PERSPECTIVES THAT DRIVE ENTERPRISE SUCCESS

MAY 2020 Capital Markets Update

Verus⁷⁷

Market commentary

U.S. ECONOMICS

- U.S. housing starts fell -30.2% from the month before (-29.7% year-over-year). Disruptions to building material supply chains likely weighed on the print. Existing home sales fell -17.8% from the month before (17.2% year-over-year) as transaction volume decreased.
- The ISM Manufacturing PMI improved from 41.5 in April to 43.1 in May, slightly below expectations of 43.7. New orders showed demand contracted again this month but at a slower rate. Only 6 of 18 manufacturing sectors reported expansion in activity.
- The broad unemployment rate fell to 13.3% from 14.7% in April defying economists' expectations of 19.5%. Though the decline in the unemployment rate in May was the largest in history, a footnote in the report from the Bureau of Labor Statistics implied that the actual rate of unemployment may be closer to 16.3%.

U.S. EQUITIES

- The S&P 500 rebounded 4.8% in May, bringing the quarter-to-date return to 18.2%. At month-end, the index was still down -5.0% since the beginning of the year. Strong performance from mega-cap tech companies and optimism surrounding nationwide reopening progress has powered the S&P 500 Index back to just -11.2% below the all-time high levels reached in mid-February of this year.
- In May, the price of the S&P 500 rose to 24.3x expectations for earnings over the next year. The last time the forward P/E ratio of the S&P 500 Index reached 24.3x was back in November of 2000.
- Speculative trading surged and the put/call ratio on the S&P 500 Index hit levels not seen since the index was at its peak toward the beginning of the year. This could suggest a high degree of uncertainty.

U.S. FIXED INCOME

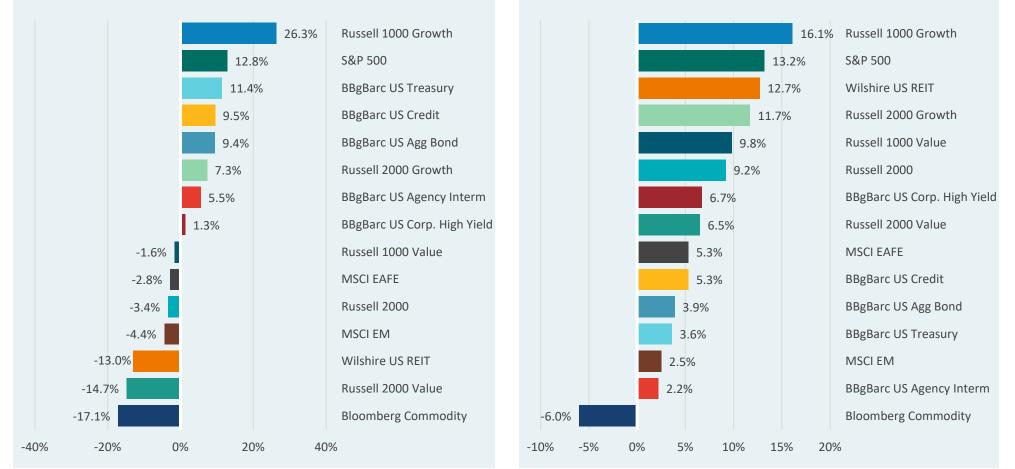
- Year-over-year growth in core consumer price inflation, measured by the Core Consumer Price Index, slowed from 2.1% to 1.0%, below expectations for 1.7% growth. The savings rate picked up to +33.0% as consumers' marginal propensities to consume fell and demand for goods eroded creating downward pressure on prices.
- In May, the Federal Reserve began buying corporate bonds for the first time in history with the intention of ensuring the liquidity of credit markets. Companies which drew down bank credit lines to fortify balance sheets in March are now issuing cheaper long-term debt to pay this revolving credit.
- The 30-year Treasury yield rose to 1.4% in May from 1.3% in April.
 Long-duration Treasuries returned -1.8% for the month.

