

Market commentary

U.S. ECONOMICS

- The ISM Manufacturing PMI ticked down from 48.3 to 48.1, missing expectations of 49.4. For the fourth straight month it remained under the neutral level of 50.0 in contractionary territory. Export orders fell 2.5 points to 47.9 and the decline was likely impacted by the ongoing U.S. China trade dispute.
- Nonfarm payroll additions in November totaled 266,000 and easily beat expectations (+180,000), though payroll additions were inflated by the return of roughly 40,000 General Motors workers who had been on strike last month. Net revisions from the prior two months totaled +41,000, further outlining the strength of the labor market.
- The unemployment rate ticked down to 3.5% (exp. 3.6%), in line with 50-year lows experienced in 1969.

U.S. EQUITIES

- Per FactSet, the number of companies that cited "ESG" or "Environmental, Social and Governance" in their earnings calls was up 29% in Q3 vs Q2. Although only 31 companies or 6% of the S&P 500 Index companies mentioned ESG, it was the highest number in at least three years.
- The S&P 500 Index continued to climb higher, gaining 3.6% over the period and bringing its year-to-date return to 27.6%. Stronger than expected earnings as well as views that U.S. and Chinese negotiators were nearing a deal likely supported the advance of the index.
- The CBOE VIX Index of implied volatility fell from 13.2 to 12.6 and remained at subdued levels relative to its long-term average. The trailing 30-day realized volatility of the S&P 500 Index remained depressed and fell to 5.8%, the lowest level since November 2017.

U.S. FIXED INCOME

- The Federal Reserve's most recent term repurchase-agreement operation, which was designed to provide \$25B in liquidity to market participants through the year-end, was oversubscribed by \$18B. The Fed previously increased the size of the operation from \$15 to \$25 billion, but demand for year-end financing so far has exceeded the supply the NY Fed has made available.
- Ten-year Treasury yields ticked up over the period from 1.69% to 1.78% and reached intra-month highs of 1.94% due in part to positive news flow regarding U.S. – China relations.
- Corporate high yield credit (+0.3%) outpaced investment grade credit (-0.1%), rewarding investors willing to take on more risk.

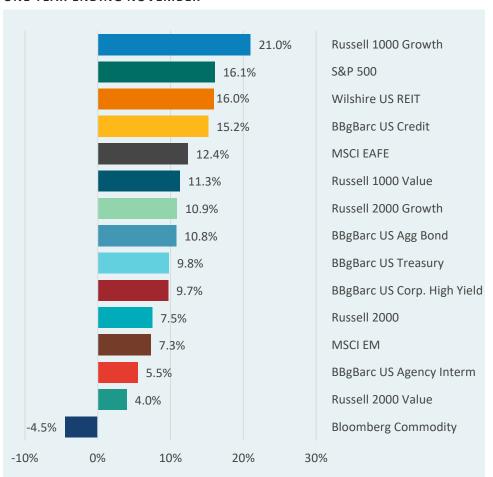
INTERNATIONAL MARKETS

- According to polls, the U.K. Prime Minister Boris Johnson's
 Conservative Party remains 10 points ahead of the Labour Party
 and on course to win a majority in Parliament on December 12th.
 If the Conservatives win a majority, "Brexit" is expected to occur
 by the current deadline of January 31st.
- Economic data out of China continued to show signs of weakness. Year-over-year growth in retail sales fell to 7.2% in October, down from 9.8% at the end of Q2 and missing expectations of 7.9%. Industrial production fell short as well and grew 4.7% year-overyear compared to expectations of 5.4%.
- Chinese total exports dropped -1.1% year-over-year (exp +0.8%), in part due to a -23.0% decline in shipments to the U.S. It appears U.S. importers of Chinese goods are reducing purchases to combat the higher prices brought about in part by imposed tariffs.

