



**PERSPECTIVES
THAT DRIVE
ENTERPRISE
SUCCESS**

FEBRUARY 2020
Capital Markets Update

Market commentary

U.S. ECONOMICS

- The U.S. labor market showed no signs of cracking in February. Non-farm payrolls expanded by +273,000 (exp. +175,000), bringing year-to-date additions just under a half a million jobs. Moreover, job additions over the prior two months were revised upward by +85,000.
- The ISM Services PMI rose from 55.5 to 57.3 (exp. 54.8), while the Markit Services PMI unexpectedly fell from 53.4 into contractionary territory below 50.0. The divergence between the two indicators of the health of the U.S. services economy is the largest in several years.
- Core PCE inflation, the Federal Reserve's preferred inflation gauge, grew +1.6% year-over-year in January, undershooting expectations (+1.7%). Fed officials have messaged they expect core PCE to move closer to their +2.0% target in the first few months of 2020.

U.S. EQUITIES

- The S&P 500 Price Index reached a new all-time high of 3386 on February 19th, and subsequently fell 12.8% by month-end. The correction (drop of 10% or more), was the fastest in the history of the S&P 500 Index and over the month, the index returned -8.2%.
- The CBOE VIX Index of implied volatility on the S&P 500 Index surged from 18.8 to 40.1, its highest level since August 2015. Heightened uncertainty surrounding the global economic and market impacts of the spreading coronavirus likely pushed the “fear gauge” higher.
- The term structure of the VIX Index inverted, implying that market participants were willing to pay more for insurance in the near-term than for insurance some time farther out in the future. Typically, the VIX curve is upward-sloping because providers of insurance require a term premium to insure a more uncertain period further in the future.

U.S. FIXED INCOME

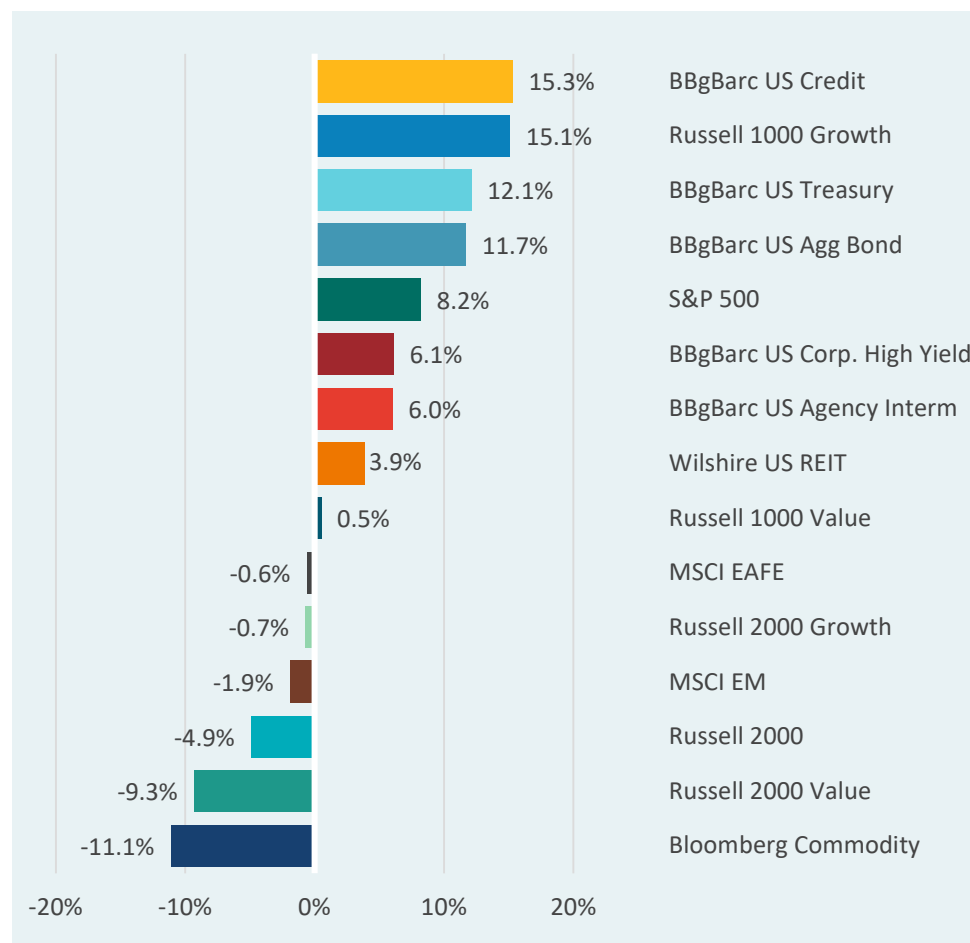
- On March 4th, the Federal Open Market Committee implemented an emergency, out-of-cycle 0.50% rate cut, bringing the range for federal funds to 1.00-1.25%. The cut was the first of its kind since the Global Financial Crisis, and the Fed noted the uncertainty regarding the impact of COVID-19 on the economy and markets as justification for an easing of monetary policy.
- The rally in U.S. Treasuries extended into February, and the 10-year Treasury yield fell from 1.51% to 1.15%, a fresh all-time low. Thirty-year Treasury yields dropped from 2.00% to 1.68%, also an all-time low, and only 6 bps above the effective fed funds rate.
- Interest rate duration exposure offered excellent diversification for equity market risk over the month as Treasury yields fell. The Bloomberg Barclays Long Term Treasury Index returned +6.7%.

