

A decorative geometric pattern of overlapping triangles in blue and gold is overlaid on the left side of the image. A white triangle is positioned to the left of the main title text.

# **PERSPECTIVES THAT DRIVE ENTERPRISE SUCCESS**

NOVEMBER 2018  
Capital Markets Update



# Market commentary

## U.S. ECONOMICS

- Non-farm payrolls added 155,000 jobs in November, missing expectations of 198,000, and the unemployment rate held steady at 3.7%. The labor force participation rate remained at 62.9%, materially below the 66.0% level which prevailed from 2004 through 2008.
- Average hourly earnings rose 0.2% in November from the previous month, which matched the October increase of 0.2%, and left the year-over-year figure unchanged at 3.1%.
- The Institute for Supply Management (ISM) Manufacturing PMI posted a reading of 59.3 in November, well above expectations of 57.5. The ISM Services PMI rose to 60.7, beating estimates of 59.0. Both indexes remain well above historical averages.

## U.S. EQUITIES

- The S&P 500 Index gained 2.0% in November, weathering a sustained pick-up in volatility. The 30-day implied volatility of the index ended the month at 15.9, above its 50-day moving average of 15.3.
- The CBOE VIX index remained elevated. The VIX ended the month at 18.1, above the year-to-date average of 15.9.
- S&P 500 companies posted aggregate earnings and sales growth of 25.9% and 9.3% YoY in Q3, respectively. According to FactSet, analysts expect Q4 earnings and sales growth of 13.6% and 6.7% YoY, respectively. Of the 97 companies providing EPS guidance, 69% have been negative, in-line with the 5-year average.

## U.S. FIXED INCOME

- Yield curve flattening resumed in November. The 2-10 spread fell from 28 bps to 20 bps – it's lowest level since August, as long-term yields fell slightly further than short-term yields.
- Federal Reserve Chairman Jerome Powell commented that with rates "just below neutral," further rate hikes will be increasingly data-dependent, which the market interpreted as more dovish in tone.
- Market expectations for future Fed rate hikes declined significantly, influenced by Powell's dovish comments referenced above. While the market is still expecting a hike in December, it is no longer pricing in any additional hikes in 2019.

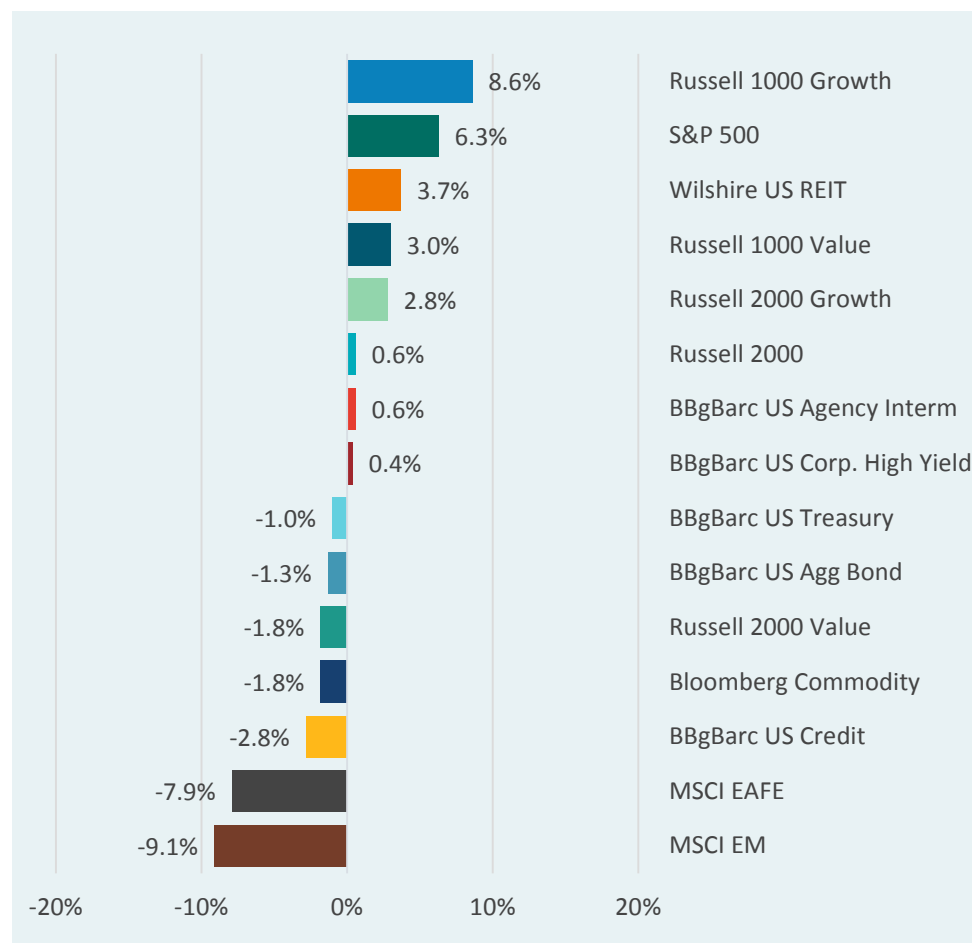
## INTERNATIONAL MARKETS

- At the G20 summit in Buenos Aires, Presidents Trump and Xi agreed to postpone tariff rate hikes for 90 days, which the market viewed as broadly positive. If no trade deal is closed before March 1<sup>st</sup>, U.S. tariffs on Chinese goods may still increase from 10% to 25%.
- The Italian composite PMI for November was unchanged at 49.3, indicating economic contraction over the past two months, and underscoring the importance of a budget resolution.
- The MSCI Emerging Markets Index outperformed, gaining 4.1% and benefitting from slight currency tailwinds. Meanwhile, the MSCI ACWI Index gained 1.5% and the MSCI EAFE Index fell 0.1%.



