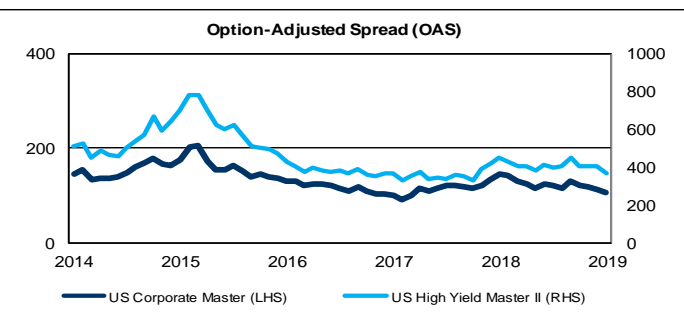
There was a yield-curve scare in 2019. As short-term yields exceeded long-term yields, the yield curve became inverted. An inversion is typically followed by a recession. As the Fed cut rates, allowing short-term rates to fall below long-term rates, the curve inversion was eliminated, and panic over a coming recession dissipated. Ironically, the pattern observed is similar to most pre-recession inversions. The exception this time around is the Fed's fondness for its newfound powers of QE and balance sheet growth. The Fed is currently intervening in the overnight repurchase market, pushing liquidity into the financial system and expanding its balance sheet. Likely not unrelated to the year-end market rally.

Central Bank Activity				
Name	Current	1 Month Ago	6 Months Ago	1 Year Ago
Fed Funds Rate	1.75%	1.75%	2.50%	2.50%
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	0.75%	0.75%	0.75%	0.75%

Fixed Income Returns				
Name	MTD	QTD	YTD	1 Year
Bloomberg Barclays US Government Index	-0.55%	-0.77%	6.83%	6.83%
Bloomberg Barclays US Agg Index	-0.07%	0.18%	8.72%	8.72%
Bloomberg Barclays US Corporate Index	0.32%	1.18%	14.54%	14.54%
Bloomberg Barclays US Corporate High Yield Index	2.00%	2.61%	14.32%	14.32%
Bloomberg Barclays EM USD Agg Index	1.52%	2.09%	13.11%	13.11%
Bloomberg Barclays Global Agg Treasuries USD Index	-0.47%	-1.24%	7.25%	7.25%
Bloomberg Barclays Municipal Index	0.31%	0.74%	7.54%	7.54%
S&P Green Bond Select Index Total Return	-0.70%	-1.55%	7.40%	7.40%



U.S. Treasury Yields									
Period	3 Month	6 Month	2 Year	5 Year	10 Year	15 Year	20 Year	25 Year	30 Year
Current	1.68%	1.66%	1.59%	1.71%	1.93%	2.07%	2.26%	2.38%	2.39%
1 Month Ago	1.71%	1.70%	1.64%	1.66%	1.79%	1.90%	2.08%	2.20%	2.21%
6 Months Ago	2.19%	2.12%	1.79%	1.80%	2.03%	2.18%	2.34%	2.52%	2.55%
1 Year Ago	2.50%	2.57%	2.51%	2.52%	2.70%	2.76%	2.87%	3.01%	3.02%