INTERNATIONAL MARKETS

- The coronavirus spread at an exponential rate and global confirmed cases ballooned from 11,374 to 86,923. South Korea, Italy, and Iran saw material increases in infections, confirming that measures to contain the virus within China had proved ineffective.
- The spread of COVID-19 stoked risk-off sentiment and a incited trimming of global equity positions. Emerging market equities (-5.3%) fared slightly better than U.S. large cap equities (-8.2%) as well as international developed equities (-9.0%).
- China's official Manufacturing and Services PMIs fell from 50.0 to 35.7 and from 54.1 to 29.6 respectively in February (neutral level is 50.0), reflecting a jarring contraction in economic activity.

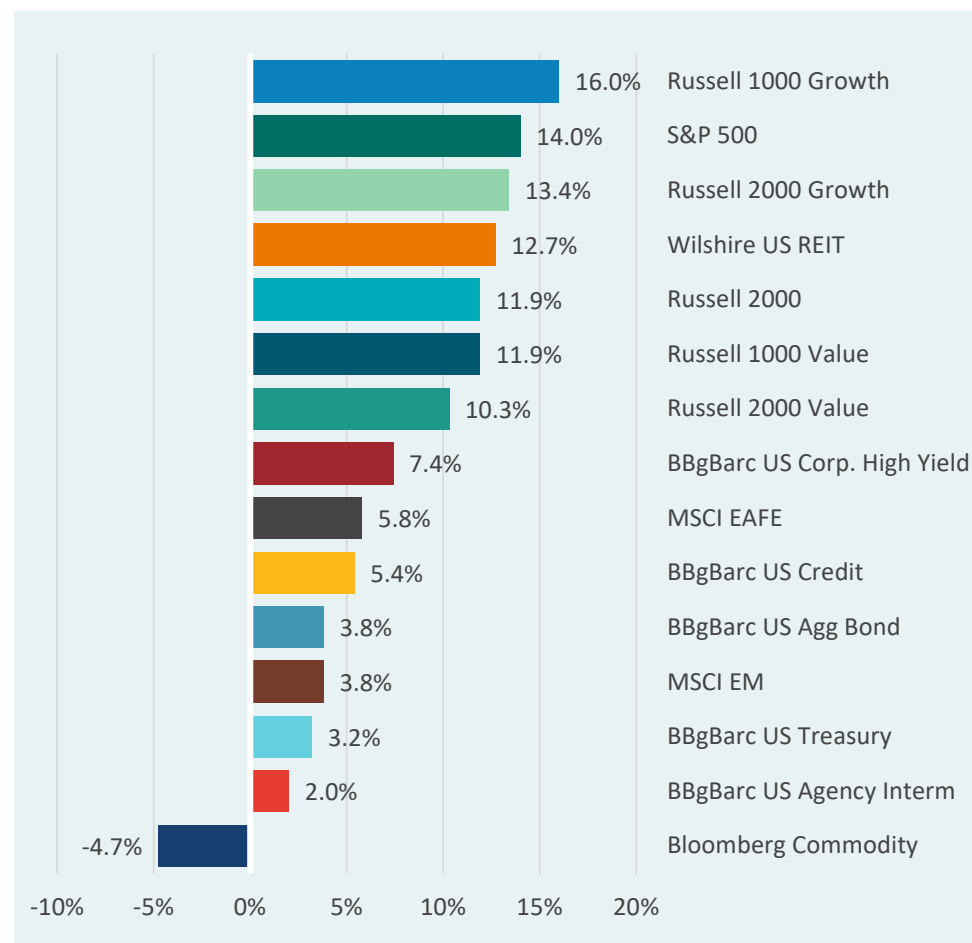
Major asset class returns

ONE YEAR ENDING FEBRUARY



Source: Morningstar, as of 2/29/20

TEN YEARS ENDING FEBRUARY



Source: Morningstar, as of 2/29/20

U.S. large cap equities

- The S&P 500 retraced much of its gains from the 4th quarter of 2019, and lost -8.2% of its value in February. Poor performance within the Energy (-14.6%) and Financials (-11.2%) sectors dragged the overall index to its worst month of performance since December 2018.
- According to FactSet, the forward P/E ratio of the S&P 500 Index fell to 16.7 from 18.1 following the equity market sell off. As a result, the current forward P/E ratio is in line with the 5-year average level, and still well above the 10-year average forward P/E of 15.0.
- The Communication Services (-6.4%) and Real Estate (-6.4%) sectors generated the best performance within the S&P 500 Index. Both sectors are highly sensitive to interest rates and often outperform in falling rate environments due to their relatively attractive yields.
- Per FactSet, analysts may be more sanguine than the broader market in their assessment of the impact of COVID-19 on corporate earnings. The bottom-up Q1 earnings estimate for the tech sector, which has the highest revenue exposure to China (13.4%), has increased by 1.6% since the beginning of the year.