INTERNATIONAL MARKETS

- President Trump and the Labor Department directed a board in charge of federal retirement dollars to not invest in Chinese equities. The Thrift Savings Plan, a retirement plan for federal employees, was set to invest in equities based on MSCI ACWI ex USA IMI weightings. Steps were taken to avoid investment of U.S. pension dollars in Chinese companies which were viewed as potentially threatening to U.S. national security interests.
- Japanese officials approved a ¥108 trillion (\$990 billion) package which will provide financing help for struggling companies, rent subsidies for businesses, and healthcare assistance.
- Emerging market currencies performed well relative to the dollar in May, benefiting from global risk-on sentiment, as well as the recovery in oil prices. The J.P. Morgan EMCI returned +3.4%.

Major asset class returns

ONE YEAR ENDING MAY



*Only publicly traded asset performance is shown here. Performance of private assets is typically released with a 3- to 6-month delay.

Source: Morningstar, as of 5/31/20

Source: Morningstar, as of 5/31/20

TEN YEARS ENDING MAY

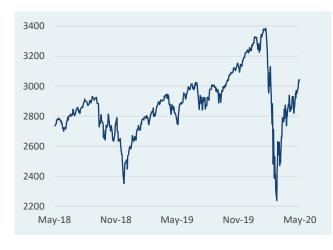


Capital Markets Update May 2020

U.S. large cap equities

- The S&P 500 Index continued to gain through May, returning 4.7%, and has rebounded quickly from the March 23rd price index low of 2237. The S&P 500 Price Index ended the month at 3044, only -11.2% below the February 19th high water mark of 3386.
- Per FactSet, with nearly all S&P 500 companies reporting Q1 2020 results, 64% have reported positive EPS surprise. Only 46 companies in the S&P 500 have issued Q2 EPS guidance, well below the five-year average of 107 companies, as significant uncertainty surrounding the economic outlook persisted.
- All 11 major sectors contributed positively to returns for the S&P 500 Index. Information Technology (+7.1%) led the index higher for the second straight month. The Materials sector (+7.0%) also contributed to the strong returns for the overall index.
- The CBOE VIX Index of implied volatility, sometimes described as the "Fear Index", declined for the second month in a row and fell to 27.5 by month-end. The VIX is now 55.2 points off mid-March highs of 82.7, indicating an expectation for calmer markets as states begin to reopen across the country.

S&P 500 PRICE INDEX





Source: CBOE, as of 5/31/20

S&P 500 VALUATION SNAPSHOT



Source: Bloomberg, as of 5/31/20

Verus⁷⁷

Source: Bloomberg, as of 5/31/20

Capital Markets Update May 2020

Domestic equity size and style

- The growth factor continued to outperform the value factor in May. The Russell 3000 Growth Index (+6.7%) outperformed the Russell 3000 Value Index (+3.1%). Over the year-to-date, the Russell 3000 Growth Index has outperformed its value counterpart by +3.7%.
- Small-cap equities as measured by the Russell 2000 Index (+6.5%) outperformed large-caps measured by the Russell 1000 Index (+5.3%). The NFIB Small Business Optimism Index, a measure of small businesses that aren't necessarily traded publicly, increased 3.5 points in May to 94.4.
- Cyclicals tend to lead the market out of recessions as cyclicals respond to trends in economic data while defensives tend be less affected. The MSCI USA Cyclicals - Defensives Total Return Spread Index has returned 5.5% over the past two months.
- Momentum factor investing, a strategy of buying stocks that have performed well and selling underperformers has outperformed the broader market in recent months. The S&P 500 Momentum Index outperformed the S&P 500 Index by +2.1% in May.