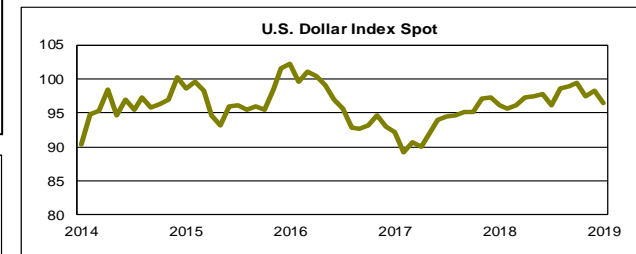
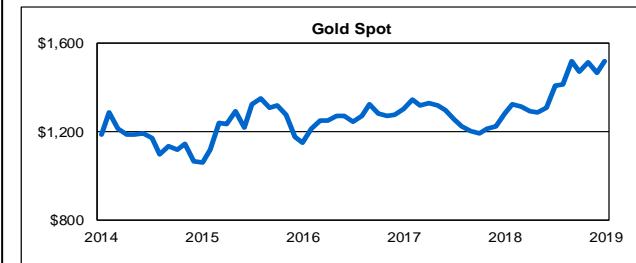
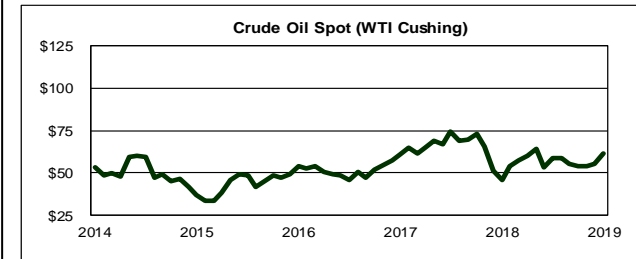
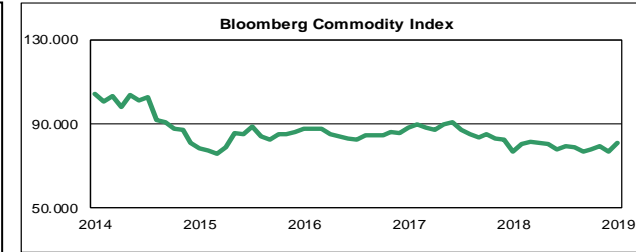
### Alternative Investments

Alternative investments were helped by a weaker US Dollar, as the DXY Index fell -1.92% to close at 96.39 for the month of December. The Dollar's monthly close represented the lowest closing level since June 2019, and could be a sign of further weakness to come. Overall, the Dollar was essentially flat on the year, up a scant +0.22%. The Dollar's weakness buoyed Gold, with the shiny metal climbing nearly \$54/ounce, or +3.64% during the month, to close the year at \$1,517/ounce. For the year, lower interest rates, a flat US Dollar, and heightened geopolitics were all positives for the precious metal, with Gold up +18.31% on the year.

Weakness in the Dollar was supportive of higher commodity prices, with the Bloomberg Commodity Index gaining +4.90% during the period. Commodities were helped by higher oil prices, as West Texas Intermediate (WTI) crude oil prices rose nearly \$6/barrel to close at \$61/barrel, up +10.68% on the month. December's closing price on WTI represented the highest level since April. WTI finished the year up +34.46% after falling sharply in December 2018's market selloff. Real Estate, as measured by the FTSE NAREIT All-REIT Index, was largely unchanged on the month, gaining only +0.08%; however, Real Estate was a top performing alternative in 2019, gaining +22.95%.

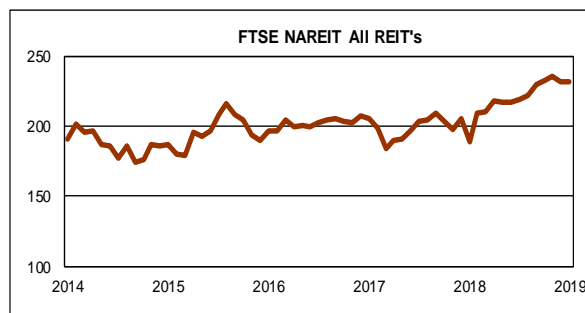
On the currency front, the Canadian Dollar strengthened to \$1.30 CAD/USD in December, from \$1.33 CAD/USD in November, and \$1.36 CAD/USD a year ago. The Loonie's strength was likely due to better economic growth, a resolution to the USMCA (new NAFTA), and higher energy prices. Elsewhere, the Japanese Yen was largely unchanged on the month and year, ending at 108.61 JPY/USD compared to 109.69 JPY/USD a year ago. The Euro also weakened on the year from \$1.15 USD/EUR to \$1.12 USD/EUR, but was stronger during the month. Perhaps the most notable currency move of the year was in the UK Pound, which was very volatile, falling sharply during the height of the Brexit saga, only to rebound to \$1.33 USD/GBP to end the year.

Hedge Fund strategies posted another year of lackluster returns, highlighting their difficulties over the decade, underperforming nearly every major asset class. It remains to be seen whether or not these strategies will act as an effective "hedge" during the next bout of market volatility.



