

Board of Trustees

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Date: December 19, 2019

To: Board of Trustees

From: Carl Nelson – Executive Director
Amy Burke – Deputy Director

Investment Report for November 2019

	November	Year to Date 2019	2018	2017	2016	2015	2014
Total Trust Investments (\$ millions)	\$1,429		\$1,285 year end	\$1,351 year end	\$1,196 year end	\$1,148 year end	\$1,190 year end
Total Fund Return	1.2% Gross	13.5% Gross	-3.2 % Gross	15.5 % Gross	6.6 % Gross	-0.8% Gross	5.1 % Gross
Policy Index Return (r)	1.0%	14.2%	-3.2 %	13.4 %	7.7 %	-0.5 %	5.2 %

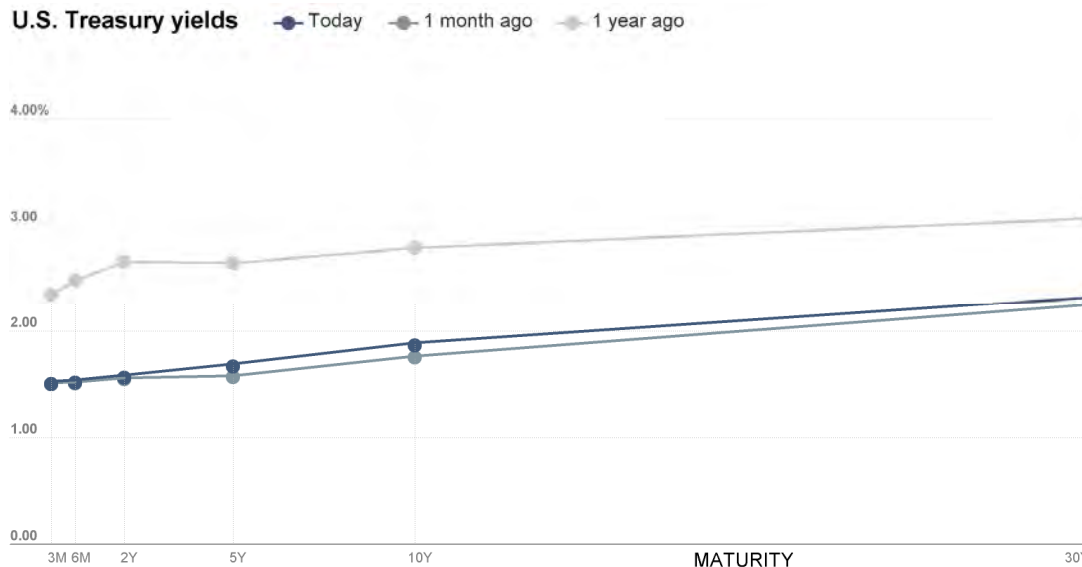
(r) Policy index as of Aug. 2016 revision to Strategic Asset Allocation Policy: 20% domestic equity, 20% international equity, 15% core bonds, 5% bank loans, 5% global bonds, 5% emerging market debt, 15% real estate, 5% commodities, 5% private equity, 5% private credit.

The Economy and Capital Markets:

- **Fed Policy and Interest Rates –**

- At the November FOMC meeting the Fed held interest rates steady.
 - Consistent with the Fed’s October comments, it retained a wait and see stance on future rate increases.
 - Expectations of moderating economic risks from Brexit and trade disputes supported the Fed’s pause in rate reductions.
 - The bond markets are currently pricing in a low probability of future interest rate reductions in December or the first half of 2020.

- The yield curve, has backed away from its worrisome tip towards inverted (a predictor of economic recessions) in August-September. The yield curve is currently positive with the 10-year Treasury at 1.92% versus the 2-year Treasury at 1.62% and T-Bills at 1.56% as of December 19th. The yield curve as of December 19th is shown below -



- **Economic Growth / Recession Risk –**

- Outlook for GDP Growth –

- Expectations for 2020 GDP growth remain in the 2% range – a slowing rate of growth. Contractionary pressures in manufacturing (PMI indices below 50) contrast with still optimistic consumer sentiment and spending. The return of the Treasury yield curve to positively sloped reflects moderating concerns over near term recession risk.

- Eurozone and Brexit –

- The probability of a Brexit from the EU taking place with some sort of agreement improved markedly in early December with new Parliamentary elections. Gains by British conservatives in the “leave” camp on Brexit make it likely that Prime Minister Johnson will be able to push through a Brexit near the January 31st deadline. While Brexit in general is expected to have negative consequences for the British economy, a “no-deal” unstructured Brexit was expected to worsen the blow. The near-term result is lessened risk perceptions in European markets.

- **Trade Policy –**

- U.S equity and fixed income markets were further reassured in November with progress on the U.S./China trade disputes. The announced “Phase 1” trade deal, while leaving many details pending, involves the U.S. cancelling planned new tariffs, increased Chinese agricultural purchases and some pledges of improved intellectual property protection.

- The approval of the USMCA trade agreement replacing NAFTA was not significant to the capital markets. The USMCA preserves the core benefits of NAFTA with improvement at the edges that received bipartisan support in Congress.

- **Employment and Wages –**
 - The November DOL report on nonfarm employment showed -
 - New jobs came in at +266k in November – well above expectations. In addition, the October estimate of new jobs was revised upwards from +_128k to +156k. The strong November jobs growth included the return of 50k workers from a prolonged strike at General.
 - Job growth over 2019 year to date has averaged +167k/month – the lowest rate in the past nine years. The job growth average in 2018 was at +233k/month.
 - Unemployment ticked down to a historic low of 3.5% in November. A broader measure of unemployment (U-6) that includes discouraged job seekers and part-time employees who would prefer full-time inched lower to 6.9%.
 - Average Hourly Earnings were little changed with a year-over-year increase measured at +3.1%.