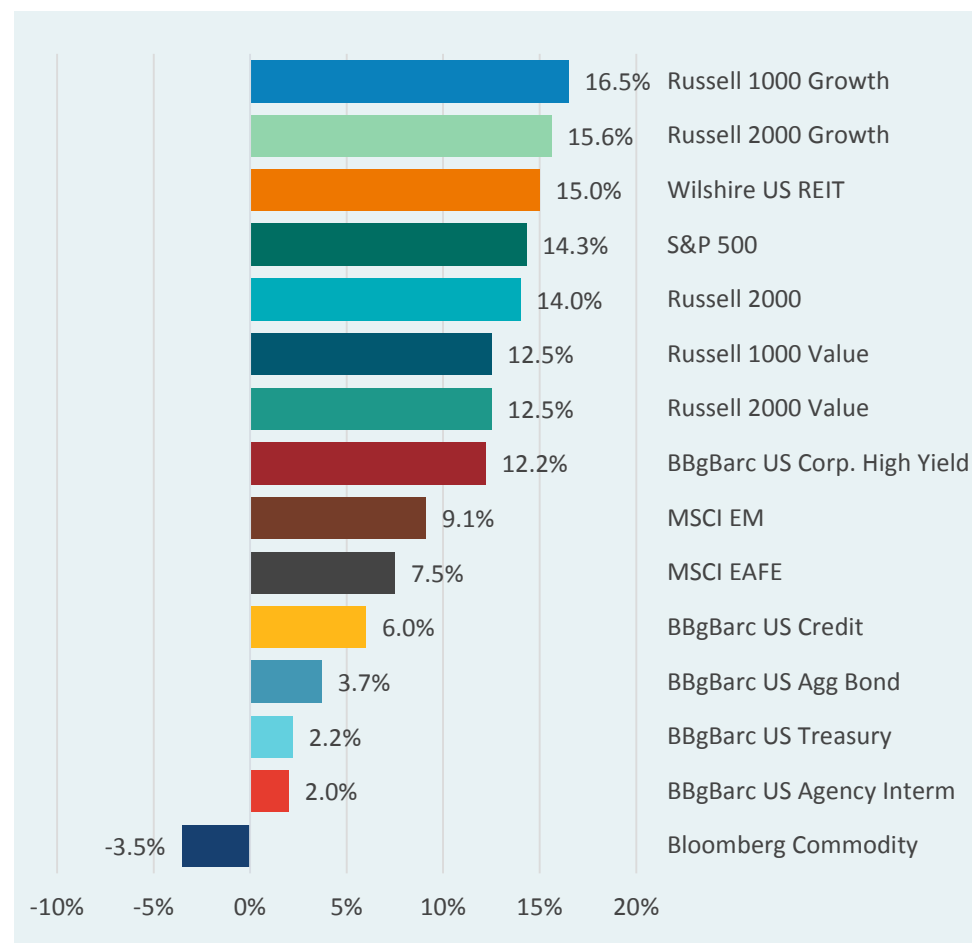
# Major asset class returns

ONE YEAR ENDING NOVEMBER



Source: Morningstar, as of 11/30/18

TEN YEARS ENDING NOVEMBER



Source: Morningstar, as of 11/30/18



# U.S. large cap equities

- Large cap equities recovered modestly in November, with the S&P 500 gaining 2.0%. The index ended the month at 2760, 5.8% below the high watermark reached in September.
- The healthcare sector (+7.1%) materially outperformed, helping to buoy the overall S&P 500 Index. Out of 64 sub-sector constituents, 86% posted price gains in November. The House of Representatives flipping to a Democratic majority in the mid-term elections likely supported the outperformance.
- Only three sectors declined, including Information Technology (-1.9%), Communication Services (-0.6%), and Energy (-1.6%). Concerns related to data privacy, continued uncertainty related to U.S.-China relations, and crude oil inventory builds likely weighed on these sectors.
- Volatility of the S&P 500 Index continued to climb in November following a spike in October. Trailing annualized 30-day volatility peaked mid-month at 23.6% and ended November at 21.4%.

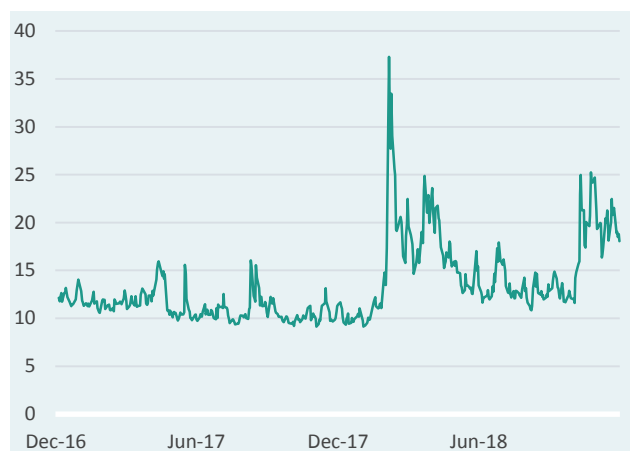
The tech sector underperformed in November

