

Capital Market Review
As of December 31, 2019

4Q19 Market Recap

Fourth quarter wrapped up a stellar year for domestic large cap, +31.5% for the year, and international stocks, +21.5%. The S&P 500 Index returns were powered primarily by the Technology sector. Domestic bonds also had a very good year, +8.7%, as did Emerging Market bonds, 14.4%.

After a miserable decline in the stock market in the fourth quarter of 2018, the market had a nice rebound in the first four months of 2019, as central banks signaled they would provide stimulus to try and keep the economic expansion intact. The markets rejoiced. Then, from the end of April to the end of September, markets were choppy reflecting investor uncertainty regarding the trade negotiations between the US and China, and the continued deterioration in macroeconomic indicators. Surprisingly, by the end of September, the Barclays Aggregate Bond Index was up 8.5%, while the MSCI World was up 18%. The flood of central bank liquidity had positive effect on all parts of the market. To have such strong returns for both stocks and bonds at the same time is unusual. But the run wasn't over, and in the fourth quarter, the S&P 500 ran up another 9%. Market confidence was boosted by strong employment numbers, a pick up in the service sectors, and current trade peace.

Economic growth remains solid in the U.S. Growth outside of the U.S. remains slow although improving modestly. We feel an imminent U.S. recession is unlikely but risks still exist. And it is expected that the combination of moderate growth and technological innovation will continue to suppress inflation below the Fed's 2% target. With Brexit, trade negotiations and a U.S. election year, we are likely to see some volatility in 2020.

The Allium Team

Market Dashboard¹ – As of December 31, 2019

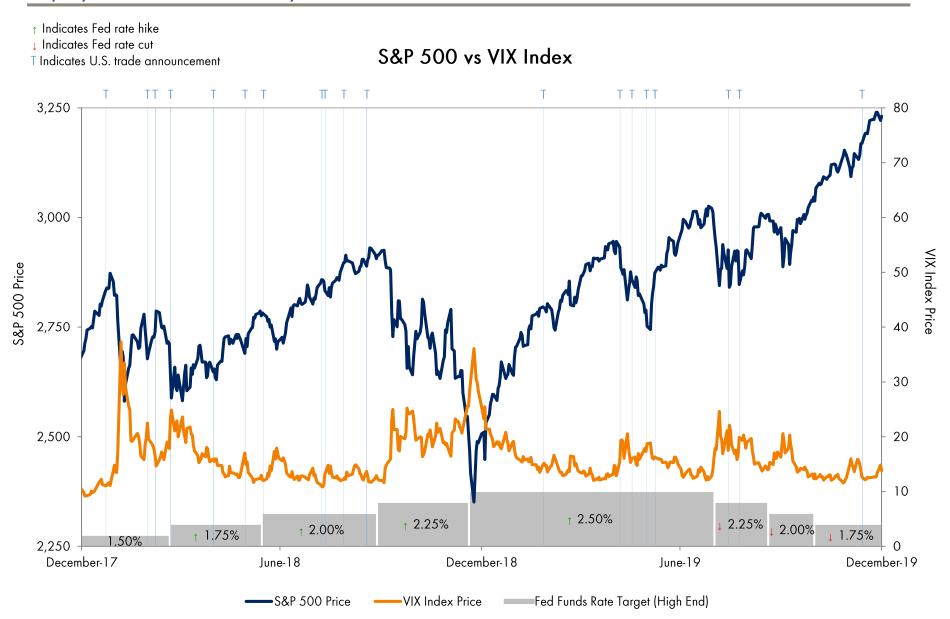
Asset Class	Fourth Quarter	4Q19	YTD
Domestic Equity (S&P 500)	 Ten of the eleven S&P 500 sectors generated positive results over the quarter, led by strong performance from Information Technology (+14.4%) and Health Care (+14.4%). Real Estate (-0.5%) and Utilities (+0.8%) provided the lowest results. Stocks finished the quarter with strong positive results as a pick-up in the service sectors, continued resiliency of overall employment in the U.S., and an enforceable agreement by the U.S. and China on a Phase One trade deal helped restore market confidence that a recession is not imminent. 	9.1%	31.5%
International Equity (EAFE)	 Developed International Markets generated strong results over the quarter, but fell behind Emerging Markets and U.S. Equities. The U.S. dollar depreciated against most major currencies. In local currency terms, results were generally positive for Developed International Markets. Japan (+8.2%), Germany (+6.7%), and Hong Kong (+6.7%) were the best performers, while Australia (+0.1%) and the U.K. (+2.3%) performed the lowest. 	8.2%	22.0%
Emerging Market Equity (MSCI Emerging Markets)	 Taiwan (+14.0%) and China (+14.0%) were the top performers on a local currency basis over the quarter while Mexico (+1.6%) and South Africa (+4.3%) were the bottom performers on a local currency basis. Emerging Markets currencies generally appreciated relative to the U.S. dollar for the quarter. The Russian Ruble and Mexican Peso experienced the greatest appreciation while the Indian Rupee depreciated relative to the U.S. dollar. 	11.8%	18.4%
Fixed Income (BB Capital Aggregate)	 Fixed Income returns finished the quarter in positive territory after the third and final cut in interest rates by the U.S. Federal Reserve for the year. Corporate High Yield (+2.6%) and Emerging Markets (+2.6%) were the strongest sectors for the quarter while Long Term Government (+4.1%) were the weakest. 	0.2%	8.7%
International Debt (ID) (JPM Global Bond Unhedged)	 Developed Markets Debt was a negative performance sector during the quarter. Core and peripheral European bond yields rose as European Central Bank stimulus began to register in the regional economy. Emerging Markets Debt was a strong performing sector driven by falling yields. 	-0.5% ID 2.1% EM	6.0% ID 14.4% EM
Real Estate Investment Trusts (DJ Wilshire REIT)	 REITs were essentially flat during the fourth quarter but posted strong year-to-date gains. Infrastructure (+6.9%) and Resorts/Lodging (+5.2%) REITs were the best performing sectors. Residential (-3.4%) was the largest detractor. 	0.1%	28.7%