SLOCPT Investment Returns:

The attached report from Verus covers the investment returns of the SLOCPT portfolio and general market conditions through the end of November. The attached market commentary from Verus details market conditions in November, but subsequent activity in December is not yet factored into these numbers. Through December 19th investment markets have been generally positive.

If the strong investment returns year to date (+13.5% gross rate of return through November) are not impacted by negative surprises at the end of December it will factor into the year-end actuarial data measurement. While investment returns for actuarial valuation purpose are smoothed over 5 years, any positive year is beneficial to pension contribution rates and funded ratio.

Respectfully submitted

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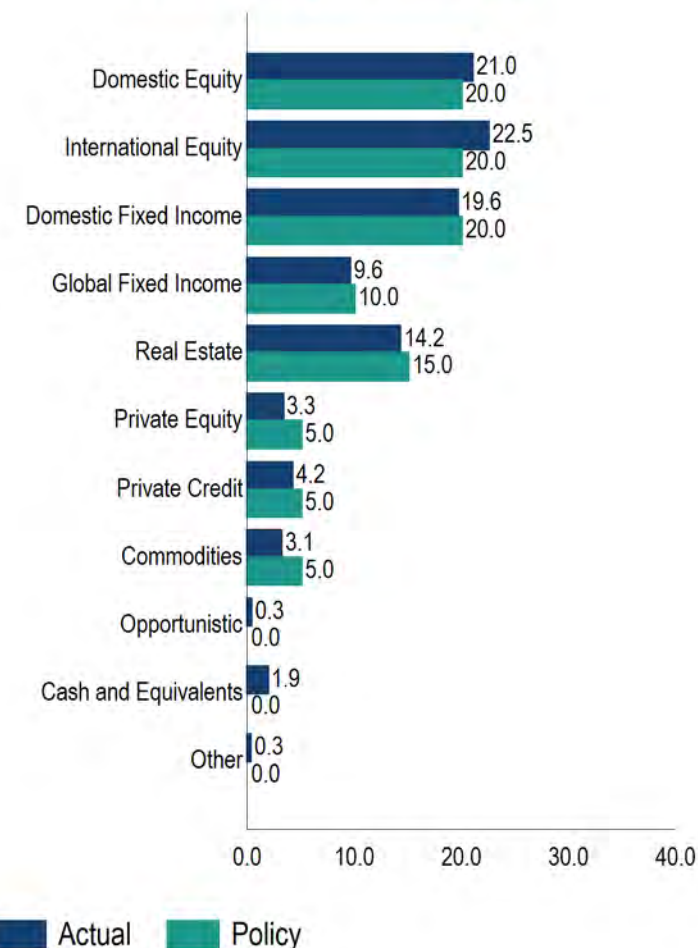
San Luis Obispo County Pension Trust

Executive Summary - Preliminary (Gross of Fees)

Period Ending: November 30, 2019

	Market Value	% of Portfolio	1 Mo	YTD
Total Fund	1,428,956,106	100.0	1.2	13.5
Total Fund ex Overlay	1,425,069,738	99.7	1.2	13.6
Policy Index			1.0	14.2
Total Domestic Equity	300,224,837	21.0	3.8	25.9
Russell 3000			3.8	27.3
PIMCO RAE Fundamental PLUS Instl	60,566,980	4.2	3.4	21.8
S&P 500			3.6	27.6
Loomis Sayles Large Cap Growth	89,851,208	6.3	4.8	28.8
Russell 1000 Growth			4.4	32.4
Boston Partners Large Cap Value	86,786,867	6.1	3.3	20.6
Russell 1000 Value			3.1	23.2
Atlanta Capital Mgmt	63,019,782	4.4	3.5	33.1
Russell 2500			4.3	25.1
Total International Equity	321,375,548	22.5	2.3	24.2
MSCI ACWI ex USA Gross			0.9	17.0
Dodge & Cox Intl Stock	149,310,003	10.4	1.8	17.6
MSCI EAFE Gross			1.1	18.8
WCM International Growth	172,065,545	12.0	2.8	30.6
MSCI ACWI ex USA Gross			0.9	17.0
Total Domestic Fixed Income	279,978,464	19.6	0.2	9.5
BBgBarc US Aggregate TR			-0.1	8.8
BlackRock Core Bond	103,266,014	7.2	-0.1	10.2
BBgBarc US Aggregate TR			-0.1	8.8
Dodge & Cox Income Fund	107,023,227	7.5	0.2	9.9
BBgBarc US Aggregate TR			-0.1	8.8
Pacific Asset Corporate Loan	69,689,223	4.9	0.6	8.0
S&P/PLSTA Leveraged Loan Index			0.6	6.9
Total Global Fixed	136,836,282	9.6	-1.7	3.8
FTSE World Govt Bond Index			-1.2	5.6
Brandywine Global Fixed Income	66,433,851	4.6	-1.6	2.4
FTSE WGBI ex US TR			-1.7	4.5
Ashmore EM Blended Debt Fund	70,402,431	4.9	-1.7	--
50% JPM EMBI GD/25% JPM GBI EM GD/25% JPM ELM+			-0.9	--

Actual vs Target Allocation (%)



*Other balance represents Clifton Group.