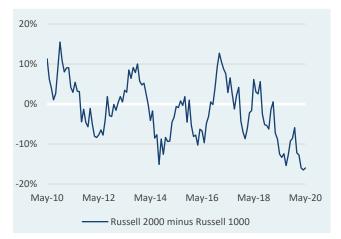
VALUE VS. GROWTH RELATIVE VALUATIONS

VALUE VS. GROWTH 1-YR ROLLING RELATIVE PERFORMANCE



Source: FTSE, Bloomberg, as of 5/31/20

SMALL VS. LARGE 1-YR ROLLING RELATIVE PERFORMANCE



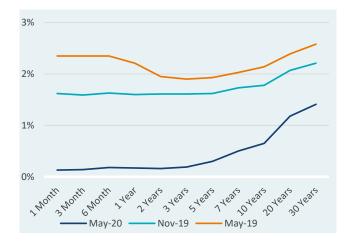
Source: FTSE, Bloomberg, as of 5/31/20

Source: Russell, Bloomberg, as of 5/31/20

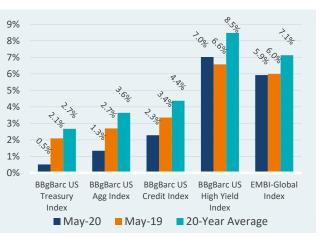
Fixed income

- High-yield U.S. credit returned 4.4% in May, bringing its quarter-to-date return to +9.1%. The Federal Reserve purchased \$3 billion in mostly investment-grade ETFs, but also bought some corporate debt that had been downgraded to below investment-grade quality. At month-end, high yield credit was still down -4.7% over the year-to-date.
- The European Central Bank announced its plans to expand the Eurozone's pandemic bond buying program by €600 billion (\$842 billion). ECB President Lagarde said that the ECB's prediction of an 8-12% decline in 2020 Eurozone GDP was likely to materialize.
- Global risky credit performed well in May, benefitting from risk-on sentiment. Hard-currency denominated emerging market debt (JPM EMBI Global Diversified Index) returned 6.1% in May and outperformed localcurrency denominated emerging market debt (J.P. Morgan GBI-EM +5.2%).
- Breakeven inflation rates continued to rise from the low levels experienced in March. Part of the recovery in priced-in inflation rates has been attributed to the recovery in oil prices from record lows.

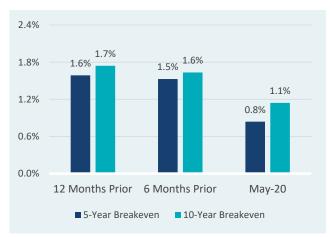
U.S. TREASURY YIELD CURVE



NOMINAL YIELDS



BREAKEVEN INFLATION RATES



Source: Bloomberg, as of 5/31/20

Source: Morningstar, as of 5/31/20

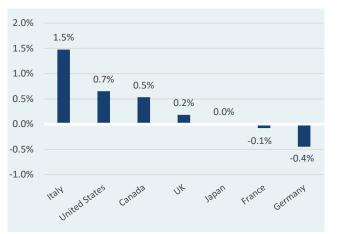
Source: Bloomberg, as of 5/31/20

6



Global markets

- The pound tumbled -2.0% against the U.S. dollar in May, resulting in currency tailwinds for hedged U.S. investors in U.K. equities. The MSCI United Kingdom Index, hedged to U.S. dollars, returned +3.2%, while the unhedged index returned +1.0%. Year-to-date, the currency hedge has paid investors +5.7%.
- Tensions between China and the U.S. escalated as the U.S. withdrew from the W.H.O. after the President criticized the agency for not quickly sounding the alarm on COVID-19. Additionally, the U.S. revoked Hong Kong's advantaged trade status based on the view that it was not sufficiently autonomous from China.
- International developed equities (MSCI EAFE +4.4%) outperformed both emerging market equities (MSCI EM +0.8%) and global equities (MSCI ACWI +4.3%). Within the MSCI EAFE Index, European companies (MSCI Euro +6.5%) outperformed Japanese companies (MSCI Japan +5.9%) in U.S. dollar terms.
- The OECD painted a bleak outlook for global growth. In its best-case scenario assuming no resurgence of the virus, 2020 global GDP was projected to fall -6.0%. Given there is a second wave of, GDP was forecasted at -7.6%. In both scenarios global GDP would require at least two years to recover to Q4 2019 levels.

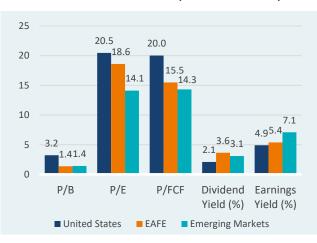


GLOBAL SOVEREIGN 10-YEAR YIELDS

U.S. DOLLAR MAJOR CURRENCY INDEX



MSCI VALUATION METRICS (3-MONTH AVG)