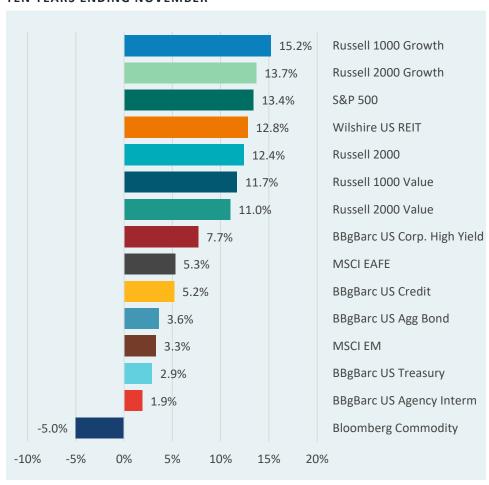


Major asset class returns

ONE YEAR ENDING NOVEMBER



TEN YEARS ENDING NOVEMBER



Source: Morningstar, as of 11/30/19

Source: Morningstar, as of 11/30/19

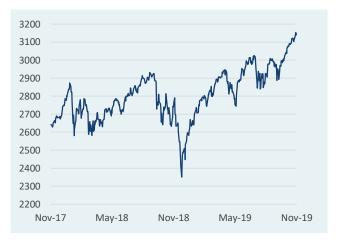


U.S. large cap equities

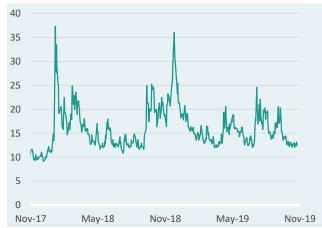
- The S&P 500 Index returned 3.6% and reached new alltime highs. The Information Technology (+5.4%), Financials (+5.0%) and Health Care (+5.0%) sectors led the index higher, while Real Estate (-1.7%) and Utilities (-1.8%) were the only sectors tallying negative performance.
- The Information Technology sector advanced 5.4% and at a weight of 22.6% helped to propel the overall index higher. Positive news relating to U.S.-Chinese trade negotiations likely helped to boost tech names.
- Health Care stocks gained 5.0%, making the sector the strongest performer over the quarter-to-date (+10.4%). Presidential hopeful Elizabeth Warren changed her health care proposal from a fully governmentsponsored health insurance plan to one which would allow supplementary private health insurance, a shift which analysts viewed as positive for the sector.
- Per FactSet, the estimated Q4 2019 earnings decline is

 -1.5%. If this is the actual decline it will mark the first time the index has reported four straight quarters of decline since the period from Q3 2015 to Q2 2016.

S&P 500 PRICE INDEX

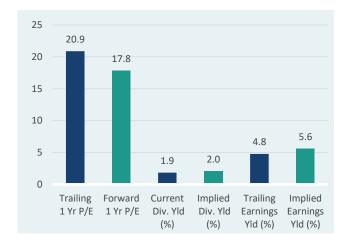


IMPLIED VOLATILITY (VIX INDEX)



Source: CBOE, as of 11/30/19

S&P 500 VALUATION SNAPSHOT



Source: Bloomberg, as of 11/30/19



Domestic equity size and style

- Small-cap equities extended their outperformance over large-cap equities to a third consecutive month. The Russell 2000 Index returned 4.1% while the Russell 1000 Index rose only 3.8%. Year-to-date, large-cap equities (+27.7%) have still outperformed their smallcap peers (+22.0%).
- Value stocks continued to underperform growth stocks over the period. The Russell 3000 Growth Index rose
 4.5% and has fared better than the Russell 3000 Value Index (+3.0%) for nine out of eleven months this year.
- In November, growth-oriented equities outperformed value-oriented equities within the large cap universe by 1.3%. However, within the small-cap universe, the outperformance of the growth factor was even more pronounced as growth-oriented equities outperformed value-oriented equities by 3.6%.
- Small-cap stocks' outperformance over large-caps was most evident within the Health Care sector. The Russell 2000 Health Care Sub-Index returned 12.2% outpacing its large-cap counterpart, which advanced only 5.7%.

VALUE VS. GROWTH RELATIVE VALUATIONS



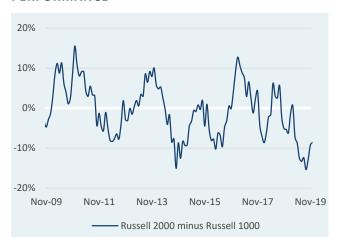
Source: Russell, Bloomberg, as of 11/30/19