Policy Index (10/1/2016): 20% Russell 3000, 20% MSCI ACWI ex. US, 30% BBgBarc Aggregate, 15% NCREIF Property, 5% Bloomberg Commodity, 5% Russell 3000 + 300 bp, 5% BBgBarc High Yield + 200 bp lagged. Effective 1/01/2017, only traditional asset class (public equity, public fixed income, REITs) investment management fees will be included in the gross of fee return calculation. Boston Partners funded 2/1/2017. WCM Intl Growth replaced Vontobel on 2/15/2017. Pathway 9 funded 4/7/2017. SSGA TIPS liquidated on 12/7/2017. Fidelity Real Estate Growth III liquidated on 12/29/2017. SSGA Flagship S&P 500 liquidated 2/1/2018. Harbourvest 2018 Global Fund L.P. funded 12/14/2018. Stone Harbor liquidated 3/22/2019. Ashmore EM Blended Debt funded 3/31/2019. Direct RE liquidated 5/3/2019. Most recently reported market values for private equity/credit, opportunistic, and illiquid real estate funds adjusted for calls and distributions through the report end date. All data is preliminary.

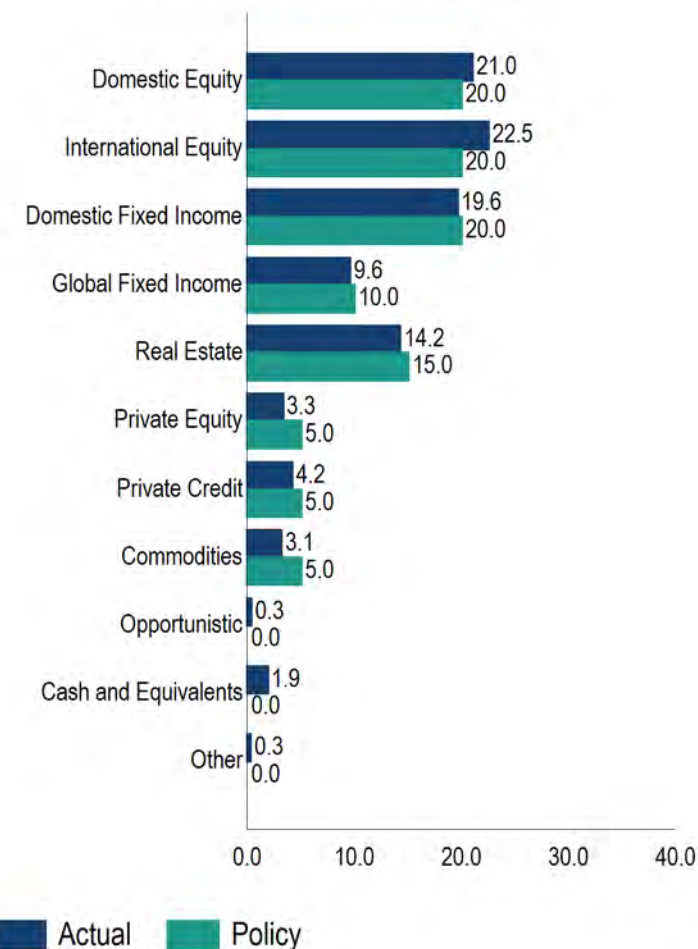
San Luis Obispo County Pension Trust

Executive Summary - Preliminary (Gross of Fees)

Period Ending: November 30, 2019

	Market Value	% of Portfolio	1 Mo	YTD
Total Real Estate	203,316,611	14.2	0.4	3.5
NCREIF Property Index			0.0	4.8
JP Morgan Core Real Estate	168,645,130	11.8	0.5	2.4
NCREIF-ODCE			0.0	3.8
NCREIF Property Index			0.0	4.8
ARA American Strategic Value Realty	34,510,892	2.4	0.0	7.3
NCREIF-ODCE			0.0	3.8
NCREIF Property Index			0.0	4.8
Total Commodities	44,938,872	3.1	-1.8	3.2
Bloomberg Commodity Index TR USD			-2.6	2.5
Gresham MTAP Commodity Builder	44,938,872	3.1	-1.8	3.2
Bloomberg Commodity Index TR USD			-2.6	2.5
Total Private Equity	47,378,124	3.3		
Harbourvest Partners IX Buyout Fund L.P.	14,616,579	1.0		
Pathway Private Equity Fund Investors 9 L.P.	27,975,145	2.0		
Harbourvest 2018 Global Fund L.P.	4,786,400	0.3		
Total Private Credit	59,603,657	4.2		
TPG Diversified Credit Program	59,603,657	4.2		
Total Cash	26,756,415	1.9	0.0	2.2
91 Day T-Bills			0.1	1.9
Cash Account	26,756,415	1.9	0.0	2.2
91 Day T-Bills			0.1	1.9
Total Opportunistic	4,660,927	0.3		
Kohlberg Kravis Roberts & Co. Mezzanine Partners I	4,558,758	0.3		
PIMCO Distressed Credit Fund	102,169	0.0		
CPI + 5%			0.4	7.1

Actual vs Target Allocation (%)



*Other balance represents Clifton Group.

Policy Index (10/1/2016): 20% Russell 3000, 20% MSCI ACWI ex. US, 30% BBgBarc Aggregate, 15% NCREIF Property, 5% Bloomberg Commodity, 5% Russell 3000 + 300 bp, 5% BBgBarc High Yield + 200 bp lagged. Effective 1/01/2017, only traditional asset class (public equity, public fixed income, REITs) investment management fees will be included in the gross of fee return calculation. Boston Partners funded 2/1/2017. WCM Intl Growth replaced Vontobel on 2/15/2017. Pathway 9 funded 4/7/2017. SSGA TIPS liquidated on 12/7/2017. Fidelity Real Estate Growth III liquidated on 12/29/2017. SSGA Flagship S&P 500 liquidated 2/1/2018. Harbourvest 2018 Global Fund L.P. funded 12/14/2018. Stone Harbor liquidated 3/22/2019. Ashmore EM Blended Debt funded 3/31/2019. Direct RE liquidated 5/3/2019. Most recently reported market values for private equity/credit, opportunistic, and illiquid real estate funds adjusted for calls and distributions through the report end date. All data is preliminary.