	Dec -19	Sep - 19	Dec - 18	10-Year Average	
Economic Growth (GDP)	-	2.1%	1.1%	2.3%	
Unemployment Rate	3.5%	3.5%	3.9%	6.2%	
Labor Participation Rate	63.2%	63.2%	63.1%	63.3%	
Core Inflation	2.3%	2.4%	2.2%	1.8%	
Inflation (Headline)	1.7%	1.6%	2.3%	1.8%	
Consumer Confidence	126.5	126.3	126.6	91.6	
WTI Crude Oil (per barrel)	\$61.06	\$54.07	\$45.41	\$72.72	
Natural Gas	\$2.19	\$2.33	\$2.94	\$3.31	
Volatility	13.8	16.2	25.4	1 <i>7</i> .1	
Gold	\$1,523	\$1,466	\$1,281	\$1,347	
LIBOR	1.5%	1.8%	2.4%	0.64%	
Federal Funds Target Rate ¹	1.75%	2.0%	2.5%	0.74%	
ECB Refinancing Rate	0.00%	0.00%	0.00%	0.39%	
10-Year U.S. Treasury Yield	1.92%	1.66%	2.68%	2.36%	
10-Year German Bund Yield	-0.19%	-0.57%	0.24%	1.08%	
S&P 500 Index	3,230.8	2,976.7	2,506.9	1,969.4	
EUR/USD Exchange Rate	1.121	1.090	1.147	1.230	
USD/JPY Exchange Rate	108.6	108.1	109.7	101.3	