**S&P 500 PRICE INDEX**



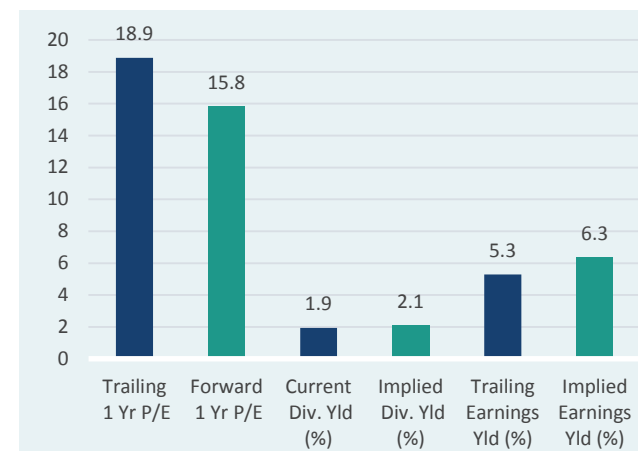
Source: Bloomberg, as of 11/30/18

**IMPLIED VOLATILITY (VIX INDEX)**



Source: CBOE, as of 11/30/18

**S&P 500 VALUATION SNAPSHOT**



Source: Bloomberg, as of 11/30/18

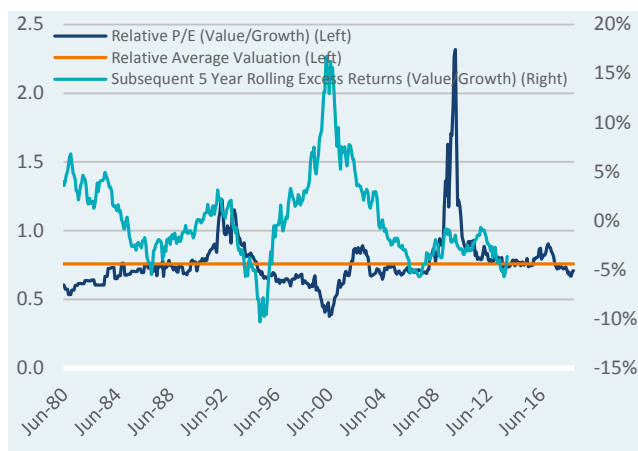


# Domestic equity size and style

- Value outperformed growth in November in both large- and small-cap equities. The Russell 1000 Value Index (3.0%) outperformed the Russell 1000 Growth Index (1.1%), and the Russell 2000 Value Index (1.6%) edged out the Russell 2000 Growth Index (1.6%) by 6 bps.
- Large cap stocks outperformed small cap stocks over the period. The Russell 1000 Index gained 2.0% versus the Russell 2000 Index return of 1.6%.
- The trailing 30-day realized volatility spread between the Russell 3000 Growth Index and the Russell 3000 Value index reached 10.6% on November 30<sup>th</sup>, the highest level since May, 2002.
- The relative P/E ratio of the Russell 1000 Value and Growth Indices increased for the second straight month. The ratio rebounded from a 13-year low of 0.67 in September to 0.71 in November, still beneath the five-year average of 0.78.

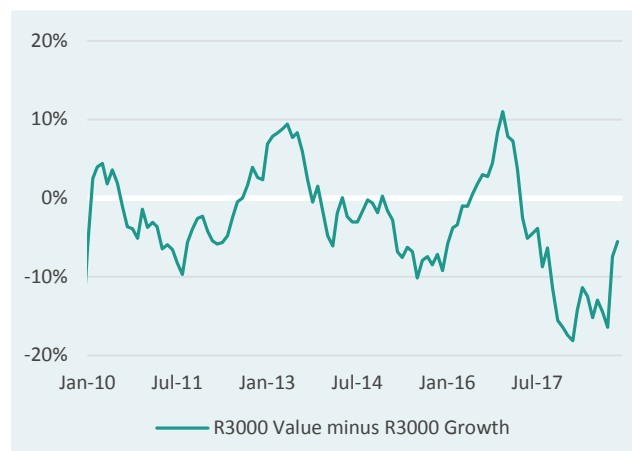
Value  
outperformance  
continued

VALUE VS. GROWTH RELATIVE VALUATIONS



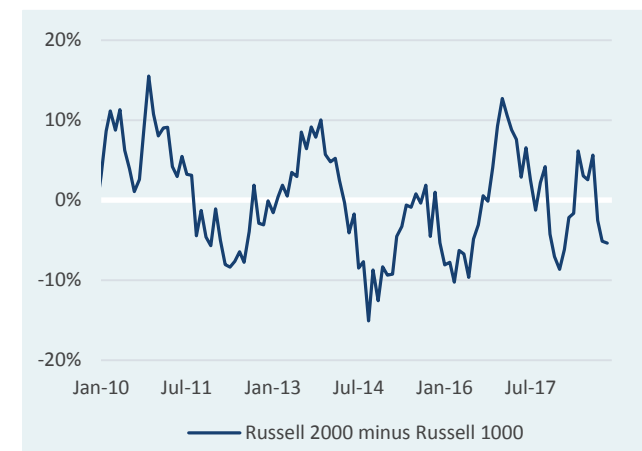
Source: Russell, Bloomberg, as of 11/30/18