**PERSPECTIVES
THAT DRIVE
ENTERPRISE
SUCCESS**

NOVEMBER 2019
Capital Markets Update

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

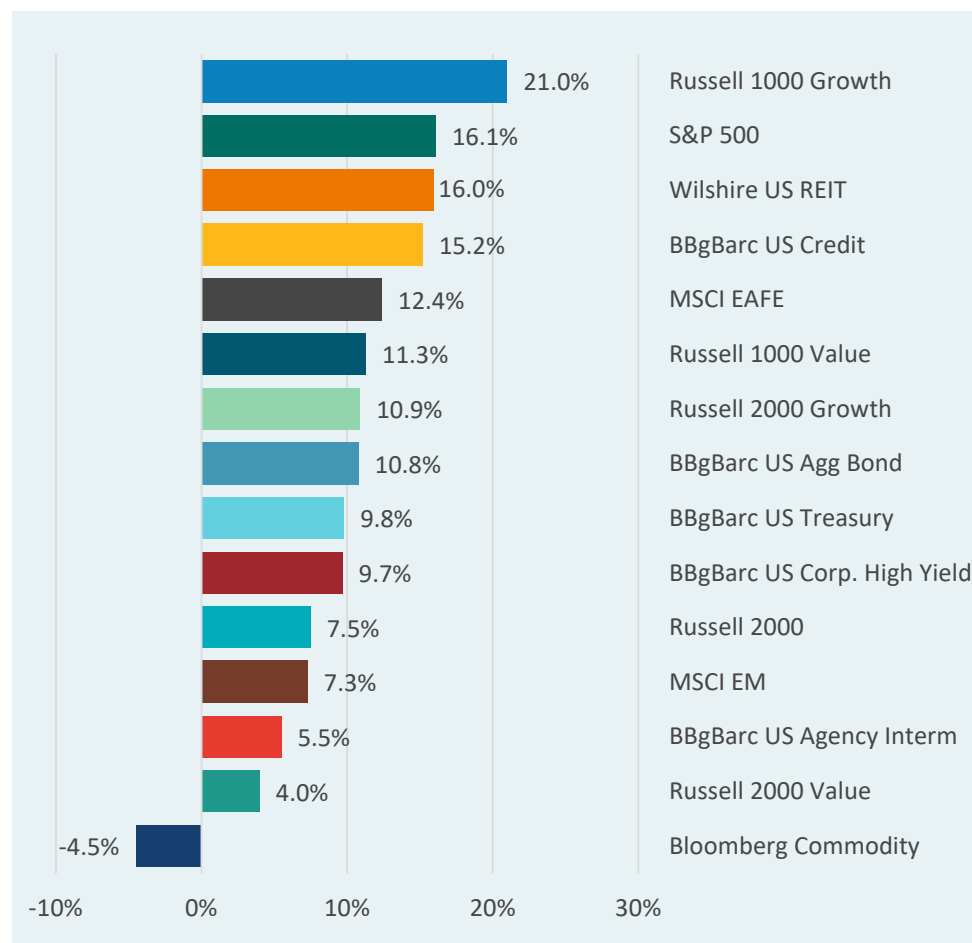
- The Federal Reserve’s most recent term repurchase-agreement operation, which was designed to provide \$25B in liquidity to market participants through the year-end, was oversubscribed by \$18B. The Fed previously increased the size of the operation from \$15 to \$25 billion, but demand for year-end 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-over-year 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.