Interest rate sensitive sectors outperformed

S&P 500 PRICE INDEX



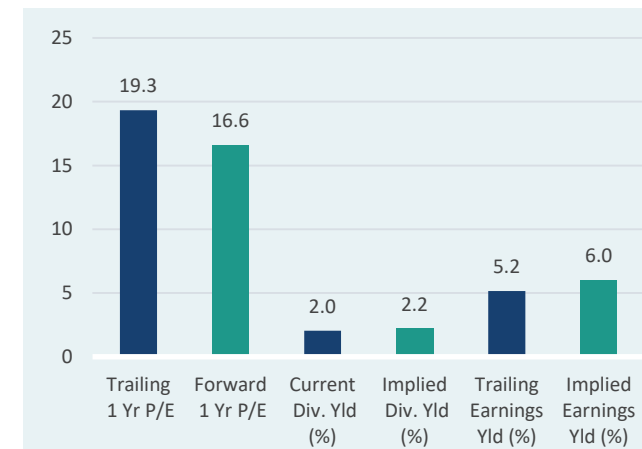
Source: Bloomberg, as of 2/29/20

IMPLIED VOLATILITY (VIX INDEX)



Source: CBOE, as of 2/29/20

S&P 500 VALUATION SNAPSHOT

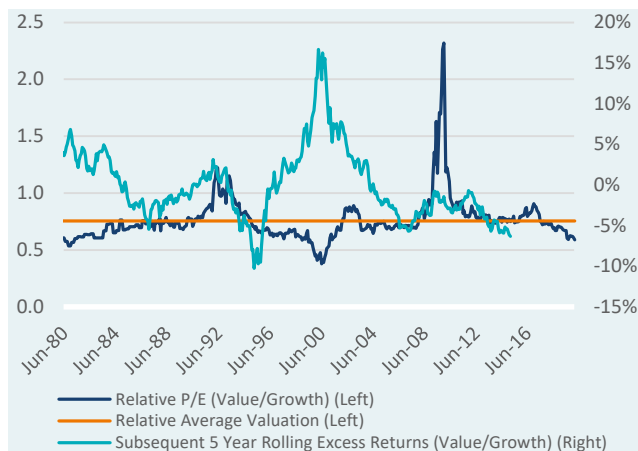


Source: Bloomberg, as of 2/29/20

Domestic equity size and style

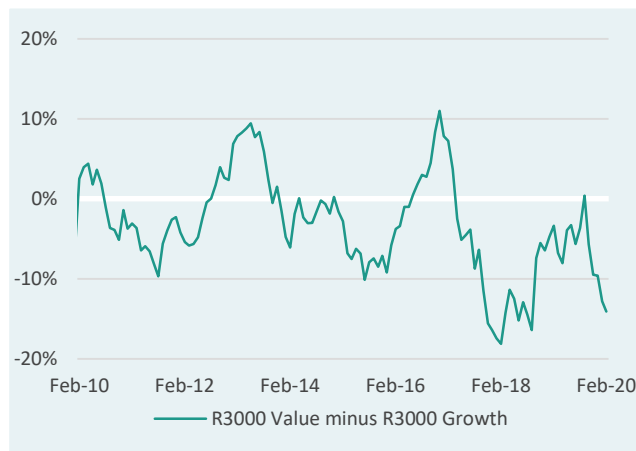
- The dominance of the growth factor over the value factor remained the story in February. The Russell 3000 Value Index declined -9.7% while the Russell 3000 Growth Index fell only -6.8%. The relatively higher proportion of Energy (-14.6%) and Financial (-11.2%) stocks within the Russell 3000 Value Index accounted for the majority of its underperformance.
- Large-cap equities (Russell 1000 Index) and small-cap equities (Russell 2000 Index) posted returns of -8.2% and -8.4% respectively. Over the trailing year, large-cap equities have outpaced small-cap equities by +12.7%.
- The MSCI USA Cyclical Sectors-Defensive Sectors Index delivered a total return of +0.4% in February, bringing its year-to-date performance to +3.6%. The index has posted positive returns in eight of the prior twelve months, and has delivered a total return of +10.6% since February of 2019.
- The S&P 500 Low Volatility High Dividend Index declined -9.5%, underperforming the S&P 500 Index (-8.2%). Many investors have positioned more defensively within their equity portfolios over the year-to-date, but that planning did not pay in February.

VALUE VS. GROWTH RELATIVE VALUATIONS



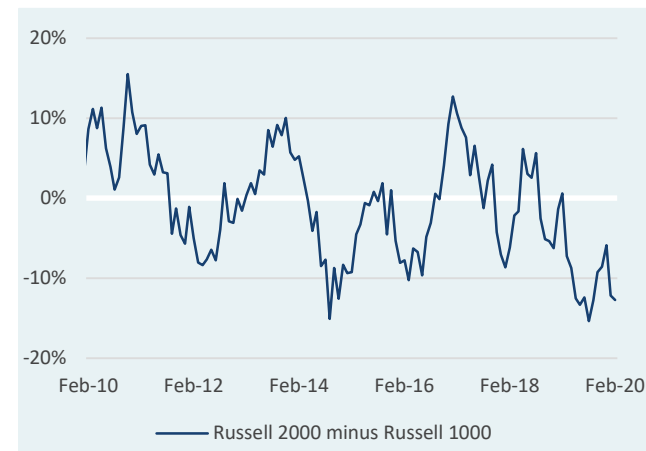
Source: Russell, Bloomberg, as of 2/29/20

