

Market commentary

U.S. ECONOMICS

- The NAHB Homebuilder Confidence Index advanced 5 points to 76, well above the neutral level of 50 and its highest level since 1999. A low supply of homes, combined with low interest rates and a strong labor market have all contributed to the 20-point gain in the sentiment indicator since last December.
- The ISM Manufacturing PMI remains under the neutral level of 50.0 and fell to 47.2 from 48.1 despite expectations for a slight improvement. The indicator is sitting at its lowest point since June 2009 and "global trade" concerns between the U.S. and China have been cited as the reason for the continued contraction in activity.
- Consumer confidence indicators ticked up in December. The University of Michigan's Consumer Sentiment Index rose from 96.8 to 99.3, narrowly beating expectations of 99.2.

U.S. EQUITIES

- The S&P 500 Index climbed 3.0% in December, bringing the 2019 total return to 31.5%, the highest annual figure since 2013.
 Accommodative Fed policy as well as beliefs that U.S. Chinese relations were improving helped to move the index higher.
- The CBOE VIX Index of implied volatility ticked up from 12.6 to 13.8, indicating an increase in expectations for 30-day forward S&P 500 Index volatility. The trailing 30-day realized volatility of the S&P 500 Index increased to 7.3%.
- Per FactSet, the bottom-up 12-month target price for the S&P 500 Index is 3441, which represents a 6.5% increase over December's close of 3231. Expectations are for the Energy (+11.2%) sector to see the largest increase and Information Technology (+2.3%) the smallest.

U.S. FIXED INCOME

- The Federal Open Market Committee held the fed funds range steady at 1.50% to 1.75%. Participants indicated that rate increases were unlikely, as long as "economic data remains consistent". A few members expressed concern that leaving rates low for too long might encourage excessively-risky bank behavior.
- The New York Fed's intervention in overnight funding markets prevented overnight liquidity from drying up during the year-end turn as some had feared might happen. The Fed, which has been injecting liquidity into markets through its repo facility since September, is hoping to conclude repo operations by February.
- The difference between the 10-and 2-year Treasury yields widened to 34 bps in December, the widest since 2018. Longerdated Treasury yields picked up more than shorter-dated yields as expectations for growth and inflation in 2020 ticked higher.

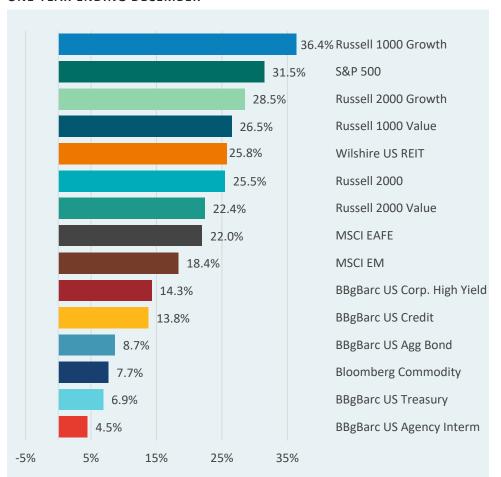
INTERNATIONAL MARKETS

- The recent general election in the U.K. resulted in Prime Minister Boris Johnson's Conservative Party winning a decisive majority in Parliament. It remains likely that the U.K. will leave the EU on January 31st, but tensions will remain high as both sides try to negotiate a trade agreement by the end of next year.
- German exports fell -2.9% year-over-year in November. Germany's relatively manufacturing-reliant economy has struggled in the face of slower global trade and more mercantilist trade policies.
- For the second consecutive calendar year, the S&P 500 Index (+31.5%) delivered a total return greater than both the MSCI EAFE (+22.0%) and MSCI EM (+18.4%) indices.