Source: Bloomberg, as of 5/31/20

Source: Federal Reserve, as of 5/31/20

Source: Bloomberg, as of 5/31/20

7

Commodities

- In May, the Bloomberg Commodity Index rose 4.3%. The petroleum component of the index advanced 34.9% as it recovered from the huge losses it incurred in April. The Energy component of the index also clawed back some of its losses and gained +11.4%.
- The Bloomberg Precious Metals Sub-Index posted a +6.3% return in May, bolstered by silver prices which rose 23.6%. Analysts believe global efforts to restart economies could boost demand for silver, which had slipped to an all-time low level relative to gold during the crisis.
- Oil prices marked their fifth consecutive weekly gain at the end of May on the back of a tentative OPEC+ agreement to cut output. Russia and Saudi Arabia focused on tightening member countries' compliance with agreed output cuts, which resulted in Iraq as well as three other member countries agreeing to implement larger cuts in Q3 to compensate for their past quota violations.
- Recovering oil prices have prompted some U.S. producers to re-open wells just weeks after shutting down. Demand in China for oil improved although U.S. diesel demand fell to its lowest level in 21 years.

INDEX AND SECTOR PERFORMANCE

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Bloomberg Commodity	4.3	(10.4)	(21.2)	(17.1)	(6.9)	(7.8)	(6.0)
Bloomberg Agriculture	(0.9)	(9.6)	(15.7)	(14.9)	(10.1)	(7.7)	(4.0)
Bloomberg Energy	11.4	(30.2)	(47.4)	(44.8)	(16.1)	(19.4)	(15.8)
Bloomberg Grains	(0.5)	(7.0)	(13.2)	(15.7)	(9.5)	(8.6)	(4.2)
Bloomberg Industrial Metals	2.8	(5.1)	(14.3)	(10.6)	(2.4)	(2.3)	(4.1)
Bloomberg Livestock	5.3	(13.6)	(28.2)	(30.1)	(14.7)	(10.5)	(5.3)
Bloomberg Petroleum	34.9	(39.0)	(54.2)	(47.4)	(14.1)	(18.4)	(12.1)
Bloomberg Precious Metals	6.3	11.1	11.3	30.5	7.9	5.6	2.2
Bloomberg Softs	(1.6)	(17.0)	(21.1)	(16.6)	(14.6)	(8.3)	(6.0)



Source: Bloomberg, as of 5/31/20

COMMODITY PERFORMANCE

Capital Markets Update May 2020

Source: Morningstar, as of 5/31/20





Periodic table of returns

1998 1999

BEST

	1000	1000	2000	2001	2002	2005	2004	2005	2000	2007	2000	2005	2010	2011	2012	2013	2014	2015	2010	2017	2010	2015	110	Jicai	10 1001
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	5.5	14.5	16.1
Large Cap Growth	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	5.2	9.6	13.1
Real Estate	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	0.7	7.7	11.7
Cash	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	0.4	6.3	10.2
Hedge Funds of Funds	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	-3.6	4.7	9.8
60/40 Global Portfolio	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	-4.5	4.4	9.2
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	-4.9	3.9	6.5
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	-6.6	3.7	6.4
International 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	-14.3	1.1	5.3
Large Cap Value	-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	-15.7	0.9	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	-15.9	0.9	2.5
Emerging Markets Equity	-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	-16.0	0.8	2.5
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	-21.2	0.7	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	-25.6	-7.8	-6.0

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018



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 3/31/20.