VALUE VS. GROWTH 1-YR ROLLING RELATIVE PERFORMANCE



Source: FTSE, Bloomberg, as of 2/29/20

SMALL VS. LARGE 1-YR ROLLING RELATIVE PERFORMANCE



Source: FTSE, Bloomberg, as of 2/29/20

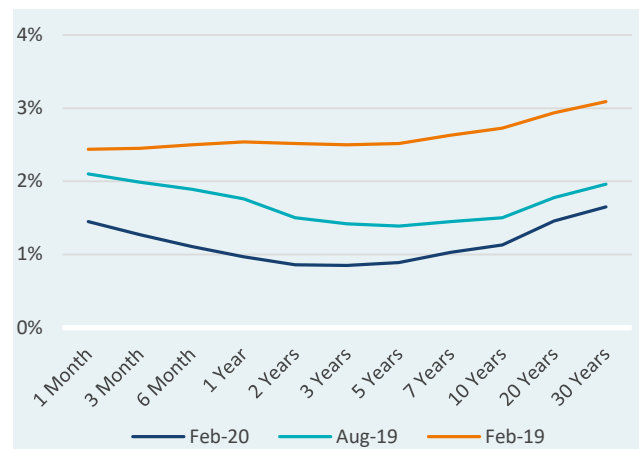
Fixed income

- U.S. Treasury yields across the curve plummeted as investors priced in an environment characterized by lower growth and inflation, as well as further cuts to the range for federal funds. At the end of the period, the entire U.S. Treasury curve was below 1.7%, and Treasury yields at many tenors were at all-time lows.
- Within the U.S. credit space, investors in core fixed income (+1.8%) outperformed those invested in high-yield fixed income (-1.4%). Higher exposure to interest rate duration, coupled with lower exposure to increasing credit spreads led to superior returns.

- Breakeven inflation rates continued to decline as expectations for subdued inflation and growth mounted. Ten-year breakeven inflation rates fell from 1.6% to 1.4%, and the five-year breakeven dropped from 1.3% to 0.9%. The last time the 10-year breakeven inflation rate touched 1.4% was back in June of 2016.
- Local currency denominated emerging market debt (-3.4%) underperformed hard-currency emerging market debt (-1.0%) as emerging market currency performance posed material headwinds. The J.P. Morgan Emerging Markets Currency Index declined -2.6%.

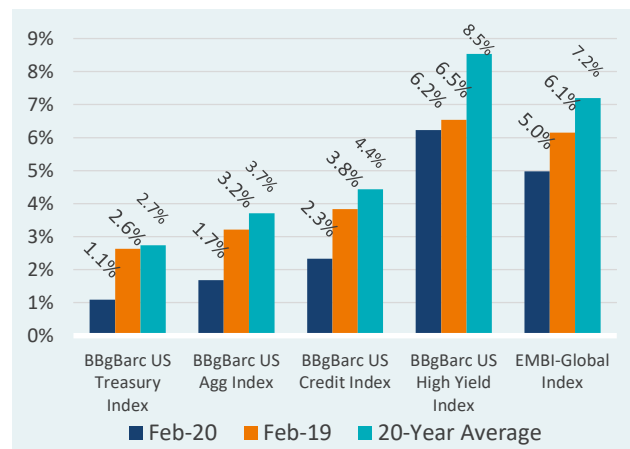
Global rates and growth expectations faded