¹Fed Funds rate is a target range of 1.50% – 1.75%

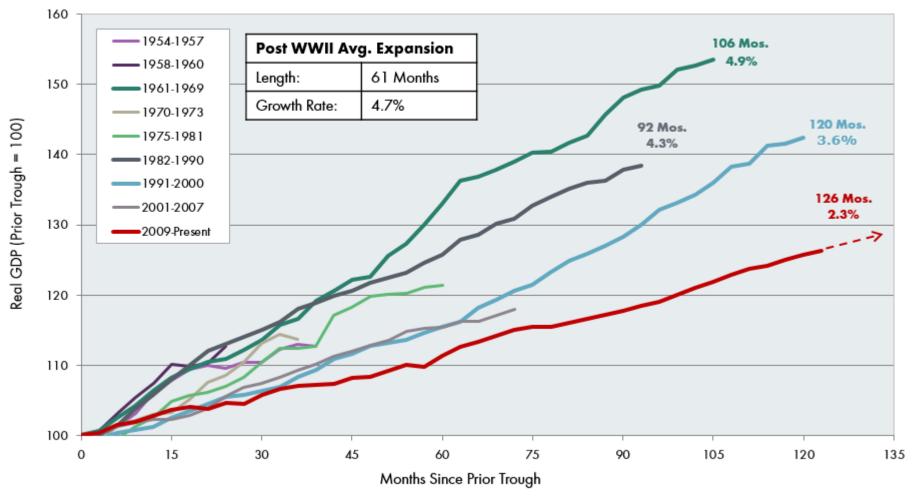
Source: Bloomberg

Equity Markets & Volatility - 2018 & 2019 in Review



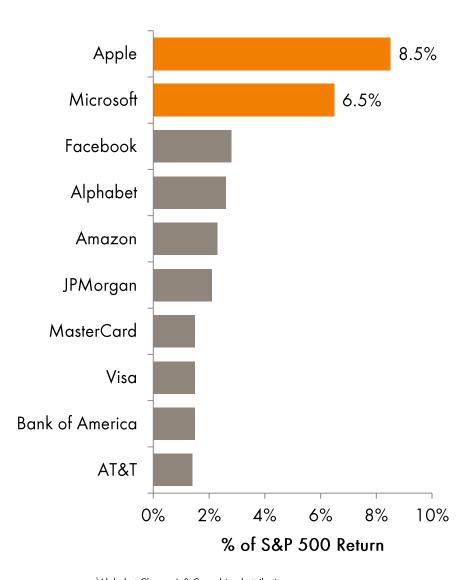
Current U.S. Economic Expansion Now the Longest, continued subpar growth





U.S. Equity Market Leadership

Two stocks contributed 15% of the total return of the S&P 500 Index in 2019:



Market Capitalizations (as of 12/31/2019)

Apple: \$1.3 Trillion

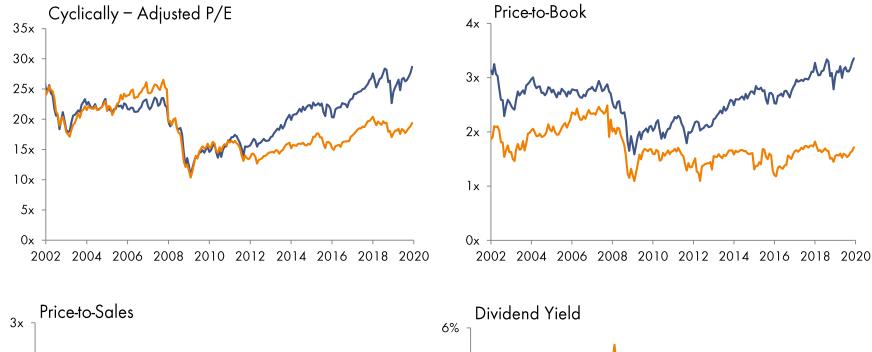
Microsoft: \$1.2 Trillion

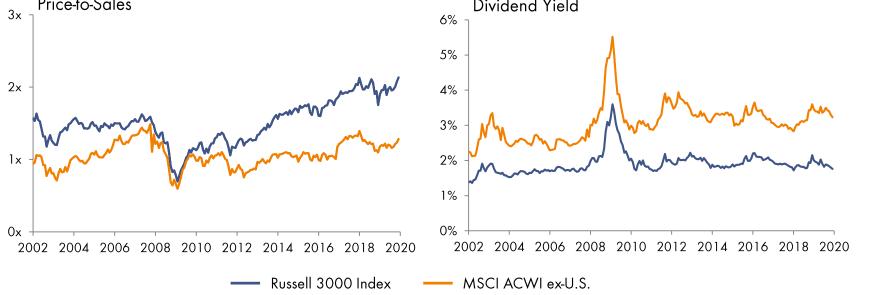
Combined: \$2.5 Trillion >

Entire Russell 2000 Index: \$2.45 Trillion

Continued high appreciation in the tech sector has further exacerbated the growth/value divergence. The MSCI World Growth Forward P/E has a 67.9% premium to the MSCI World Value Forward P/E as of 12/31/2019.