VALUE VS. GROWTH 1-YR ROLLING RELATIVE PERFORMANCE



Source: FTSE, as of 11/30/18

SMALL VS. LARGE 1-YR ROLLING RELATIVE PERFORMANCE



Source: FTSE, as of 11/30/18



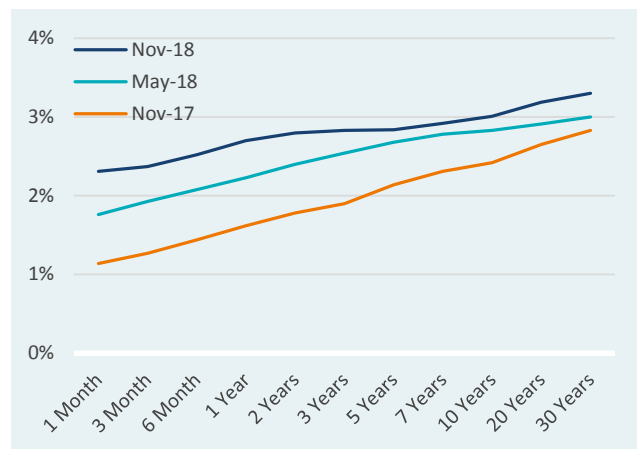
# Fixed income

- The U.S. Treasury yield curve markedly flattened in November. The spread between the 10- and 2-year Treasury yields fell from 28 bps to 20bps, and fell as low as 12 bps in the first few days of December.
- At month-end, the 3-5 yield curve inverted, stoking some analysts' concerns regarding the economic outlook. Historically, most recessions have followed yield curve inversions, although the time frame between inversion and recession has varied significantly.

- U.S. corporate high yield spreads widened notably in November. Starting the month at 3.7%, spreads expanded to 4.2%, well above the 50-day moving average of 3.6%.
- Breakeven inflation rates declined in November, continuing a downward trend that started in April. The 5- and 10-year breakeven inflation rates dropped 14 and 9 bps, respectively, in part due to falling oil prices.

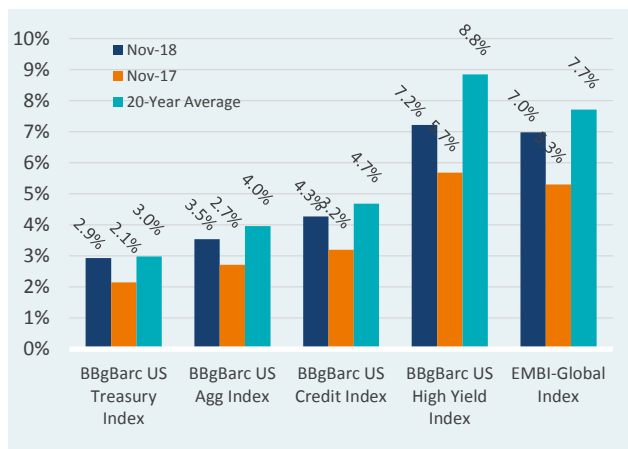
Yield curve flattening resumed in November

U.S. TREASURY YIELD CURVE



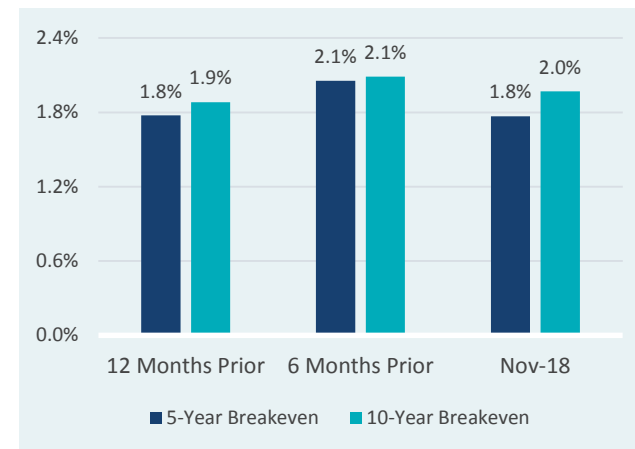
Source: Bloomberg, as of 11/30/18

NOMINAL YIELDS



Source: Morningstar, as of 11/30/18

BREAKEVEN INFLATION RATES



Source: Bloomberg, as of 11/30/18



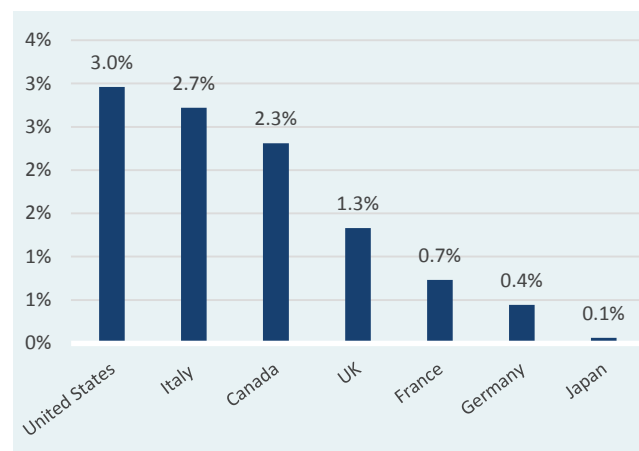
# Global markets

- In the interest of developing a trade agreement, Chinese and American officials agreed to halt any additional tariff rate hikes until March 1st. Beijing expressed a willingness to buy a “very substantial” amount of U.S. agricultural, energy, and industrial goods, and to consider changes relating to forced technology transfer and intellectual property protections.
- Italian officials softened their tone regarding the budget plan, likely providing relief for Italian debt, which saw 10-year yields decline 22 bps to 3.2%.

- Theresa May’s Brexit deal won endorsement from all 27 remaining members of the European Union. Next, May will have to usher the deal through the British parliament. The vote, scheduled for December 11<sup>th</sup>, is widely-expected to fail, fueling speculation that EU negotiations might not be over yet.
- Violent protests intensified in Paris as the largely working-class Gilets Jaunes or Yellow Vests movement sought redress for rising fuel prices and policy viewed as favoring the wealthy. French equities (CAC 40 -1.7%) underperformed the Euro Stoxx 50 (-0.7%).