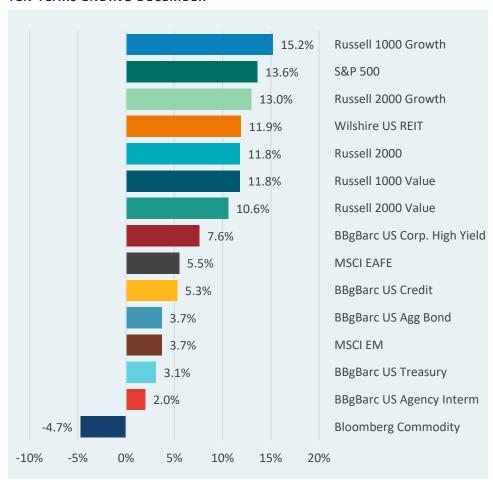


Major asset class returns

ONE YEAR ENDING DECEMBER



TEN YEARS ENDING DECEMBER



Source: Morningstar, as of 12/31/19

Source: Morningstar, as of 12/31/19



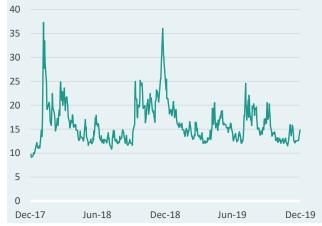
U.S. large cap equities

- The S&P 500 Index gained 3.0% in December and finished the year up 31.5%. The Energy (+6.0%), Information Technology (+4.5%) and Health Care (+3.6%) sectors were the biggest movers within the overall index and the Industrials (-0.1%) sector was the only sector to post negative performance.
- At month-end the one-year forward P/E ratio of the S&P 500 Index was 18.3, above its 5- and 10-year averages of 16.7 and 14.9. Per FactSet, the Consumer Discretionary (22.5x) sector was priced the highest relative to one-year forward expected earnings.
- The Information Technology sector gained 4.5% over the month, bringing its 1-year return to 50.3%. At a weight of roughly 22% the sector was the largest contributor (+10.0%) to the advance of the S&P 500 Index. Mega-cap tech names such as Apple and Microsoft led the way for most of the year.
- Energy sector stocks advanced 6.0% likely due to news that U.S. crude oil stockpiles fell more than expected.
 Further, encouraging economic data may have boosted speculation on higher crude oil demand in the future.

S&P 500 PRICE INDEX



IMPLIED VOLATILITY (VIX INDEX)



Source: CBOE, as of 12/31/19

S&P 500 VALUATION SNAPSHOT

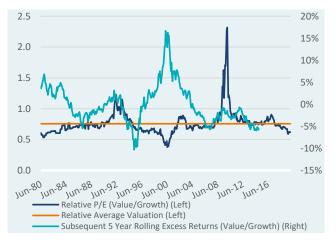


Source: Bloomberg, as of 12/31/19

Domestic equity size and style

- Growth stocks edged out value stocks to end the year with the Russell 3000 Growth Index up 3.0% versus 2.8% for the Russell 3000 Value Index. In 2019, growth-style equities returned 35.9%, easily outpacing value-style equities (+26.2%).
- Large-cap equites and small-cap equites performed in line with one another as the Russell 1000 Index and the Russell 2000 Index both advanced 2.9%. In 2019, largecap equites (+31.4%) outperformed their small-cap peers (+25.5%) by a significant margin.
- Large-cap equities' largest outperformance relative to small-cap was within the Information Technology subindex, where the Russell 1000 Index was up 4.1% to the Russell 2000 Index's 2.0%. The most significant underperformance was within the Energy sector, where large-cap returned 6.5% and small-cap 16.7%.
- Within the large-cap universe, growth-oriented equites outperformed their value counterparts by 0.2%.
 Conversely, within the small-cap universe, valueoriented equities outpaced growth equites by 1.2%.

VALUE VS. GROWTH RELATIVE VALUATIONS



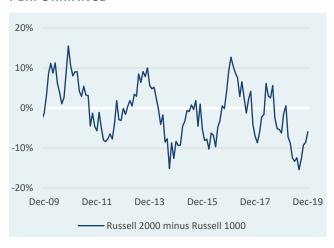
Source: Russell, Bloomberg, as of 12/31/19

VALUE VS. GROWTH 1-YR ROLLING RELATIVE PERFORMANCE



Source: FTSE, Bloomberg, as of 12/31/19

SMALL VS. LARGE 1-YR ROLLING RELATIVE PERFORMANCE

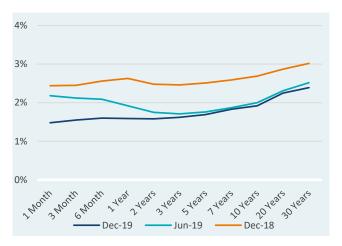




Fixed income

- The JPM GBI-EM Global Diversified Index advanced 4.1% compared to the JPM EMBI Global Diversified Index's 2.0%. U.S. dollar weakness vs. emerging market currency pairs increased returns for unhedged investors in local-currency denominated emerging markets debt over the month.
- At the end of the period, the futures implied probability of the fed funds range being cut by at least 0.25% by the end of the 2020 sat at 51%. There was a 17% probability of 0.50% in cuts by year-end.
- The European Central Bank held rates steady for the new President Christine Lagarde's first meeting. The Governing Council voted to keep the deposit rate at its all-time low level of -0.50%, in line with expectations.
- Euro-area core inflation remains stubbornly low at 1.3% year-over-year and the ECB has pledged to keep its current stimulus in place until inflation is firmly back near its target of just below 2%. Some officials argue more aggressive stimulus may be needed as inflation has undershot its target for most of the last decade.