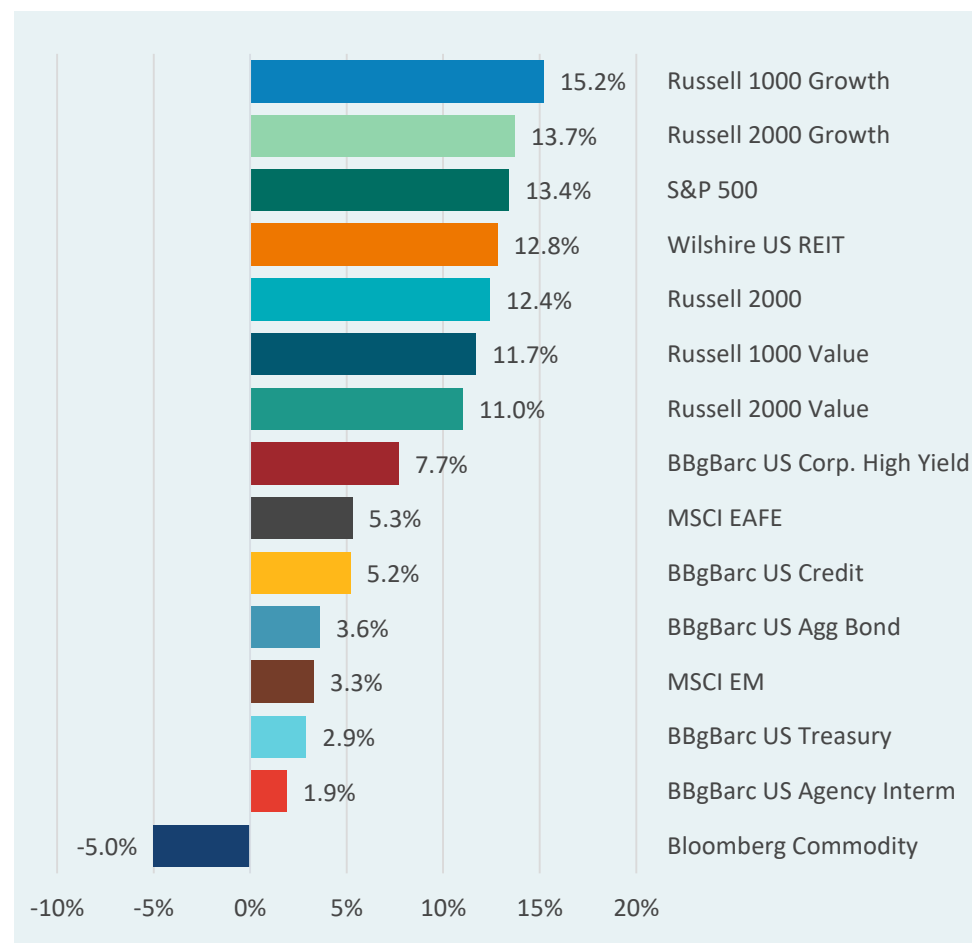
Major asset class returns

ONE YEAR ENDING NOVEMBER



Source: Morningstar, as of 11/30/19

TEN YEARS ENDING NOVEMBER



Source: Morningstar, as of 11/30/19

U.S. large cap equities

- The S&P 500 Index returned 3.6% and reached new all-time 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 government-sponsored 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



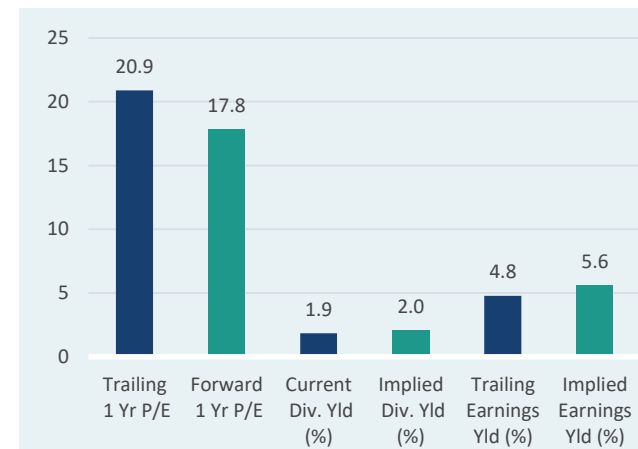
Source: Bloomberg, as of 11/30/19

IMPLIED VOLATILITY (VIX INDEX)



Source: CBOE, as of 11/30/19

S&P 500 VALUATION SNAPSHOT

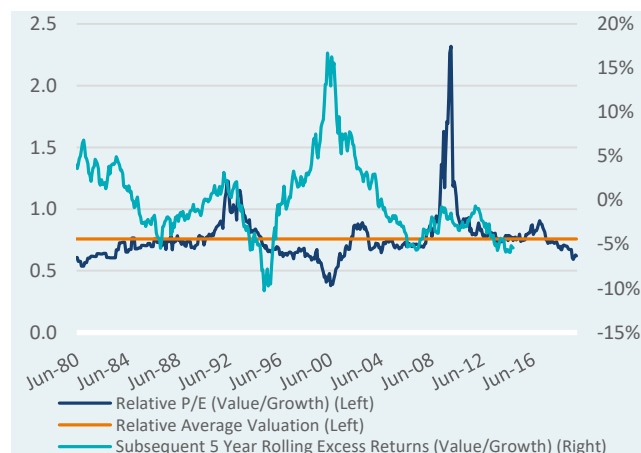


Source: Bloomberg, as of 11/30/19

Domestic equity size and style

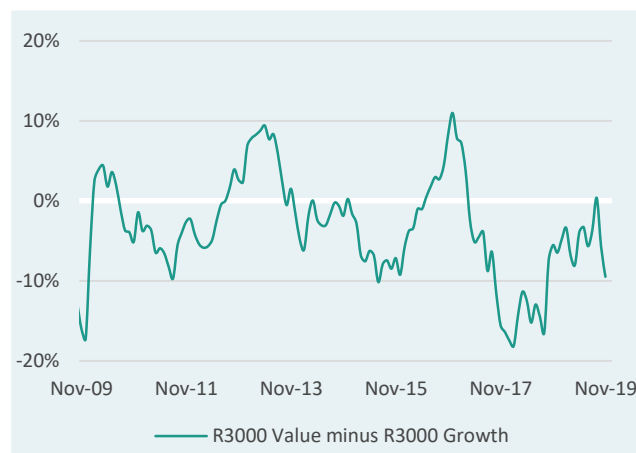
- Small-cap equities extended their outperformance over large-cap equities to a third consecutive month. The Russell 2000 Index returned 4.1% while the Russell 1000 Index rose only 3.8%. Year-to-date, large-cap equities (+27.7%) have still outperformed their small-cap peers (+22.0%).
- Value stocks continued 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