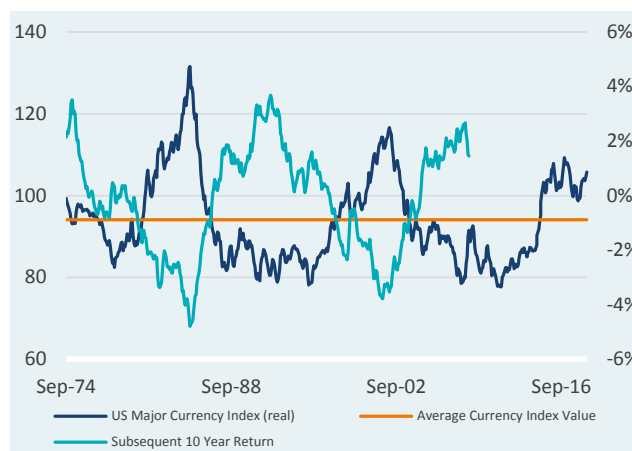
European geopolitical issues broadened

GLOBAL SOVEREIGN 10-YEAR YIELDS



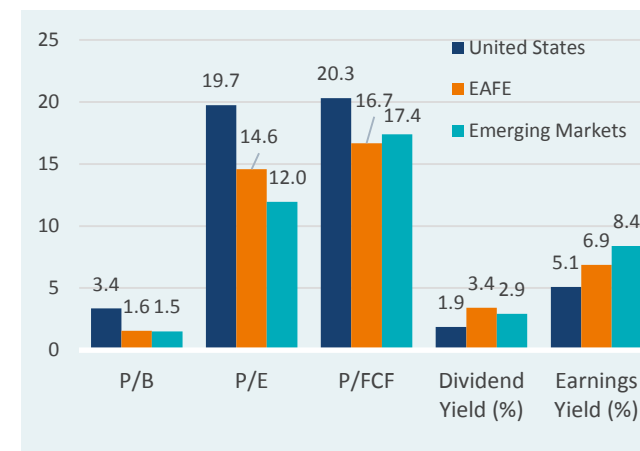
Source: Bloomberg, as of 11/30/18

U.S. DOLLAR MAJOR CURRENCY INDEX



Source: Federal Reserve, as of 11/30/18

MSCI VALUATION METRICS (3-MONTH AVG)



Source: Bloomberg, as of 11/30/18



# Commodities

- The Bloomberg Commodity Index fell 0.6% in November. The energy sub-component, which targets a 30.4% weight in the overall index, underperformed, and led the decline.
- In its most recent meeting in Vienna, OPEC and its oil-producing allies reached an agreement to cut crude oil production by 1.2 million barrels per day. Additionally, Qatar announced its departure from the cartel, citing an interest to concentrate on gas production, and shrugging off critics who claimed the move was political.

- WTI crude fell from \$65.44 to \$50.93 per barrel, its lowest level since October 2017. Strong gains in natural gas prices (+39.7%), which at month-end represented 13.8% of the overall index and 40.0% of the energy sub-index, helped to pare losses.
- The WTI-WCS spread, which represents the discount on Canadian heavy crude oil relative to WTI, declined from \$43.13 to \$29.00, still well above the five-year average of \$18.32. Alberta officials' decision to cut production by 325,000 barrels per day in Q1 2019 likely contributed to the decline in the spread.

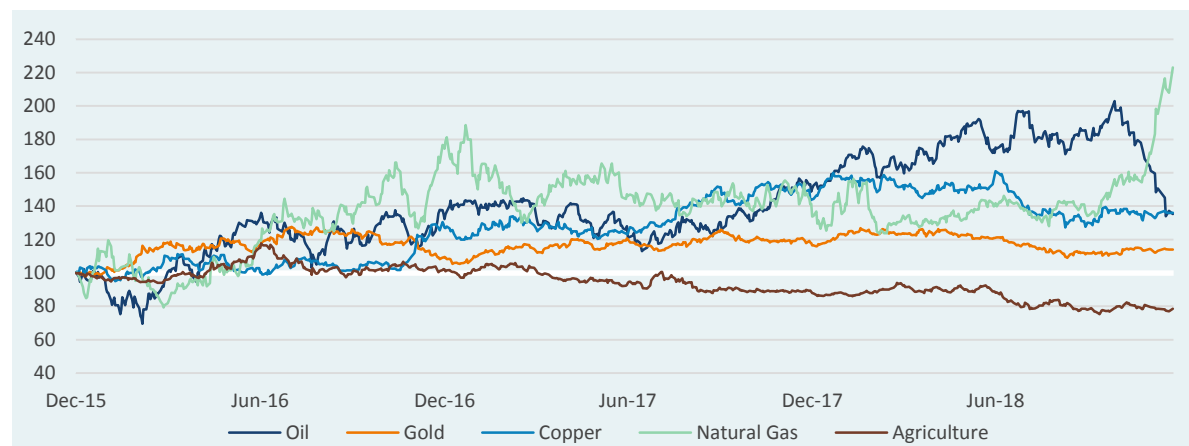
Global crude sell-off induced producers to curb supply

## INDEX AND SECTOR PERFORMANCE

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Bloomberg Commodity	(0.6)	(2.7)	(4.7)	(1.8)	1.6	(7.3)	(3.5)
Bloomberg Agriculture	0.4	2.6	(8.6)	(10.0)	(6.3)	(9.2)	(2.1)
Bloomberg Energy	(3.3)	(8.7)	7.4	11.6	2.3	(14.2)	(12.9)
Bloomberg Grains	2.1	2.0	(4.3)	(6.2)	(8.0)	(10.9)	(3.6)
Bloomberg Industrial Metals	1.9	(3.8)	(15.1)	(7.4)	10.8	(1.2)	1.1
Bloomberg Livestock	2.3	1.6	(0.8)	(1.5)	1.2	(2.4)	(3.2)
Bloomberg Petroleum	(20.7)	(28.3)	(11.0)	(5.5)	(0.7)	(16.5)	(8.0)
Bloomberg Precious Metals	0.2	1.0	(9.8)	(7.0)	2.8	(2.7)	3.4
Bloomberg Softs	(3.5)	7.5	(17.1)	(15.8)	(6.4)	(8.4)	(1.9)