U.S. TREASURY YIELD CURVE



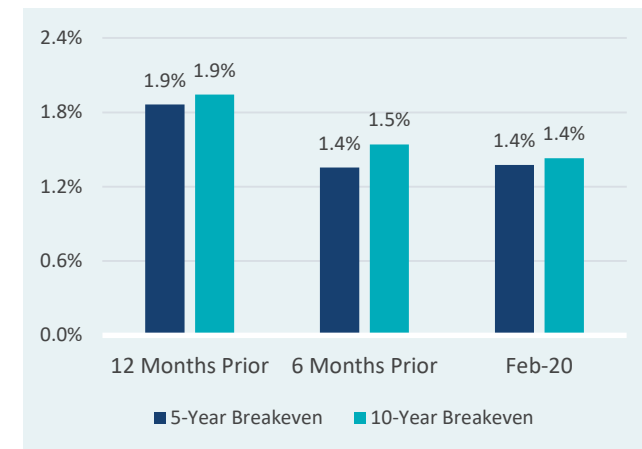
Source: Bloomberg, as of 2/29/20

NOMINAL YIELDS



Source: Morningstar, as of 2/29/20

BREAKEVEN INFLATION RATES

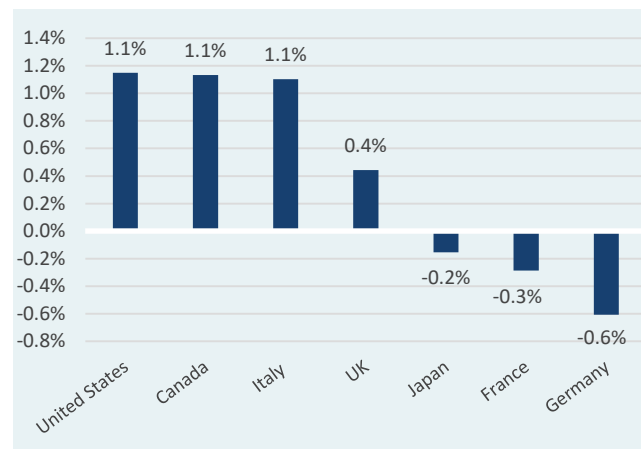


Source: Bloomberg, as of 2/29/20

Global markets

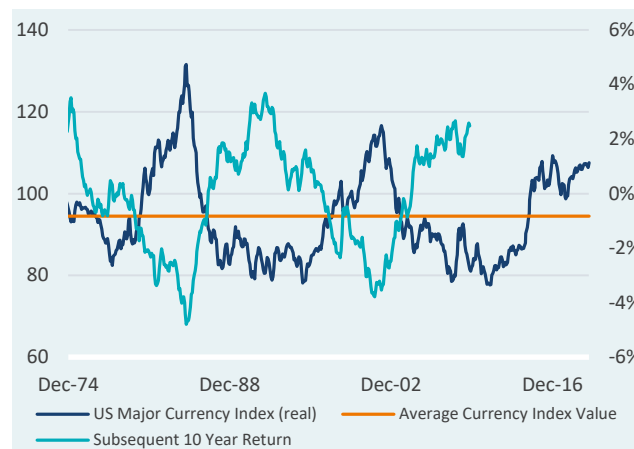
- All major equity indices declined over the month, and the global equity benchmark, the MSCI ACWI Index, fell -8.1%. International developed equities, specifically within the United Kingdom (-11.9%) and the Eurozone (-9.0%), were the largest detractors from performance.
- The MSCI Currency Factor Mix Index, Verus' preferred currency beta benchmark, returned -0.4%, bringing its one-year return to +2.4%. The MSCI Currency Factor Mix Index has outperformed the embedded currency portfolio of the MSCI ACWI ex USA Index by +5.3% over the trailing one-year period.
- Emerging market equities (MSCI EM Index -5.3%) outperformed U.S. and international developed equities in U.S. dollar terms. Emerging market currencies depreciated relative to the U.S. dollar and U.S. investors who hedged their currency exposure (-3.8%) outpaced those who left currency unhedged.
- Countries whose economies are heavily exposed to the price of oil saw significant depreciation in their domestic currencies relative to the U.S. dollar. The Canadian dollar, Russian ruble, South African rand and the Norwegian Krone all weakened against the dollar.

GLOBAL SOVEREIGN 10-YEAR YIELDS



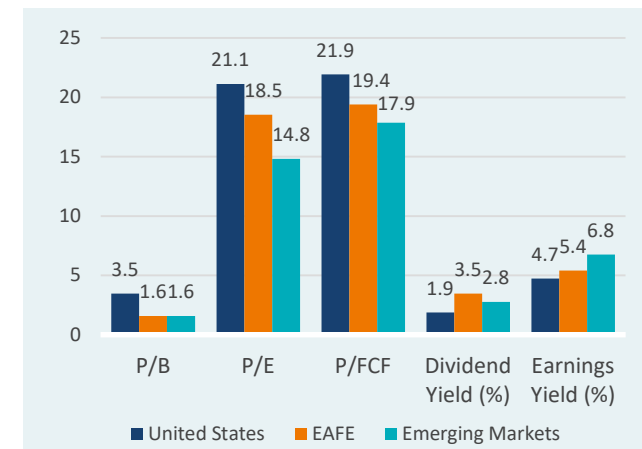
Source: Bloomberg, as of 2/29/20

U.S. DOLLAR MAJOR CURRENCY INDEX



Source: Federal Reserve, as of 2/29/20

MSCI VALUATION METRICS (3-MONTH AVG)