VALUE VS. GROWTH 1-YR ROLLING RELATIVE PERFORMANCE



Source: FTSE, Bloomberg, as of 11/30/19

SMALL VS. LARGE 1-YR ROLLING RELATIVE PERFORMANCE

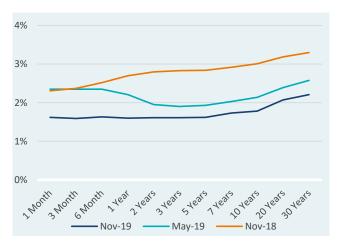




Fixed income

- Over the period the JPM EMBI Global Diversified Index declined -0.2% while the JPM GBI-EM Global Diversified Index fell -1.8%. U.S. dollar appreciation likely presented headwinds for unhedged investors in local-currency denominated emerging market debt.
- China is issuing U.S. dollar denominated bonds at a record pace through 2019 and its most recent issue raised \$6 billion. Despite ongoing trade turbulence, there was strong demand for the issue which attracted over \$20 billion in orders, indicating investors' strong appetite for dollar-denominated Chinese debt.
- The ECB will hold its first review since 2003, where it will discuss topics ranging from inflation to climate change. The current inflation target of "below, but close to 2%" is viewed as being too vague by some, but there are differing opinions on what it should be changed to, ranging from a fixed 2% target to including bands around the current target.
- Chinese headline inflation rose 4.5% year-over-year.
 Food prices, specifically pork, drove much of the pickup in the price of the goods basket. Core inflation, excluding food and energy, remained benign at 1.4%.

U.S. TREASURY YIELD CURVE



Source: Bloomberg, as of 11/30/19

NOMINAL YIELDS



Source: Morningstar, as of 11/30/19

BREAKEVEN INFLATION RATES

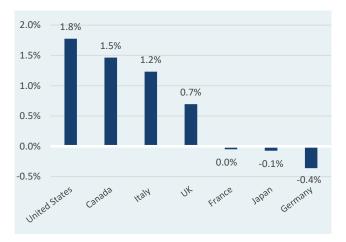




Global markets

- Emerging market currency exposure provided a headwind for emerging market equity performance.
 The JP Morgan EMCI Index declined -2.0% which likely helped the MSCI EM Local Index (+0.6%) to outperform the MSCI EM Index (-0.1%) in U.S. dollar terms.
- Germany and the U.K. narrowly avoided technical recessions (two consecutive quarters of GDP decline) as they both posted slightly positive Q3 quarter-over-quarter growth. German GDP expanded +0.1% (exp. -0.1%) while U.K. GDP grew +0.3% (exp. +0.4%).
- Despite Congress passing a bill supporting the protestors in Hong Kong the U.S.-Chinese phase one trade deal appears to have remained on track. Chinese officials are in "close contact" with U.S. officials and hope to reach a deal before new U.S. tariffs on Chinese imports are scheduled to take effect on December 15th.
- Chinese officials announced plans to raise penalties on violators of intellectual property rights. Built into the proposed plans were lower thresholds for criminal punishment of those who steal intellectual property.

GLOBAL SOVEREIGN 10-YEAR YIELDS



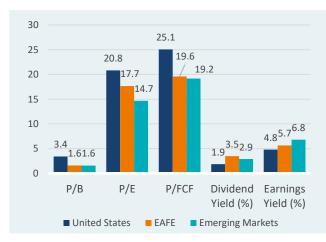
Source: Bloomberg, as of 11/30/19

U.S. DOLLAR MAJOR CURRENCY INDEX



Source: Federal Reserve, as of 11/30/19

MSCI VALUATION METRICS (3-MONTH AVG)





Commodities

- The Bloomberg Commodity Index fell 2.6% over the month and Industrial Metals (-4.9%) and Precious Metals (-3.8%) led the decline. Softs (6.4%) and Petroleum (2.1%) outperformed and were the only positive movers.
- The Livestock Sub-Index fell 2.1% driven by pork prices which fell nearly 11.0%. U.S. pork production is on a record pace in 2019 and although U.S. – China trade conversations have resulted in an increase in Chinese purchases of U.S. pork, the purchases have not been sufficient to keep up with the increased supply.
- The Softs component of the commodities basket saw positive returns of 6.4%, driven by coffee prices which rose 13.4%. Arabica coffee supply levels have come down off recent highs and after two seasons of a global production surplus, a deficit is forecast for the 2019-2020 production season.
- Gold traded down 3.1% in November as a better overall risk sentiment likely made precious metals a less appealing choice for investors. Higher interest rates also increased the opportunity cost of holding non-yielding assets.

INDEX AND SECTOR PERFORMANCE

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year			
Bloomberg Commodity	(2.6)	(0.6)	2.5	(4.5)	(2.0)	(6.4)	(5.0)			
Bloomberg Agriculture	(0.4)	1.3	(3.8)	(6.1)	(9.3)	(8.4)	(4.4)			
Bloomberg Energy	(2.6)	(1.0)	4.6	(15.0)	(1.6)	(13.5)	(12.1)			
Bloomberg Grains	(2.4)	(1.0)	(5.5)	(6.7)	(7.7)	(9.5)	(5.3)			
Bloomberg Industrial Metals	(4.9)	(3.2)	3.8	(1.5)	0.9	(1.9)	(3.1)			
Bloomberg Livestock	(2.1)	(1.4)	(7.4)	(8.2)	2.1	(6.7)	(2.0)			
Bloomberg Petroleum	2.1	3.5	22.1	10.8	5.3	(8.9)	(6.8)			
Bloomberg Precious Metals	(3.8)	(0.2)	12.7	19.1	5.3	3.1	0.9			
Bloomberg Softs	6.4	7.3	(1.9)	(8.0)	(14.4)	(9.4)	(5.5)			
Source: Morningstar, as of 11/30/19										