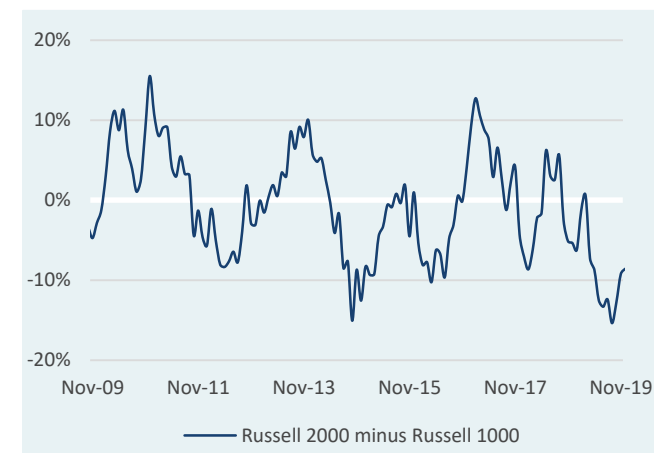
Source: Russell, Bloomberg, as of 11/30/19

VALUE VS. GROWTH 1-YR ROLLING RELATIVE PERFORMANCE



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

SMALL VS. LARGE 1-YR ROLLING RELATIVE PERFORMANCE

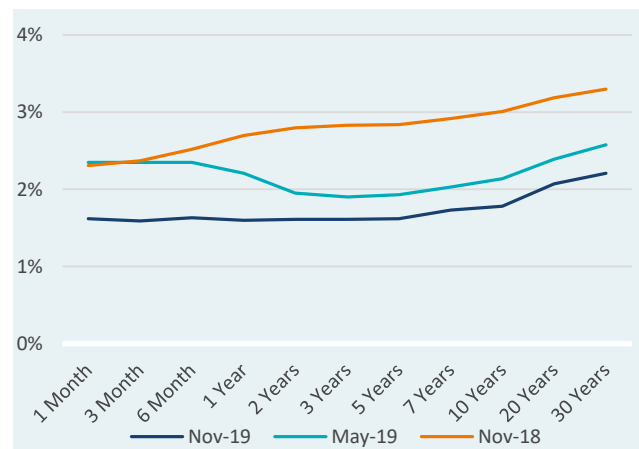


Source: FTSE, Bloomberg, as of 11/30/19

Fixed income

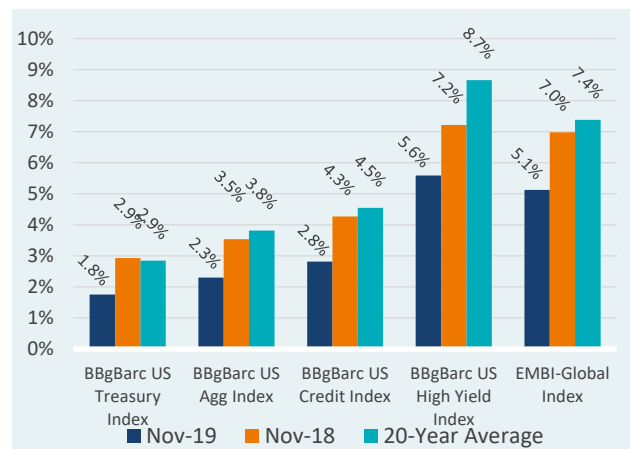
- Over the period the JPM EMBI Global Diversified Index declined -0.2% while the JPM GBI-EM Global Diversified Index fell -1.8%. U.S. dollar appreciation likely presented headwinds for unhedged investors in local-currency denominated emerging market debt.
- China is issuing U.S. dollar denominated bonds 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