Hedge Funds						
Name	MTD	QTD	YTD	1 Year	3 Year	5 Year
Global Hedge	1.27%	2.62%	8.68%	8.68%	2.42%	1.20%
Convertible Arbitrage	0.71%	2.19%	5.53%	5.53%	3.82%	3.40%
Equity Hedge (L/S)	1.22%	2.64%	10.71%	10.71%	3.31%	1.52%
Equity Market Neutral	-0.82%	-0.61%	-1.87%	-1.87%	-1.12%	-0.65%
Event Driven	2.06%	5.48%	9.99%	9.99%	1.13%	1.35%
Macro	0.57%	0.06%	5.12%	5.12%	1.40%	-0.16%
Merger Arbitrage	0.61%	1.95%	0.22%	0.22%	0.16%	2.58%
Relative Value Arbitrage	0.99%	1.62%	6.54%	6.54%	3.00%	1.36%
Absolute Return	0.61%	1.55%	4.34%	4.34%	2.39%	2.06%

Note: Price Return, Returns as of 12/30/19



Spot Rates					
Description	Current	1 Month Ago	3 Months Ago	6 Months Ago	1 Year Ago
CAD / USD	1.30	1.33	1.32	1.31	1.36
JPY / USD	108.61	109.49	108.08	107.85	109.69
USD / GBP	1.33	1.29	1.23	1.27	1.28
USD / EUR	1.12	1.10	1.09	1.14	1.15

**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, S5RLST)** – The S&P 500 is broken down into eleven sub-indices according to the Global Industry Classification Standard (GICS) sectors. These eleven sectors include Consumer Discretionary, Consumer Staples, Energy, Financials, Health Care, Industrials, Information Technology, Materials, Communication Services, Utilities, and Real Estate.

**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.

**MSCI USA Extended ESG Focus Index**- The Index is designed to maximize exposure to positive environmental, social and governance (ESG) factors while exhibiting risk and return characteristics similar to those of the MSCI USA Index.

**MSCI EAFE Extended ESG Focus Index**- The Index is designed to maximize exposure to positive environmental, social and governance (ESG) factors while exhibiting risk and return characteristics similar to those of the MSCI EAFE Index.

**MSCI Emerging Markets Extended ESG Focus Index**- The Index is designed to maximize exposure to positive environmental, social and governance (ESG) factors while exhibiting risk and return characteristics similar to those of the MSCI Emerging Markets Index.

**MSCI ACWI ex USA Index (MXWDU)** – The MSCI ACWI ex USA Index is a free-float weighted index.

**MSCI ACWI ex USA Sector Indices**– The MSCI ACWI ex USA Index is broken down into eleven sub-indices according to the Global Industry Classification Standard (GICS) sectors. These eleven sectors include Consumer Discretionary, Consumer Staples, Energy, Financials, Health Care, Industrials, Information Technology, Materials, Communication Services, Utilities, and Real Estate.

**MSCI EMU Index (MXEM)** – The MSCI EMU (European Economic and Monetary Union) Index is a free-float weighted equity index.

**Bloomberg Barclays Global Treasuries USD Hedged Index (LGTTRUHQ)**– 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 U.S. Government Index**- Bloomberg Barclays US Government Bond Index is comprised 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 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. Aggregate Bond Index (LBSTRUU)**- 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 (COA0))** – The Bloomberg Barclays US Corporate High Yield Bond Index measures the USD-denominated, high yield, below-investment grade fixed-rate corporate bond market.

**S&P Green Bond Select Index (SPGRSLT)**- The S&P Green Bond Select Index is a market value-weighted subset of the S&P Green Bond Index that seeks to measure the performance of green-labeled bonds issued globally, subject to stringent financial and extra-financial eligibility criteria.

**ML U.S. Corporate Index (COA0)** – 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.

**Bloomberg Commodity Index (BCOM)** – Bloomberg Commodity Index (BCOM) is calculated on an excess return basis and reflects commodity futures price movements. The index rebalances annually weighted 2/3 by trading volume and 1/3 by world production and weight-caps are applied at the commodity, sector and group level for diversification. Roll period typically occurs from 6th-10th business day based on the roll schedule.

**U.S. Dollar Index (DXY)** – The U.S. Dollar Index (USDIX) indicates the general int'l value of the USD. The USDIX 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

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