U.S. TREASURY YIELD CURVE



NOMINAL YIELDS



Source: Morningstar, as of 12/31/19

BREAKEVEN INFLATION RATES



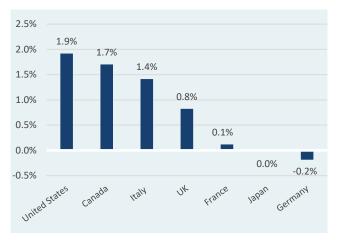
Source: Bloomberg, as of 12/31/19



Global markets

- The J.P. Morgan Emerging Market Currency Index advanced 2.7% in December. Broad emerging market currency strength likely resulted in the MSCI EM Index (+7.5%) outperforming the MSCI EM Local Index (5.7%) in U.S.-dollar terms, to the benefit of unhedged U.S. investors in emerging markets equity.
- Japanese Prime Minister Shinzo Abe announced Japan's first stimulus package since 2016, worth \$121B. The package will be used to repair typhoon damage, upgrade infrastructure and invest in technologies.
 Officials expect it to boost economic growth by 1.4%.
- Global market participants breathed a collective sigh of relief as U.S. and Chinese negotiators ironed out the plan for inking a phase one trade agreement. Chinese Vice Premier Liu He will travel to Washington for a signing ceremony at the White House on January 15th.
- The phase one deal will cut existing tariffs on \$120B in Chinese imports to 7.5% from 15.0%. U.S. tariffs of 25.0% on \$250B worth of Chinese imports will remain unchanged. In return the Chinese have agreed to bolster purchases of U.S. agricultural goods and offer more protections for businesses operating in China.

GLOBAL SOVEREIGN 10-YEAR YIELDS



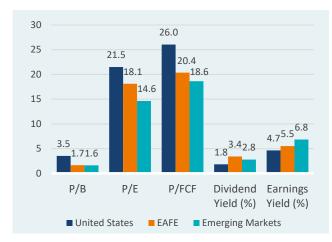
Source: Bloomberg, as of 12/31/19

U.S. DOLLAR MAJOR CURRENCY INDEX



Source: Federal Reserve, as of 12/31/19

MSCI VALUATION METRICS (3-MONTH AVG)





Commodities

- The Bloomberg Commodity Index gained 5.0%, bringing its 2019 return to 7.7%. All major components of the commodities basket saw positive returns and Petroleum (+9.5%), Energy (+6.9%) and Softs (+6.2%) led the way.
- The Petroleum component of the commodities basket advanced 9.5% over the month led by increasing oil prices. Brent crude oil returned 10.4%, due to U.S. crude inventories falling further than expected, U.S. – China trade optimism, and confirmation of extended OPEC production cuts.
- The Softs Sub-Index rose 6.2% driven primarily by increasing coffee prices (+9.1%). Unfavorable weather in Brazil, the top producer and exporter of coffee, has pushed green bean stockpiles near 50-year lows, and will likely lead to tighter supply dynamics in 2020.
- Gold continued its strong yearly performance and gained 3.6% in December. A favorable interest rate environment characterized by low rates, which decrease the opportunity cost of holding gold, likely attributed to gold returning 18.0% in 2019, it's largest yearly gain since 2010.

INDEX AND SECTOR PERFORMANCE

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Bloomberg Commodity	5.0	4.4	7.7	7.7	(0.9)	(3.9)	(4.7)
Bloomberg Agriculture	5.8	7.1	1.7	1.7	(6.9)	(7.0)	(4.0)
Bloomberg Energy	6.9	5.8	11.8	11.8	(2.3)	(7.9)	(11.7)
Bloomberg Grains	4.6	3.6	(1.1)	(1.1)	(6.1)	(8.9)	(4.6)
Bloomberg Industrial Metals	3.1	(0.2)	7.0	7.0	3.7	(0.5)	(3.5)
Bloomberg Livestock	1.6	0.1	(6.0)	(6.0)	(0.6)	(5.5)	(1.8)
Bloomberg Petroleum	9.6	13.4	33.8	33.8	5.8	(3.4)	(5.9)
Bloomberg Precious Metals	3.9	3.7	17.0	17.0	7.4	3.7	2.1
Bloomberg Softs	6.2	13.9	4.3	4.3	(11.6)	(6.8)	(5.6)