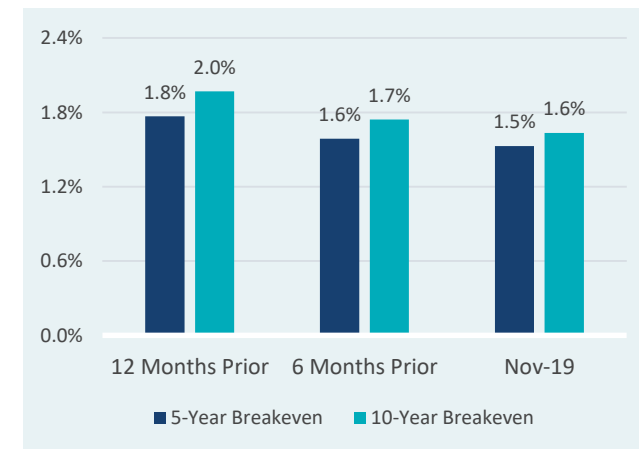
Source: Bloomberg, as of 11/30/19

NOMINAL YIELDS



Source: Morningstar, as of 11/30/19

BREAKEVEN INFLATION RATES

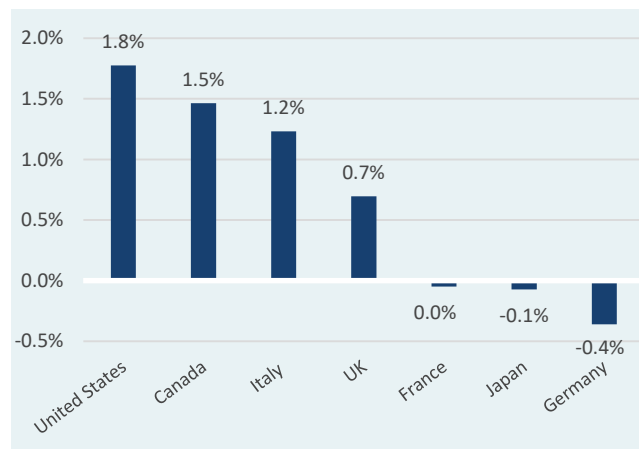


Source: Bloomberg, as of 11/30/19

Global markets

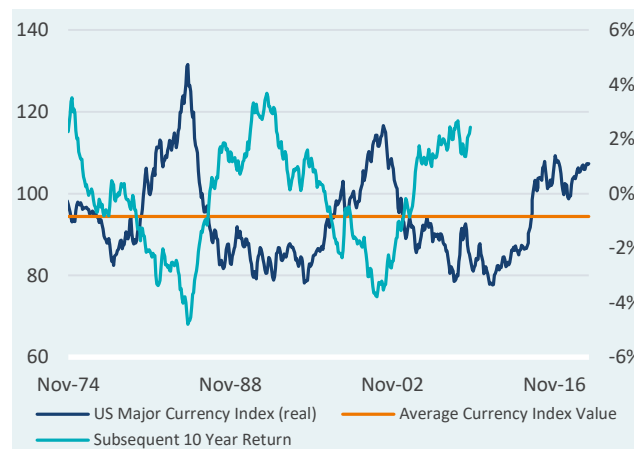
- Emerging market currency exposure provided a headwind for emerging market equity performance. The JP Morgan EMCI Index declined -2.0% which likely helped the MSCI EM Local Index (+0.6%) to outperform the MSCI EM Index (-0.1%) in U.S. dollar terms.
- Germany and the U.K. narrowly avoided technical recessions (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



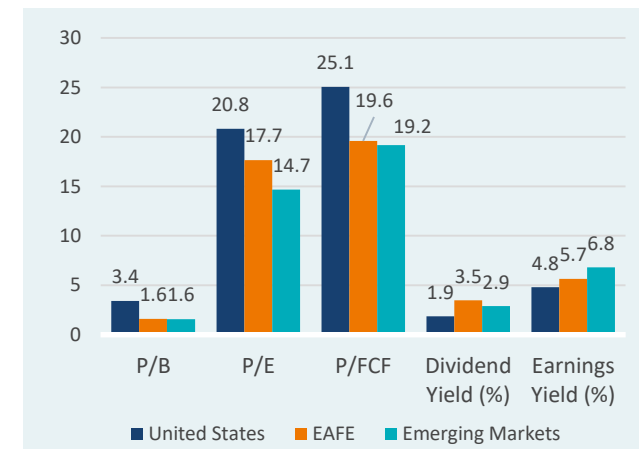
Source: Bloomberg, as of 11/30/19

U.S. DOLLAR MAJOR CURRENCY INDEX



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

MSCI VALUATION METRICS (3-MONTH AVG)



Source: Bloomberg, as of 11/30/19

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.

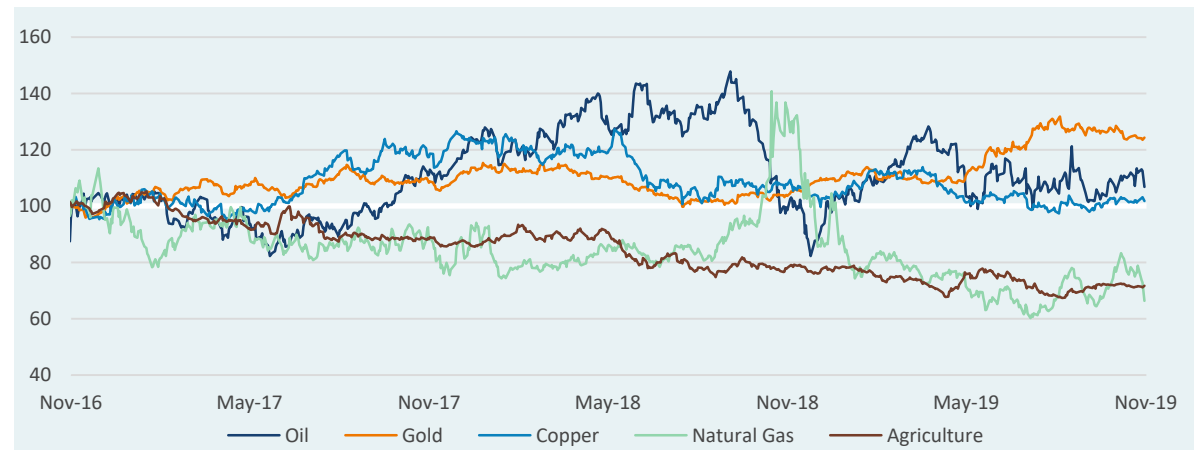
- The Softs component of the commodities basket saw positive returns of 6.4%, driven by coffee prices which rose 13.4%. Arabica coffee supply levels have come down off recent highs and after two seasons of a global production surplus, a deficit is forecast for the 2019-2020 production season.
- Gold 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