Source: Bloomberg, as of 2/29/20

Commodities

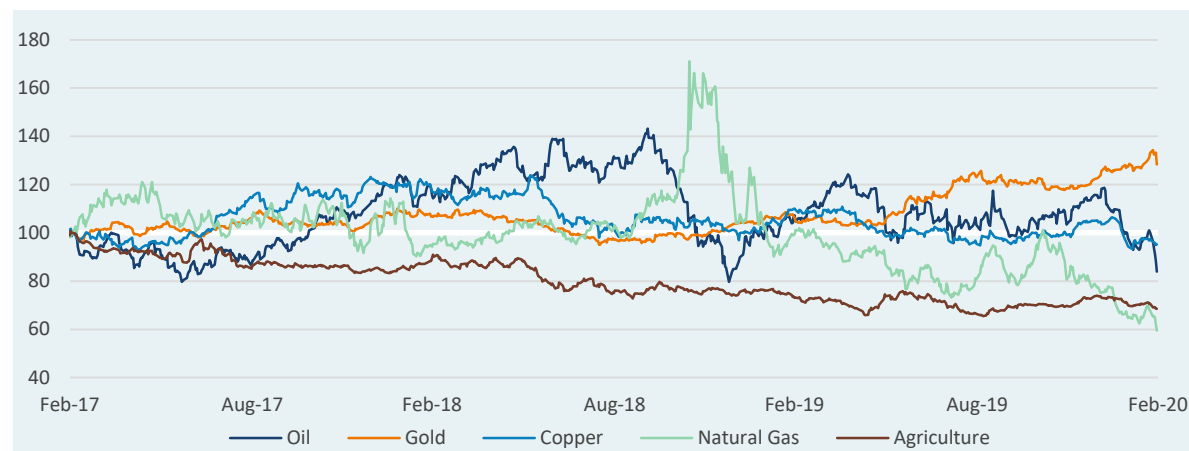
- The Bloomberg Commodity Index continued to sell off in February (-5.0%), bringing its year-to-date performance to -12.0%. Weakness was broad, and the largest detractor was the Energy sector (-24.7%) which suffered from further declines in crude oil and petroleum prices.
- West Texas Intermediate crude oil fell from \$51.58 to \$44.76 per barrel on concerns over the potential impact of the coronavirus on future economic activity. The WTI futures curve shifted downward, and into steeper contango as demand for crude oil delivery over the next few months declined most substantially along the curve.
- Gold continued to see haven in-flows throughout February and reached an intra-month high of \$1,659. However, gold price declines in the final days of February led to the commodity returning -0.2% for the month. Normal rebalancing activity, redemptions for cash flow management, as well as central bank selling to support desired exchange rates all contributed to the decline.
- The Bloomberg Livestock Index returned -6.7%, driven by plunging cattle (-9.3%) prices. Fears of further COVID-19 spread drove down demand for beef, the most important and costly meat protein in the U.S. foodservice sector.

INDEX AND SECTOR PERFORMANCE

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Bloomberg Commodity	(5.0)	(12.0)	(12.0)	(11.1)	(5.2)	(6.2)	(5.6)
Bloomberg Agriculture	(1.6)	(6.8)	(6.8)	(4.3)	(10.0)	(7.6)	(4.0)
Bloomberg Energy	(11.6)	(24.7)	(24.7)	(26.9)	(7.8)	(13.1)	(13.7)
Bloomberg Grains	(2.7)	(6.7)	(6.7)	(4.6)	(9.4)	(9.2)	(4.4)
Bloomberg Industrial Metals	(2.6)	(9.7)	(9.7)	(13.6)	(2.9)	(1.6)	(4.2)
Bloomberg Livestock	(6.7)	(16.9)	(16.9)	(20.7)	(6.5)	(6.8)	(3.9)
Bloomberg Petroleum	(12.1)	(24.9)	(24.9)	(18.2)	(2.5)	(9.2)	(8.4)
Bloomberg Precious Metals	(2.9)	0.3	0.3	15.0	4.0	3.1	2.0
Bloomberg Softs	(0.0)	(5.0)	(5.0)	(2.1)	(13.5)	(6.7)	(5.8)

Source: Morningstar, as of 2/29/20

COMMODITY PERFORMANCE



Source: Bloomberg, as of 2/29/20

Appendix

Periodic table of returns

BEST

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	YTD	5-Year	10-Year
US Bonds	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	36.4	3.8	12.4	14.8
Hedge Funds of Funds	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	31.4	0.6	9.0	12.6
Cash	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	28.5	0.3	8.3	12.1
Real Estate	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	26.5	0.0	6.5	10.4
60/40 Global Portfolio	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	25.5	-4.7	5.5	10.4
Large Cap Growth	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	22.4	-4.7	5.1	10.2
Large Cap 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	22.0	-8.1	4.7	8.7
Small Cap Growth	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	18.6	-8.2	3.6	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	18.4	-9.7	3.6	4.8
International Equity	-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	8.7	-10.9	2.7	3.9
Small Cap Equity	-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	7.8	-11.4	2.5	3.2
Large Cap Value	-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	7.7	-11.6	2.0	2.9
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	6.4	-12.0	1.1	0.6
Small Cap Value	-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	2.1	-14.6	-6.2	-5.6