Source: Morningstar, as of 11/30/18

## COMMODITY PERFORMANCE



Source: Bloomberg, as of 11/30/18



# Appendix



# Periodic table of returns

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	YTD	5-Year	10-Year
Large Cap Growth	38.7	66.4	31.8	14.0	25.9	56.3	26.0	34.5	32.6	39.8	5.2	79.0	29.1	14.3	18.6	43.3	13.5	13.3	31.7	37.3	7.8	13.0	16.5
Real Estate	27.0	43.1	22.8	8.4	10.3	48.5	22.2	21.4	26.9	16.2	1.4	37.2	26.9	7.8	18.1	38.8	13.2	5.7	21.3	30.2	5.3	10.9	15.6
Large Cap Equity	20.3	33.2	12.2	7.3	6.7	47.3	20.7	20.1	23.5	15.8	-6.5	34.5	24.5	2.6	17.9	34.5	13.0	0.9	17.3	25.0	4.8	9.6	14.5
Small Cap Growth	19.3	27.3	11.6	3.3	1.6	46.0	18.3	14.0	22.2	11.8	-21.4	32.5	19.2	1.5	17.5	33.5	11.8	0.6	12.1	22.2	2.7	8.7	14.0
Cash	16.2	26.5	7.0	2.8	1.0	39.2	16.5	7.5	18.4	11.6	-25.9	28.4	16.8	0.4	16.4	33.1	6.0	0.0	11.8	21.7	1.7	8.2	12.5
Large Cap Value	15.6	24.3	6.0	2.5	-5.9	30.0	14.5	7.1	16.6	10.9	-28.9	27.2	16.7	0.1	16.3	32.5	5.6	-0.4	11.3	17.1	1.5	7.5	12.5
Small Cap Equity	8.7	21.3	4.1	-2.4	-6.0	29.9	14.3	6.3	15.5	10.3	-33.8	23.3	16.1	-2.1	15.3	23.3	4.9	-0.8	11.2	14.6	1.0	6.7	9.1
Small Cap Value	4.9	20.9	-3.0	-5.6	-11.4	29.7	12.9	5.3	15.1	7.0	-35.6	20.6	15.5	-2.9	14.6	12.1	4.2	-1.4	8.0	13.7	-0.9	4.0	7.7
Hedge Funds of Funds	1.2	13.2	-7.3	-9.1	-15.5	25.2	11.4	4.7	13.3	7.0	-36.8	19.7	13.1	-4.2	11.5	11.0	3.4	-2.5	7.1	7.8	-1.6	2.2	7.5
US Bonds	-2.5	11.4	-7.8	-9.2	-15.7	23.9	9.1	4.6	10.4	5.8	-37.6	18.9	10.2	-5.5	10.5	9.0	2.8	-3.8	5.7	7.7	-1.8	2.0	6.4
60/40 Global Portfolio	-5.1	7.3	-14.0	-12.4	-20.5	11.6	6.9	4.6	9.1	4.4	-38.4	11.5	8.2	-5.7	4.8	0.1	0.0	-4.4	2.6	5.1	-2.7	1.9	3.7
Commodities	-6.5	4.8	-22.4	-19.5	-21.7	9.0	6.3	4.2	4.8	-0.2	-38.5	5.9	6.5	-11.7	4.2	-2.0	-1.8	-7.5	1.0	3.5	-4.7	1.8	3.2
International Equity	-25.3	-0.8	-22.4	-20.4	-27.9	4.1	4.3	3.2	4.3	-1.6	-43.1	0.2	5.7	-13.3	0.1	-2.3	-4.5	-14.9	0.5	1.7	-9.4	0.6	0.3
Emerging Markets Equity	-27.0	-1.5	-30.6	-21.2	-30.3	1.0	1.4	2.4	2.1	-9.8	-53.2	-16.9	0.1	-18.2	-1.1	-9.5	-17.0	-24.7	0.3	0.9	-12.2	-7.3	-3.5