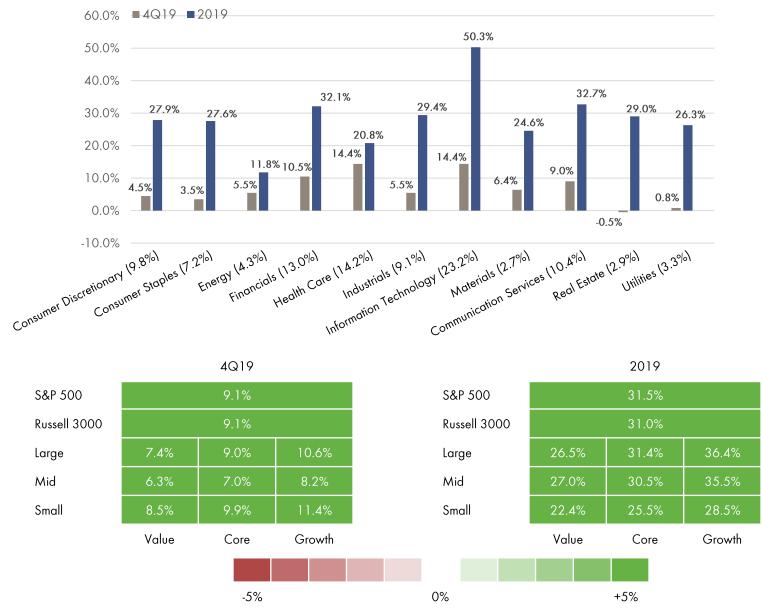
U.S. Stock Valuations at a Premium to Developed International Stocks