COMMODITY PERFORMANCE





Appendix



Periodic table of returns

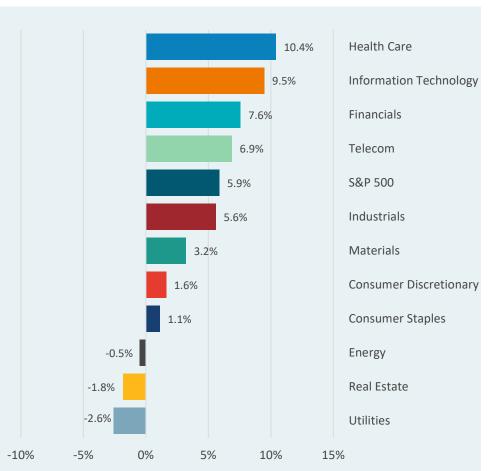
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	YTD	5-Year	10-Year
Large Cap Growth	38.7	66.4	31.8	14.0	25.9	56.3	26.0	34.5	32.6	39.8	5.2	79.0	29.1	14.3	18.6	43.3	13.5	13.3	31.7	37.3	6.7	32.4	13.7	15.2
Large Cap Equity	27.0	43.1	22.8	8.4	10.3	48.5	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	1.9	27.7	10.8	13.7
Small Cap Growth	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	0.0	25.6	9.5	13.5
Large Cap Value	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	-1.5	23.2	8.6	12.4
Small Cap Equity	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	-3.5	22.0	8.2	11.7
Small Cap Value	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	-6.0	18.3	7.8	11.0
International Equity	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	-4.8	18.2	6.8	9.8
60/40 Global Portfolio	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	-8.3	15.8	5.3	6.1
Emerging Markets Equity	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	-9.3	10.2	4.3	5.3
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	-11.0	8.8	3.1	3.6
Hedge Funds of Funds	-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	7.0	-11.2	5.8	3.1	3.3
Real Estate	-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	-12.9	4.8	2.2	2.7
Commodities	-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	-13.8	2.5	1.0	0.5
Cash	-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	-14.6	1.9	-6.4	-5.0
			Large (Cap Equ	ıity			9	Small Ca	ap Grov	vth			Co	ommod	ities								
			Large (Cap Val	ue			I	nterna	tional E	quity			Re	eal Esta	te								
			Large (Cap Gro	wth			E	Emergin	ıg Mark	ets Equ	ity		Н	edge Fu	nds of F	unds							
			Small	Cap Equ	iity			U	JS Bond	ls				60	0% MSC	I ACWI/	40% BB	gBarc G	ilobal B	ond				
			Small	Cap Val	ue			(Cash															

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 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 9/30/19.