Large Cap Equity

Large Cap Value

Large Cap Growth

Small Cap Equity

Small Cap Value

Small Cap Growth

International Equity

Emerging Markets Equity

US Bonds

Cash

Commodities

Real Estate

Hedge Funds of Funds

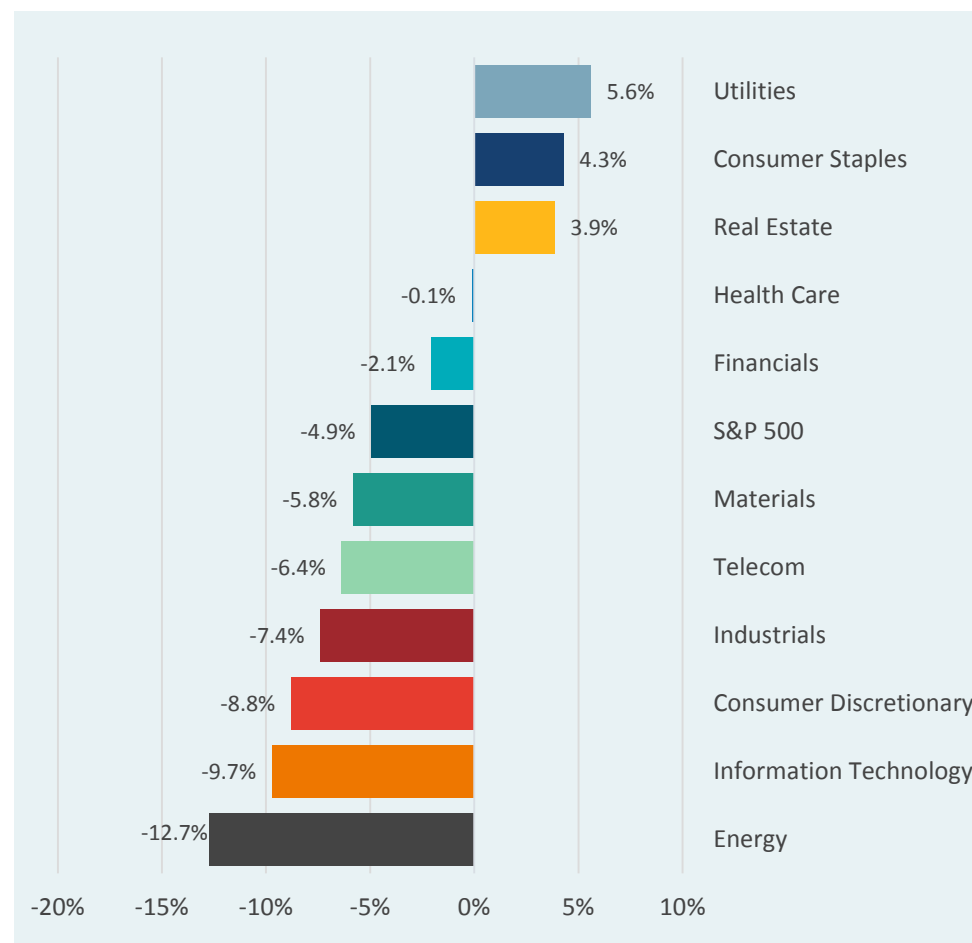
60% MSCI ACWI/40% BBgBarc Global Bond

Source Data: Morningstar, Inc., Hedge Fund Research, Inc. (HFR), National Council of Real Estate Investment Fiduciaries (NCREIF). Indices used: Russell 1000, Russell 1000 Value, Russell 1000 Growth, Russell 2000, Russell 2000 Value, Russell 2000 Growth, MSCI EAFE, MSCI EM, BBgBarc US Aggregate, T-Bill 90 Day, Bloomberg Commodity, NCREIF Property, HFRI FOF, MSCI ACWI, BBgBarc Global Bond. NCREIF Property Index performance data as of 9/30/18.