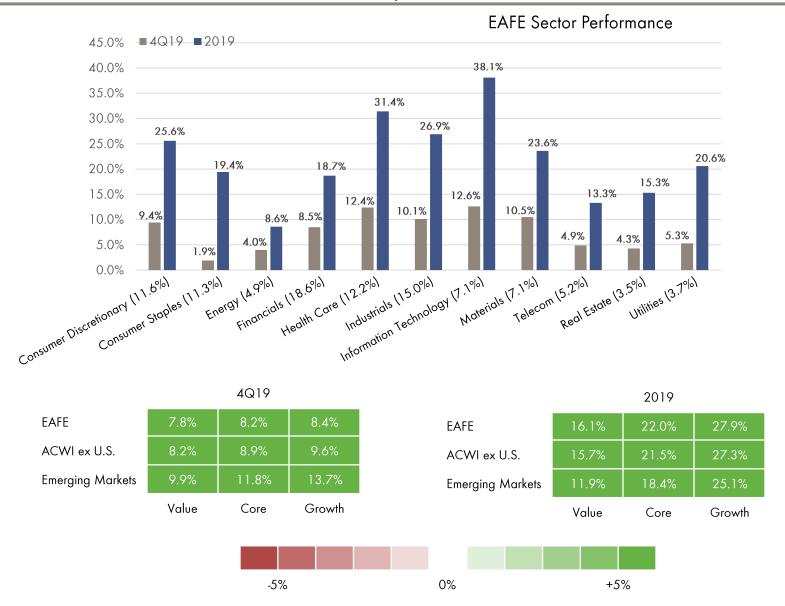


Source: Bloomberg

U.S. Stock Market – Sector and Style



International Stock Market – Sector and Style

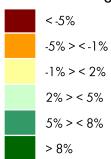


Global Stock Returns

Fourth Quarter Relative Strength



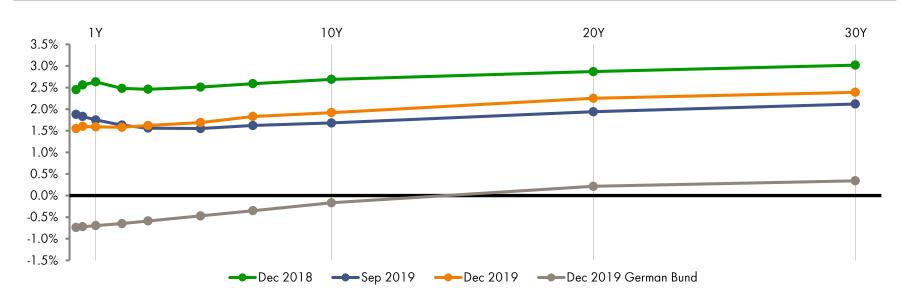
Relative Strength

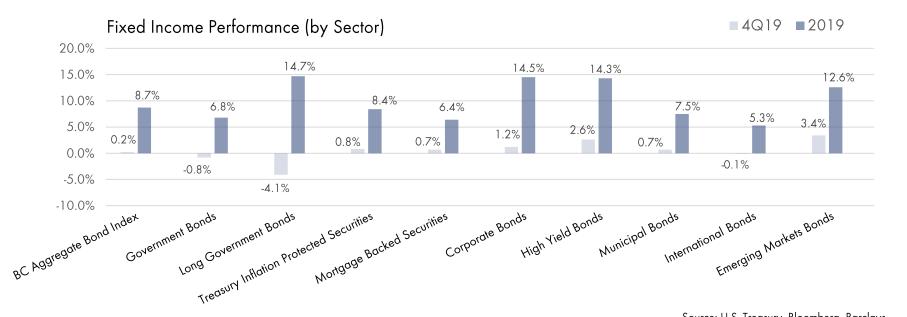


	4Q2	019	20)19
	Local Return	USD Return	Local Return	USD Return
North America				
Canada	2.7%	4.9%	21.1%	27.5%
United States	9.1%	9.1%	31.5%	31.5%
Europe				
France	5.4%	8.5%	28.0%	25.7%
Germany	6.7%	9.9%	23.0%	20.8%
Italy	5.0%	8.1%	29.7%	27.3%
Spain	3.0%	6.0%	14.0%	12.0%
Switzerland	4.5%	7.6%	30.0%	32.3%
- United Kingdom	2.3%	10.0%	16.4%	21.0%
Asia Pacific				
Australia	0.1%	-1.4%	23.1%	22.9%
Hong Kong	6.7%	-11.9%	9.9%	10.3%
Japan	8.2%	3.1%	18.5%	19.6%
International Devel	oped Markets Inc	dex		
MSCI EAFE Index	5.2%	8.2%	21.7%	22.0%
Emerging Markets				
Brazil	10.3%	14.2%	31.1%	26.3%
China	14.0%	14.7%	23.1%	23.5%
India	6.1%	5.3%	10.0%	7.6%
South Korea	9.6%	13.4%	16.6%	12.5%
Mexico	1.6%	6.2%	6.8%	11.4%
Russia	12.4%	16.8%	37.1%	50.9%
South Africa	4.3%	13.1%	7.0%	10.0%
Taiwan	14.0%	17.9%	33.0%	36.4%
Emerging Markets I	Index			
MSCI EM Index	9.5%	11.8%	18.0%	18.4%