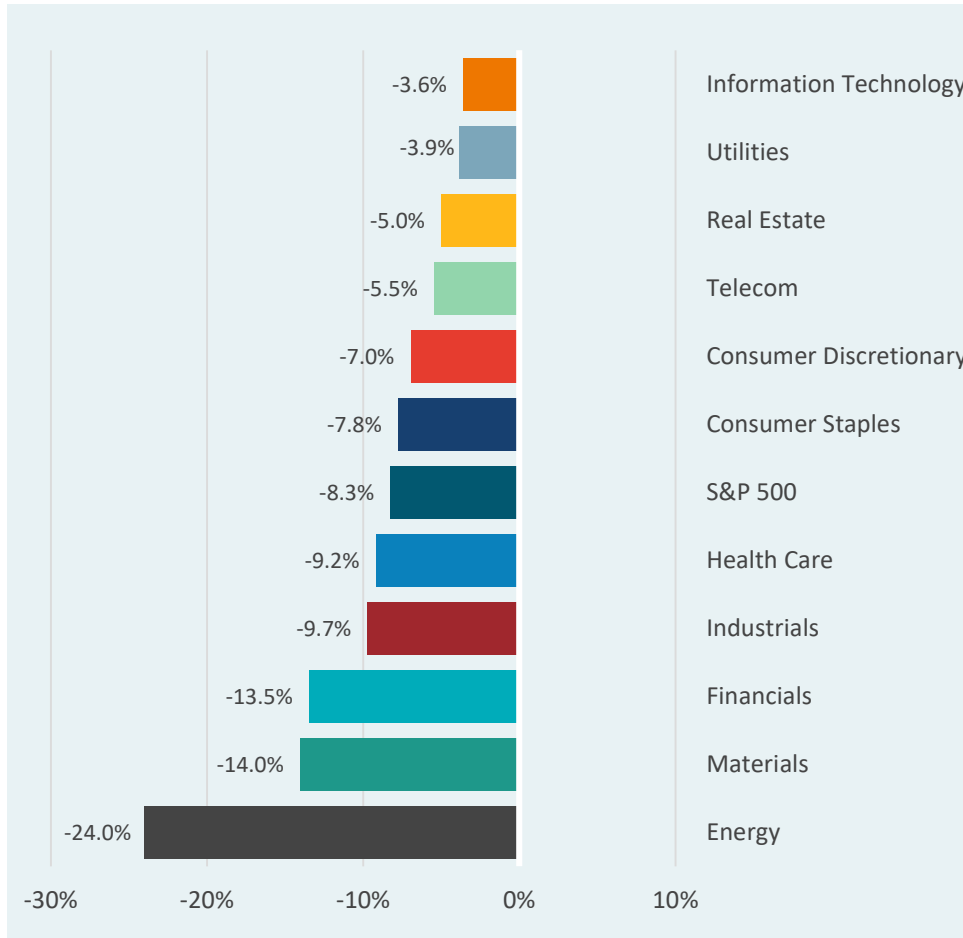
WORST



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 12/31/19.