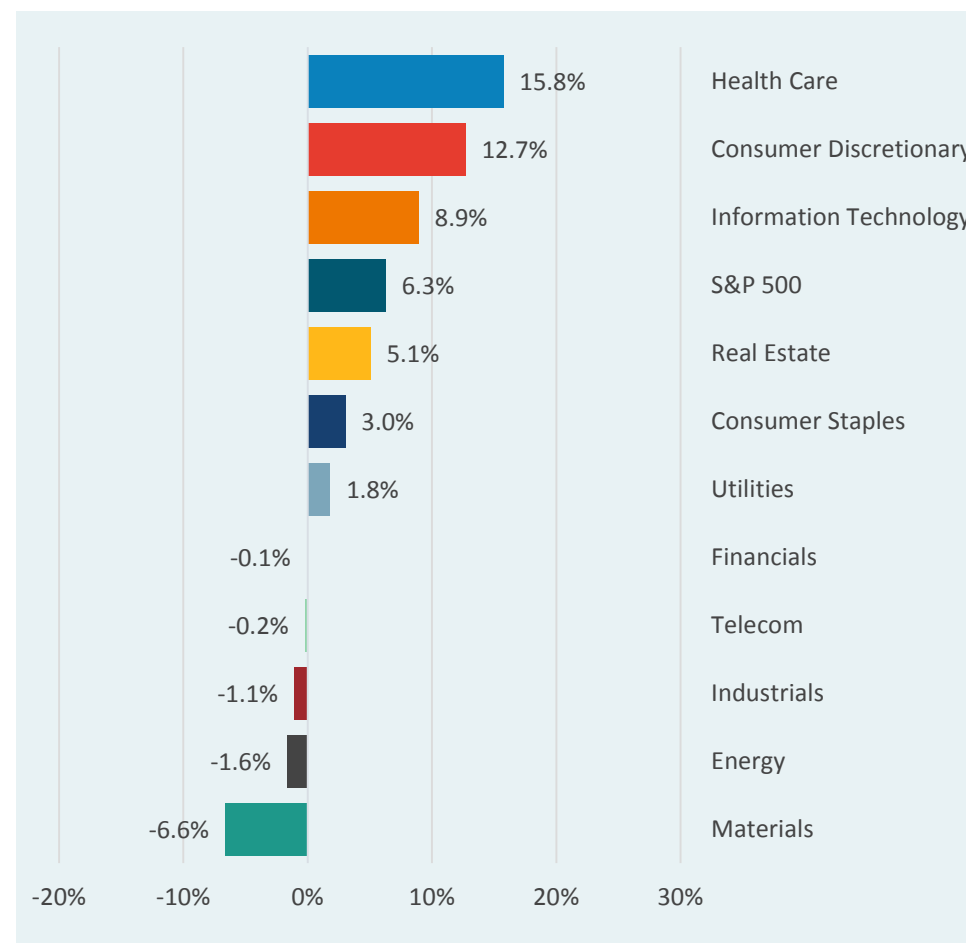
# S&P 500 sector returns

QTD



Source: Morningstar, as of 11/30/18

ONE YEAR ENDING NOVEMBER



Source: Morningstar, as of 11/30/18



# Detailed index returns

## DOMESTIC EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
<b>Core Index</b>							
S&P 500	2.0	(4.9)	5.1	6.3	12.2	11.1	14.3
S&P 500 Equal Weighted	2.8	(4.6)	2.3	3.5	10.9	10.0	16.5
DJ Industrial Average	2.1	(3.0)	5.6	7.6	15.8	12.4	14.1
Russell Top 200	1.9	(4.9)	6.3	7.5	12.8	11.6	14.1
Russell 1000	2.0	(5.2)	4.8	5.9	11.9	10.9	14.5
Russell 2000	1.6	(9.4)	1.0	0.6	10.1	7.5	14.0
Russell 3000	2.0	(5.5)	4.5	5.5	11.8	10.6	14.5
Russell Mid Cap	2.5	(6.1)	1.0	1.9	9.8	9.1	15.7
<b>Style Index</b>							
Russell 1000 Growth	1.1	(8.0)	7.8	8.6	14.0	13.0	16.5
Russell 1000 Value	3.0	(2.3)	1.5	3.0	9.8	8.7	12.5
Russell 2000 Growth	1.6	(11.3)	2.7	2.8	10.0	8.2	15.6
Russell 2000 Value	1.6	(7.5)	(0.9)	(1.8)	10.1	6.7	12.5

## INTERNATIONAL EQUITY

<b>Broad Index</b>							
MSCI ACWI	1.5	(6.1)	(2.6)	(1.0)	8.6	6.2	10.7
MSCI ACWI ex US	0.9	(7.3)	(10.1)	(8.1)	5.4	1.8	7.7
MSCI EAFE	(0.1)	(8.1)	(9.4)	(7.9)	4.1	1.8	7.5
MSCI EM	4.1	(4.9)	(12.2)	(9.1)	9.4	1.9	9.1
MSCI EAFE Small Cap	(0.7)	(10.3)	(12.2)	(9.9)	6.3	4.9	12.0
<b>Style Index</b>							
MSCI EAFE Growth	0.3	(8.9)	(8.4)	(6.9)	4.3	3.0	8.3
MSCI EAFE Value	(0.6)	(7.2)	(10.4)	(9.0)	3.9	0.7	6.6
<b>Regional Index</b>							
MSCI UK	(1.7)	(8.3)	(10.8)	(6.3)	1.6	(0.4)	6.9
MSCI Japan	0.4	(8.1)	(6.6)	(6.0)	5.9	4.7	6.9
MSCI Euro	(0.4)	(8.8)	(12.1)	(12.5)	2.8	0.5	5.9
MSCI EM Asia	5.2	(6.3)	(12.7)	(10.3)	9.5	4.3	11.3
MSCI EM Latin American	(2.2)	1.2	(5.8)	(1.6)	13.5	(2.1)	5.4

## FIXED INCOME

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
<b>Broad Index</b>							
BBgBarc US TIPS	0.5	(1.0)	(1.8)	(0.9)	1.7	1.3	4.1
BBgBarc US Treasury Bills	0.2	0.4	1.7	1.7	1.0	0.6	0.4
BBgBarc US Agg Bond	0.6	(0.2)	(1.8)	(1.3)	1.3	2.0	3.7
<b>Duration</b>							
BBgBarc US Treasury 1-3 Yr	0.4	0.5	0.7	0.8	0.6	0.6	0.9
BBgBarc US Treasury Long	1.9	(1.2)	(6.9)	(5.3)	0.8	4.4	4.5
BBgBarc US Treasury	0.9	0.4	(1.3)	(1.0)	0.6	1.4	2.2
<b>Issuer</b>							
BBgBarc US MBS	0.9	0.3	(0.8)	(0.5)	1.1	2.1	3.1
BBgBarc US Corp. High Yield	(0.9)	(2.4)	0.1	0.4	7.1	4.4	12.2
BBgBarc US Agency Interm	0.5	0.6	0.6	0.6	0.9	1.1	2.0
BBgBarc US Credit	(0.1)	(1.5)	(3.6)	(2.8)	2.4	2.9	6.0

## OTHER

<b>Index</b>							
Bloomberg Commodity	(0.6)	(2.7)	(4.7)	(1.8)	1.6	(7.3)	(3.5)
Wilshire US REIT	4.7	1.6	3.9	3.7	5.8	9.9	15.0
CS Leveraged Loans	(0.8)	(0.8)	3.5	3.9	5.5	3.9	8.1
Alerian MLP	(0.5)	(8.7)	(3.9)	0.4	0.6	(5.1)	11.1
<b>Regional Index</b>							
JPM EMBI Global Div	(0.4)	(2.6)	(5.5)	(4.8)	4.2	4.6	8.8
JPM GBI-EM Global Div	2.8	0.8	(7.4)	(5.5)	4.7	(1.3)	4.3
<b>Hedge Funds</b>							
HFRI Composite	(0.2)	(3.1)	(1.8)	(0.8)	3.6	3.0	5.3
HFRI FOF Composite	0.2	(2.5)	(1.6)	(0.7)	2.0	2.2	3.2
<b>Currency (Spot)</b>							
Euro	(0.1)	(2.5)	(5.7)	(5.0)	2.3	(3.6)	(1.1)
Pound	(0.1)	(2.2)	(5.7)	(5.7)	(5.4)	(4.9)	(1.8)
Yen	(0.6)	0.0	(0.8)	(1.4)	2.8	(2.1)	(1.7)

Source: Morningstar, HFR, as of 11/30/18



# Notices & disclosures

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