10

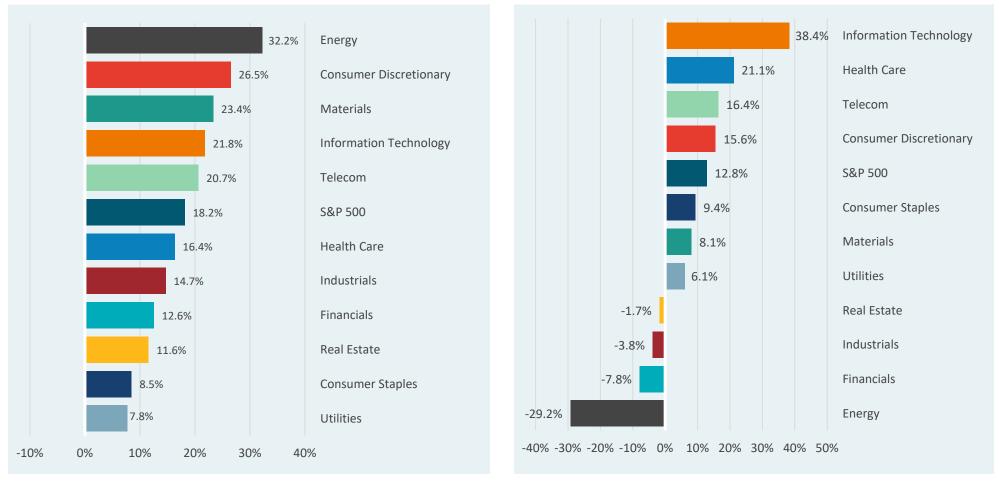
2019

YTD

5-Year 10-Year

S&P 500 sector returns

QTD



Source: Morningstar, as of 5/31/20

Source: Morningstar, as of 5/31/20

ONE YEAR ENDING MAY



Detailed index returns

DOMESTIC EQUITY							
	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Core Index							
S&P 500	4.8	18.2	(5.0)	12.8	10.2	9.9	13.2
S&P 500 Equal Weighted	4.7	19.8	(12.2)	2.4	5.3	6.3	11.7
DJ Industrial Average	4.7	16.4	(10.1)	4.8	9.1	9.8	12.4
Russell Top 200	4.7	18.1	(2.8)	16.3	11.8	11.0	13.7
Russell 1000	5.3	19.2	(4.9)	12.5	10.1	9.6	13.1
Russell 2000	6.5	21.1	(15.9)	(3.4)	2.0	3.7	9.2
Russell 3000	5.3	19.3	(5.6)	11.5	9.5	9.2	12.8
Russell Mid Cap	7.0	22.4	(10.7)	2.6	5.5	5.9	11.4
Style Index							
Russell 1000 Growth	6.7	22.5	5.2	26.3	17.2	14.5	16.1
Russell 1000 Value	3.4	15.1	(15.7)	(1.6)	2.6	4.4	9.8
Russell 2000 Growth	9.4	25.8	(6.6)	7.3	7.7	6.3	11.7
Russell 2000 Value	2.9	15.6	(25.6)	(14.7)	(4.2)	0.7	6.5
INTERNATIONAL EQUITY							
Broad Index							
MSCLACWI	4.3	15.5	(9.2)	54	5.2	5.3	8.5

Broad Index							
MSCI ACWI	4.3	15.5	(9.2)	5.4	5.2	5.3	8.5
MSCI ACWI ex US	3.3	11.1	(14.8)	(3.4)	(0.2)	0.8	4.4
MSCI EAFE	4.4	11.1	(14.3)	(2.8)	(0.4)	0.8	5.3
MSCI EM	0.8	10.0	(16.0)	(4.4)	(0.2)	0.9	2.5
MSCI EAFE Small Cap	7.1	18.3	(14.3)	(0.8)	0.1	3.3	7.8
Style Index							
MSCI EAFE Growth	5.5	13.3	(6.6)	7.4	4.6	4.3	7.4
MSCI EAFE Value	3.0	8.6	(22.1)	(13.0)	(5.4)	(2.9)	3.0
Regional Index							
MSCI UK	1.1	6.3	(24.4)	(14.9)	(5.0)	(3.4)	3.5
MSCI Japan	5.9	11.6	(7.1)	7.0	3.3	3.1	5.9
MSCI Euro	6.5	12.6	(17.9)	(6.6)	(3.3)	(0.1)	4.2
MSCI EM Asia	(0.3)	8.9	(10.8)	3.0	2.0	2.3	5.1
MSCI EM Latin American	6.4	13.2	(38.5)	(31.9)	(8.6)	(4.0)	(4.6)