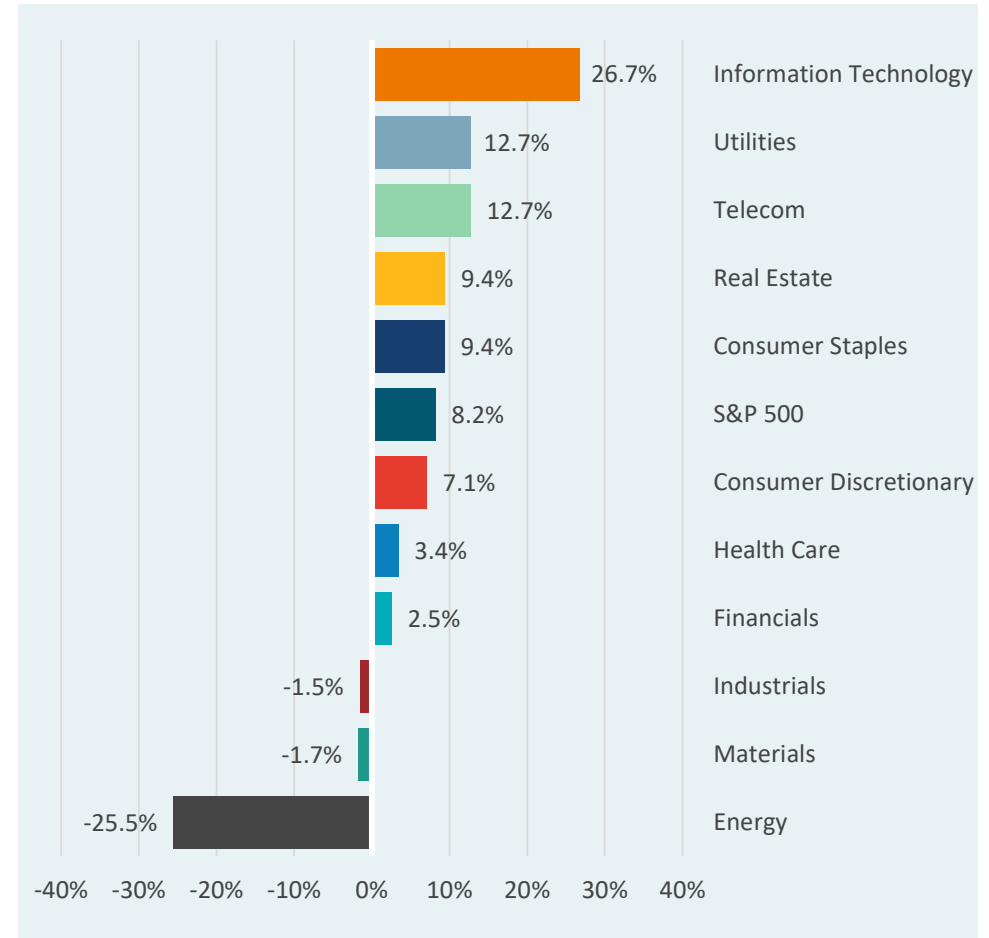
S&P 500 sector returns

QTD



Source: Morningstar, as of 2/29/20

ONE YEAR ENDING FEBRUARY



Source: Morningstar, as of 2/29/20

Detailed index returns

DOMESTIC EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Core Index							
S&P 500	(8.2)	(8.3)	(8.3)	8.2	9.9	9.2	12.7
S&P 500 Equal Weighted	(9.0)	(10.6)	(10.6)	1.4	6.4	6.7	12.2
DJ Industrial Average	(9.8)	(10.6)	(10.6)	0.4	9.4	9.6	12.2
Russell Top 200	(8.0)	(7.6)	(7.6)	10.0	11.0	10.1	12.9
Russell 1000	(8.2)	(8.1)	(8.1)	7.8	9.7	9.0	12.6
Russell 2000	(8.4)	(11.4)	(11.4)	(4.9)	3.5	5.1	10.4
Russell 3000	(8.2)	(8.3)	(8.3)	6.9	9.3	8.7	12.5
Russell Mid Cap	(8.7)	(9.4)	(9.4)	2.3	6.6	6.4	11.9
Style Index							
Russell 1000 Growth	(6.8)	(4.7)	(4.7)	15.1	15.7	12.4	14.8
Russell 1000 Value	(9.7)	(11.6)	(11.6)	0.5	3.8	5.5	10.4
Russell 2000 Growth	(7.2)	(8.2)	(8.2)	(0.7)	7.9	6.5	12.1
Russell 2000 Value	(9.7)	(14.6)	(14.6)	(9.3)	(0.8)	3.6	8.7

INTERNATIONAL EQUITY

Broad Index							
MSCI ACWI	(8.1)	(9.1)	(9.1)	3.9	7.0	5.5	8.1
MSCI ACWI ex US	(7.9)	(10.4)	(10.4)	(0.7)	4.2	2.2	4.3
MSCI EAFE	(9.0)	(10.9)	(10.9)	(0.6)	3.9	2.0	4.8
MSCI EM	(5.3)	(9.7)	(9.7)	(1.9)	4.9	2.7	3.2
MSCI EAFE Small Cap	(9.8)	(12.4)	(12.4)	(0.9)	4.1	4.6	7.6
Style Index							
MSCI EAFE Growth	(8.6)	(9.2)	(9.2)	5.5	7.3	4.2	6.4
MSCI EAFE Value	(9.5)	(12.7)	(12.7)	(6.6)	0.5	(0.4)	3.2
Regional Index							
MSCI UK	(11.9)	(15.3)	(15.3)	(7.4)	1.4	(1.1)	4.0
MSCI Japan	(9.1)	(10.4)	(10.4)	1.1	3.4	3.7	5.1
MSCI Euro	(9.0)	(11.9)	(11.9)	(1.4)	3.9	1.1	3.7
MSCI EM Asia	(2.9)	(7.2)	(7.2)	1.4	6.8	4.1	5.6
MSCI EM Latin American	(12.1)	(17.0)	(17.0)	(11.9)	0.4	0.8	(2.0)

FIXED INCOME

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Broad Index							
BBgBarc US TIPS	1.4	3.5	3.5	10.8	4.1	2.9	3.7
BBgBarc US Treasury Bills	0.2	0.3	0.3	2.3	1.7	1.2	0.6
BBgBarc US Agg Bond	1.8	3.8	3.8	11.7	5.0	3.6	3.9
Duration							
BBgBarc US Treasury 1-3 Yr	0.9	1.5	1.5	4.7	2.3	1.6	1.3
BBgBarc US Treasury Long	6.7	14.0	14.0	31.6	11.0	6.3	8.1
BBgBarc US Treasury	2.7	5.2	5.2	12.1	4.8	3.2	3.4
Issuer							
BBgBarc US MBS	1.0	1.7	1.7	7.5	3.7	2.8	3.2
BBgBarc US Corp. High Yield	(1.4)	(1.4)	(1.4)	6.1	4.9	5.2	7.3
BBgBarc US Agency Interm	1.1	2.0	2.0	6.0	2.9	2.2	2.1
BBgBarc US Credit	1.4	3.7	3.7	15.3	6.5	4.8	5.5

OTHER

Index							
Bloomberg Commodity	(5.0)	(12.0)	(12.0)	(11.1)	(5.2)	(6.2)	(5.6)
Wilshire US REIT	(7.8)	(7.1)	(7.1)	3.9	4.0	5.7	12.7
CS Leveraged Loans	(1.4)	(0.8)	(0.8)	3.2	3.8	4.6	5.0
Alerian MLP	(14.2)	(19.3)	(19.3)	(23.9)	(13.2)	(10.7)	2.0
Regional Index							
JPM EMBI Global Div	(1.0)	0.5	0.5	9.7	5.7	6.0	6.8
JPM GBI-EM Global Div	(3.4)	(4.7)	(4.7)	3.7	3.9	2.0	2.1
Hedge Funds							
HFRI Composite	(1.7)	(2.0)	(2.0)	3.2	3.1	2.8	3.8
HFRI FOF Composite	(1.5)	(1.2)	(1.2)	3.4	2.8	1.8	2.7
Currency (Spot)							
Euro	(0.9)	(2.1)	(2.1)	(3.5)	1.1	(0.4)	(2.2)
Pound	(3.1)	(3.6)	(3.6)	(4.0)	0.9	(3.7)	(1.7)
Yen	0.5	0.8	0.8	3.2	1.2	2.1	(1.9)

Source: Morningstar, HFR, as of 2/29/20

Notices & disclosures

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