Source: Morningstar, as of 12/31/19

COMMODITY PERFORMANCE





Appendix



Periodic table of returns

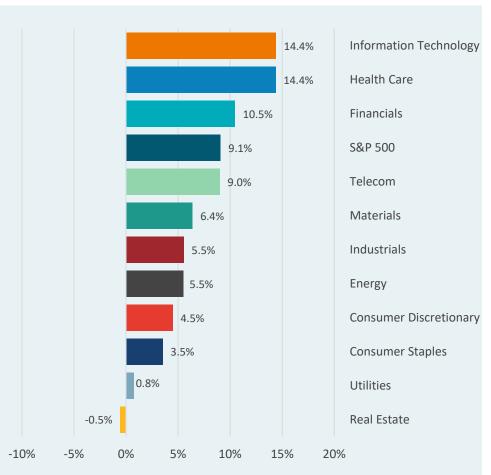
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	5-Year	10-Year
Large Cap Growth	38.7	66.4	31.8	14.0	25.9	56.3	26.0	34.5	32.6	39.8	5.2	79.0	29.1	14.3	18.6	43.3	13.5	13.3	31.7	37.3	6.7	36.4	14.6	15.2
Large Cap Equity	27.0	43.1	22.8	8.4	10.3	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	31.4	11.5	13.5
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	28.5	9.3	13.0
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	26.5	8.6	11.8
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	25.5	8.3	11.8
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	22.4	8.2	10.6
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	22.0	7.0	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	18.6	6.1	6.4
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	5.7	5.5
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	-11.0	8.7	5.6	3.7
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	7.8	3.0	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	-12.9	7.7	2.2	2.8
Real Estate	-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	4.8	1.1	0.6
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	2.1	-3.9	-4.7
														_										
			Large	Cap Equ	iity			9	Small C	ap Grov	vth			Commodities										
			Large	Cap Val	ue			ı	nterna	tional E	quity			Real Estate										
			Large	Cap Gro	wth			E	mergir	ng Mark	ets Equ	ity		Hedge Funds of Funds										
			Small	Cap Equ	iity			U	JS Bond	ls				60% MSCI ACWI/40% BBgBarc Global Bond										
			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.

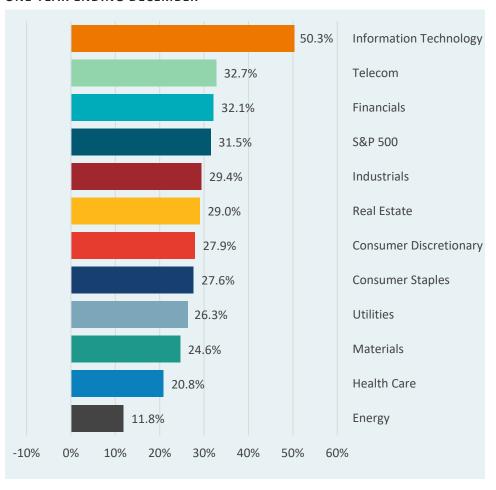


S&P 500 sector returns

Q4 2019



ONE YEAR ENDING DECEMBER



Source: Morningstar, as of 12/31/19

Source: Morningstar, as of 12/31/19



Detailed index returns

DOMESTIC EQUIT	Y
----------------	---

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Core Index							
S&P 500	3.0	9.1	31.5	31.5	15.3	11.7	13.6
S&P 500 Equal Weighted	2.8	7.6	29.2	29.2	12.4	9.8	13.5
DJ Industrial Average	1.9	6.7	25.3	25.3	15.7	12.6	13.4
Russell Top 200	3.1	9.8	31.8	31.8	16.2	12.3	13.7
Russell 1000	2.9	9.0	31.4	31.4	15.0	11.5	13.5
Russell 2000	2.9	9.9	25.5	25.5	8.6	8.2	11.8
Russell 3000	2.9	9.1	31.0	31.0	14.6	11.2	13.4
Russell Mid Cap	2.3	7.1	30.5	30.5	12.1	9.3	13.2
Style Index							
Russell 1000 Growth	3.0	10.6	36.4	36.4	20.5	14.6	15.2
Russell 1000 Value	2.8	7.4	26.5	26.5	9.7	8.3	11.8
Russell 2000 Growth	2.3	11.4	28.5	28.5	12.5	9.3	13.0
Russell 2000 Value	3.5	8.5	22.4	22.4	4.8	7.0	10.6