FIXED INCOME							
	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Broad Index							
BBgBarc US TIPS	0.3	3.1	4.8	8.0	4.3	3.3	3.6
BBgBarc US Treasury Bills	0.0	0.0	0.6	1.9	1.8	1.2	0.7
BBgBarc US Agg Bond	0.5	2.3	5.5	9.4	5.1	3.9	3.9
Duration							
BBgBarc US Treasury 1-3 Yr	0.1	0.2	3.0	4.6	2.7	1.9	1.4
BBgBarc US Treasury Long	(1.9)	0.1	21.0	26.9	12.1	8.4	8.2
BBgBarc US Treasury	(0.3)	0.4	8.6	11.4	5.5	3.9	3.6
lssuer							
BBgBarc US MBS	0.1	0.8	3.6	6.5	3.9	3.1	3.2
BBgBarc US Corp. High Yield	4.4	9.1	(4.7)	1.3	3.0	4.3	6.7
BBgBarc US Agency Interm	0.3	0.6	3.6	5.5	3.2	2.4	2.2
BBgBarc US Credit	1.6	6.3	2.9	9.5	5.6	4.8	5.3
OTHER Index							
Bloomberg Commodity	4.3	2.7	(21.2)	(17.1)	(6.9)	(7.8)	(6.0)
Wilshire US REIT	(0.3)	8.1	(19.6)	(13.0)	0.3	5.7	12.7
CS Leveraged Loans	3.8	8.3	(6.0)	(3.4)	1.7	4.6	5.0
Alerian MLP	8.7	60.3	(32.8)	(37.6)	(16.1)	(13.7)	0.1
Regional Index							
JPM EMBI Global Div	6.1	8.5	(6.1)	0.4	2.4	4.2	5.9
JPM GBI-EM Global Div	5.2	9.3	(7.3)	2.1	1.1	2.0	1.7
Hedge Funds							
HFRI Composite	2.5	7.3	(4.8)	0.3	1.7	1.8	3.5
HFRI FOF Composite	2.1	5.7	(3.6)	1.6	1.6	0.9	2.5
Currency (Spot)							
Euro	1.6	1.4	(0.9)	(0.2)	(0.4)	0.3	(1.0)
Pound	(2.0)	(0.3)	(6.7)	(1.9)	(1.4)	(4.1)	(1.6)

(0.7)

0.2

0.9

0.8

0.9

2.9

FIVED INCOME

Yen

Source: Morningstar, HFR, as of 5/31/20



12

(1.7)

Detailed private market returns

Comparison to public market index returns

Private Equity Pooled IRRs	1 Year	3 Year	5 Year	10 Year
Global Private Equity FoFs & Secondary Funds	11.9	13.0	10.0	11.9
Global Private Equity Direct Funds *	17.6	16.5	13.3	14.3
U.S. Private Equity Direct Funds *	18.8	16.7	13.7	15.6
Europe Private Equity Direct Funds *	18.8	20.4	15.0	12.2
Asia Private Equity Direct Funds *	12.6	13.4	11.9	13.2
Public Index Time-weighted Returns				
MSCI World	27.7	12.6	8.7	9.5
S&P 500	31.5	15.3	11.7	13.6
MSCI Europe	23.8	9.8	5.1	5.2
MSCI AC Asia Pacific	19.4	10.8	6.9	6.1

Private Real Estate Pooled IRRs	1 Year	3 Year	5 Year	10 Year
U.S. All Private Real Estate	9.1	9.8	10.4	13.1
Public Index Time-weighted Returns				
FTSE NAREIT Equity REIT	26.0	8.1	7.2	11.9

Private Credit Pooled IRRs	1 Year	3 Year	5 Year	10 Year
U.S. All Private Debt **	9.0	9.2	8.3	11.1
Public Index Time-weighted Returns				
S&P / LSTA U.S. Leveraged Loan 100 Index	10.7	4.3	4.1	4.7
Private Real Assets Pooled IRRs	1 Year	3 Year	5 Year	10 Year
Private Real Assets Pooled IRRs Global Nature Resources ***	1 Year (5.8)	3 Year	5 Year (0.4)	10 Year 3.3
Global Nature Resources ***	(5.8)	0.2	(0.4)	3.3
Global Nature Resources *** Global Infrastructure	(5.8)	0.2	(0.4)	3.3

Source: Pooled IRRs are from Thompson Reuters C|A and Time-weighted Returns are from Investment Metrics, as of December 31st, 2019. All returns in U.S. dollars.

* Includes Buyout, Growth Equity and Venture Capital.

** Includes Control-Oriented Distressed, Credit Opportunities, Senior Debt and Subordinated Capital.

*** Includes Private Equity Energy, Timber and Upstream Energy & Royalties.



13

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™.