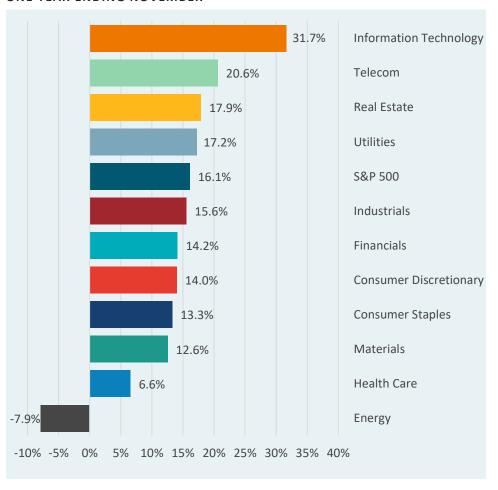


S&P 500 sector returns

QTD



ONE YEAR ENDING NOVEMBER



Source: Morningstar, as of 11/30/19

Source: Morningstar, as of 11/30/19



Detailed index returns

DOI	MEST	IC I	EQU	ITY
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	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Core Index							
S&P 500	3.6	5.9	27.6	16.1	14.9	11.0	13.4
S&P 500 Equal Weighted	3.4	4.7	25.7	13.5	11.8	9.2	13.7
DJ Industrial Average	4.1	4.7	23.0	12.5	16.3	12.2	13.3
Russell Top 200	3.9	6.5	27.8	16.5	15.9	11.6	13.5
Russell 1000	3.8	6.0	27.7	16.1	14.7	10.8	13.5
Russell 2000	4.1	6.9	22.0	7.5	8.6	8.2	12.4
Russell 3000	3.8	6.0	27.3	15.5	14.2	10.6	13.4
Russell Mid Cap	3.6	4.7	27.6	15.0	11.6	8.9	13.6
Style Index							
Russell 1000 Growth	4.4	7.4	32.4	21.0	19.8	13.7	15.2
Russell 1000 Value	3.1	4.5	23.2	11.3	9.6	7.8	11.7
Russell 2000 Growth	5.9	8.9	25.6	10.9	12.2	9.5	13.7
Russell 2000 Value	2.3	4.8	18.3	4.0	5.0	6.8	11.0

FIXED INCOME

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Broad Index							
BBgBarc US TIPS	0.2	0.4	8.0	8.6	3.2	2.3	3.1
BBgBarc US Treasury Bills	0.1	0.3	2.2	2.4	1.6	1.1	0.6
BBgBarc US Agg Bond	(0.1)	0.3	8.8	10.8	4.1	3.1	3.6
Duration							
BBgBarc US Treasury 1-3 Yr	(0.0)	0.3	3.4	4.2	1.8	1.3	1.1
BBgBarc US Treasury Long	(0.5)	(1.4)	18.1	24.6	7.8	5.3	6.7
BBgBarc US Treasury	(0.3)	(0.2)	7.5	9.8	3.5	2.5	2.9
Issuer							
BBgBarc US MBS	0.1	0.4	6.1	8.0	3.2	2.6	3.0
BBgBarc US Corp. High Yield	0.3	0.6	12.1	9.7	6.3	5.4	7.7
BBgBarc US Agency Interm	(0.0)	0.2	4.4	5.5	2.4	1.8	1.9
BBgBarc US Credit	0.2	0.8	13.5	15.2	5.9	4.3	5.2

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INTERNATIONAL EQUITY							
Broad Index							
MSCI ACWI	2.4	5.2	22.3	13.7	11.9	7.2	8.6
MSCI ACWI ex US	0.9	4.4	16.5	11.2	9.2	3.8	4.7
MSCI EAFE	1.1	4.8	18.2	12.4	9.6	4.3	5.3
MSCI EM	(0.1)	4.1	10.2	7.3	9.0	3.1	3.3
MSCI EAFE Small Cap	2.2	6.9	19.7	12.0	10.4	7.8	8.4
Style Index							
MSCI EAFE Growth	1.8	5.4	24.4	18.4	12.6	6.4	6.9
MSCI EAFE Value	0.4	4.0	12.0	6.5	6.6	2.1	3.7
Regional Index							
MSCI UK	1.7	4.6	15.1	10.8	8.0	1.7	4.8
MSCI Japan	0.6	5.4	17.2	9.3	8.5	7.0	6.4
MSCI Euro	1.4	4.8	19.4	13.6	10.4	3.3	3.5
MSCI EM Asia	0.5	5.0	11.3	7.8	9.8	4.8	5.5
MSCI EM Latin American	(4.1)	0.1	6.5	5.6	7.5	0.2	(1.4)

OTHER

OTHER							
Index							
Bloomberg Commodity	(2.6)	(0.6)	2.5	(4.5)	(2.0)	(6.4)	(5.0)
Wilshire US REIT	(1.5)	(0.5)	26.6	16.0	9.6	7.4	12.8
CS Leveraged Loans	0.6	0.1	6.5	4.0	4.3	4.0	5.3
Alerian MLP	(6.2)	(12.4)	(2.1)	(10.2)	(6.4)	(9.5)	4.6
Regional Index							
JPM EMBI Global Div	(0.5)	(0.2)	12.8	14.3	6.4	5.3	6.7
JPM GBI-EM Global Div	(1.8)	1.0	9.0	10.4	6.3	0.7	2.3
Hedge Funds							
HFRI Composite	1.2	1.8	8.6	5.9	4.3	3.2	4.0
HFRI FOF Composite	0.9	1.4	6.6	4.8	3.6	2.1	2.7
Currency (Spot)							
Euro	(1.2)	1.1	(3.5)	(2.6)	1.3	(2.4)	(3.0)
Pound	(0.0)	5.0	1.6	1.4	1.2	(3.8)	(2.4)
Yen	(1.3)	(1.3)	0.2	3.7	1.3	1.6	(2.4)

Source: Morningstar, HFR, as of 11/30/19



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