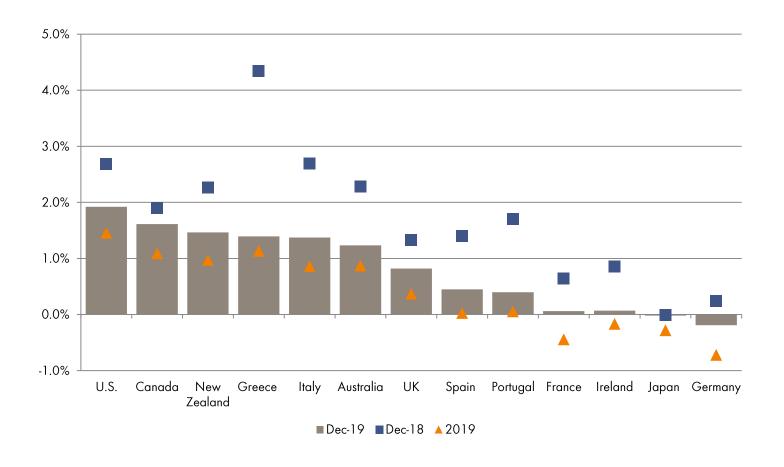
Source: Bloomberg, MSCI, mapchart.net

Treasury Yield Curve and Bond Sector Returns





Developed Market Sovereign Bonds



Source: Bloomberg, Eaton Vance

Tactical Positioning 4Q19

Asset Class	Underweight Overweight Neutral to Target	Comments
Cash	Overweight for clients with regular spending	Money market funds when possible in lieu of cash reserves
Low Duration	Neutral	Conservative "dry powder" for rebalancing purposes
Fixed Income	Neutral	Active management and higher quality preferred, diversified including global bonds, international bonds – 20% or less of overall fixed income exposure
Credit Alternatives	Overweight	Important to recognize added risk for increased return potential, illiquidity
Large Cap	Underweight	Finding greater opportunity in value vs. growth due to valuations
Mid Cap	Neutral	Finding greater opportunity in value vs. growth due to valuations
Small Cap	Overweight	Finding greater opportunity in value vs. growth due to valuations
International	Neutral	Prefer active management, leaning into value and small cap
Emerging Markets	Overweight	Attractive from a valuation standpoint
Liquid Alternatives	Neutral	
Long/Short Equity	Neutral to overweight	We remain convicted in the important risk management role of this asset class
Private Equity	Neutral	Multiples remain high, new opportunities are limited and selective, invest with top-quartile managers only
Private Real Estate	Neutral	Geographical diversification, selective opportunities

Annual Total Returns of Key Asset Classes 2008 – 4Q 2019

2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	15 Year Annualized
US Bonds 5.2	Emg Mkts 78.5	US Small Cap 26.9	Real Estate 16.0	Emg Mkts 18.2	US Small Cap 38.8	US Large Cap 13.7	Real Estate 15.0	US Small Cap 21.3	Emg Mkts 37.3	Real Estate 8.3	US Large Cap 31.5	US Mid Cap 9.5
Inflation 0.1	Intl Equity 41.4	US Mid Cap 25.5	US Bonds 7.8	US Mid Cap 1 <i>7</i> .3	US Mid Cap 34.8	US Mid Cap 13.2	Long/ Short Eq 3.6	US Mid Cap 13.8	Intl Equity 27.2	Inflation 1.9	US Mid Cap 30.5	US Large Cap 9.0
Real Estate -10.0	US Mid Cap 40.5	Emg Mkts 18.9	Inflation 3.0	Intl Equity 16.8	US Large Cap 32.4	Real Estate 12.5	US Large Cap 1.4	US Large Cap 12.0	US Large Cap 21.8	US Bonds 0.0	Real Estate 28.7	Real Estate 8.4
Long/ Short Eq -19.8	US Small Cap 27.2	Real Estate 16.4	US Large Cap 2.1	US Small Cap 16.3	Long/ Short Eq 17.7	US Bonds 6.0	Inflation 0.7	Emg Mkts 11.2	US Mid Cap 18.5	US Large Cap -4.4	US Small Cap 25.5	US Small Cap 7.9
US Small Cap -33.8	US Large Cap 26.5	US Large Cap 15.1	US Mid Cap -1.5	US Large Cap 16.0	Intl Equity 15.3	Long/ Short Eq 5.5	US Bonds 0.5	Real Estate 8.8	US Small Cap 14.6	Long/ Short Eq -4.6	Intl Equity 21.5	Emg Mkts 7.5
US Large Cap -37.0	Long/ Short Eq 19.5	Intl Equity 11.2	US Small Cap -4.2	Real Estate 10.9	Real Estate 13.9	US Small Cap 4.9	US Mid Cap -2.4	Intl Equity 4.5	Long/ Short Eq 13.4	US Mid Cap -9.1	Emg Mkts 18.4	Long/ Short Eq 5.6
US Mid Cap -41.5	US Bonds 5.9	Long/ Short Eq 9.3	Long/ Short Eq -7.3	Long/ Short Eq 8.2	Inflation 1.5	Inflation 0.8	US Small Cap -4.4	US Bonds 2.6	Real Estate 7.6	US Small Cap -11.0	Long/ Short Eq 12.2	Intl Equity 5.3
Intl Equity -45.5	Inflation 2.7	US Bonds 6.5	Intl Equity -13.7	US Bonds -2.0	US Bonds -2.0	Emg Mkts -2.2	Intl Equity -5.7	Inflation 2.1	US Bonds 3.5	Intl Equity -14.2	US Bonds 8. <i>7</i>	US Bonds 4.2
Emg Mkts -53.3	Real Estate -29.8	Inflation 1.5	Emg Mkts -18.4	Inflation 1.7	Emg Mkts -2.6	Intl Equity -3.9	Emg Mkts -14.9	Long/ Short Eq -3.4	Inflation 2.1	Emg Mkts -14.6	Inflation 2.3	Inflation 2.0

Note Real Estate return data lags the timing of our quarterly updates. It will be included on an annual basis. Source: Morningstar

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