Source: Bloomberg, as of 11/30/19

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

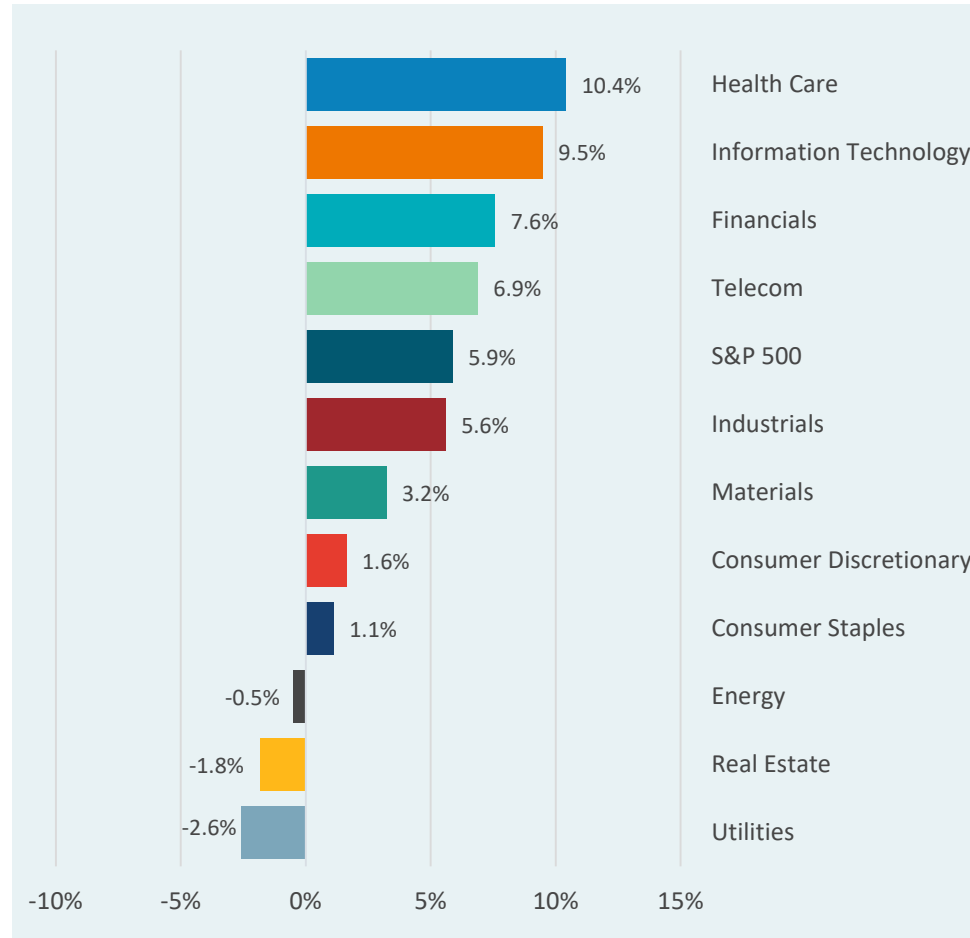
BEST
↑
↓
WORST

- Large Cap Equity
- Small Cap Growth
- Commodities
- Large Cap Value
- International Equity
- Real Estate
- Small Cap Value
- Emerging Markets Equity
- US Bonds
- Hedge Funds of Funds
- 60% MSCI ACWI/40% BBgBarc Global Bond
- 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 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 9/30/19.

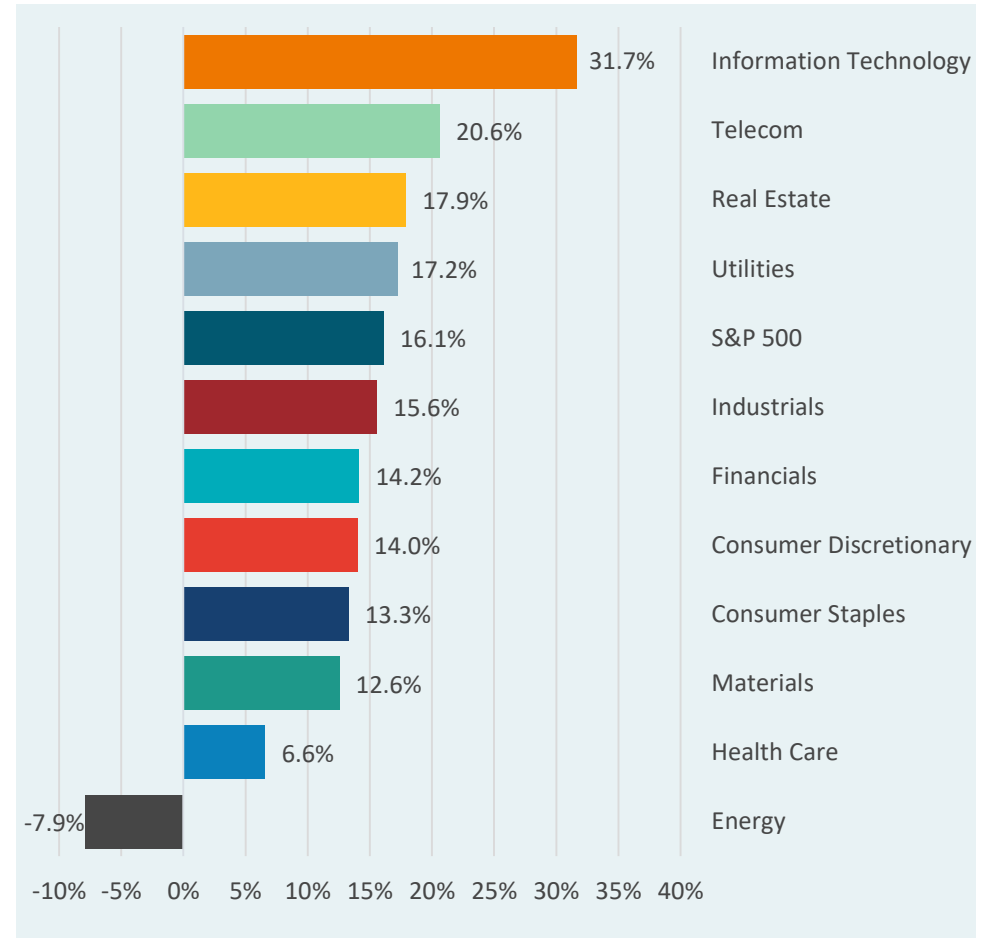
S&P 500 sector returns

QTD



Source: Morningstar, as of 11/30/19

ONE YEAR ENDING NOVEMBER



Source: Morningstar, as of 11/30/19

Detailed index returns

DOMESTIC EQUITY

	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

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)

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 Interim	(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

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

Notices & disclosures

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