FIXED INCOME

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Broad Index							
BBgBarc US TIPS	0.4	0.8	8.4	8.4	3.3	2.6	3.4
BBgBarc US Treasury Bills	0.1	0.5	2.3	2.3	1.7	1.1	0.6
BBgBarc US Agg Bond	(0.1)	0.2	8.7	8.7	4.0	3.0	3.7
Duration							
BBgBarc US Treasury 1-3 Yr	0.2	0.5	3.6	3.6	1.9	1.4	1.2
BBgBarc US Treasury Long	(2.8)	(4.1)	14.8	14.8	6.9	4.1	7.0
BBgBarc US Treasury	(0.6)	(8.0)	6.9	6.9	3.3	2.4	3.1
Issuer							
BBgBarc US MBS	0.3	0.7	6.4	6.4	3.2	2.6	3.2
BBgBarc US Corp. High Yield	2.0	2.6	14.3	14.3	6.4	6.1	7.6
BBgBarc US Agency Interm	0.1	0.3	4.5	4.5	2.4	1.9	2.0
BBgBarc US Credit	0.3	1.1	13.8	13.8	5.8	4.4	5.3

INTERNATIONAL EQUITY

INTERNATIONAL EQUIT							
Broad Index							
MSCI ACWI	3.5	9.0	26.6	26.6	12.4	8.4	8.8
MSCI ACWI ex US	4.3	8.9	21.5	21.5	9.9	5.5	5.0
MSCI EAFE	3.2	8.2	22.0	22.0	9.6	5.7	5.5
MSCI EM	7.5	11.8	18.4	18.4	11.6	5.6	3.7
MSCI EAFE Small Cap	4.4	11.5	25.0	25.0	10.9	8.9	8.7
Style Index							
MSCI EAFE Growth	2.9	8.4	27.9	27.9	12.8	7.7	6.9
MSCI EAFE Value	3.7	7.8	16.1	16.1	6.3	3.5	4.0
Regional Index							
MSCI UK	5.2	10.0	21.0	21.0	8.3	3.3	5.0
MSCI Japan	2.1	7.6	19.6	19.6	8.9	7.7	6.6
MSCI Euro	2.9	7.9	22.9	22.9	9.1	5.1	3.7
MSCI EM Asia	7.1	12.5	19.2	19.2	12.9	6.6	5.8
MSCI EM Latin American	10.3	10.5	17.5	17.5	10.7	4.2	(0.6)

THER

OTHER							
Index							
Bloomberg Commodity	5.0	4.4	7.7	7.7	(0.9)	(3.9)	(4.7)
Wilshire US REIT	(0.7)	(1.1)	25.8	25.8	7.6	6.9	11.9
CS Leveraged Loans	1.6	1.7	8.2	8.2	4.5	4.5	5.2
Alerian MLP	8.9	(4.6)	6.7	6.7	(5.0)	(7.0)	4.8
Regional Index							
JPM EMBI Global Div	2.0	1.8	15.0	15.0	6.7	6.2	6.9
JPM GBI-EM Global Div	4.1	5.2	13.5	13.5	7.0	2.8	2.7
Hedge Funds							
HFRI Composite	1.8	3.5	10.4	10.4	4.5	3.5	4.0
HFRI FOF Composite	1.3	2.5	7.8	7.8	3.7	2.2	2.8
Currency (Spot)							
Euro	1.8	3.0	(1.8)	(1.8)	2.1	(1.5)	(2.4)
Pound	2.4	7.5	4.0	4.0	2.3	(3.2)	(2.0)
Yen	0.8	(0.6)	1.0	1.0	2.4	2.0	(1.5)

Source: Morningstar, HFR, as of 12/31/19



Notices & disclosures

Past performance is no guarantee of future results. This document is provided for informational purposes only and is directed to institutional clients and eligible institutional counterparties only and is not intended for retail investors. Nothing herein constitutes investment, legal, accounting or tax advice, or a recommendation to buy, sell or hold a security or pursue a particular investment vehicle or any trading strategy. This document may include or imply estimates, outlooks, projections and other "forward-looking statements." No assurance can be given that future results described or implied by any forward looking information will be achieved. Investing entails risks, including possible loss of principal. Verus Advisory Inc. ("Verus") file a single form ADV under the United States Investment Advisors Act of 1940, as amended. Additional information about Verus Advisory, Inc. available on the SEC's website at www.adviserinfo.sec.gov.

Verus – also known as Verus Advisory™.

