

**DIVERSIFICATION – THE BROKEN DECADE?**

We've been indoctrinated through financial theory and literature that diversification is essential to investing success. However, in the 2010's it bluntly has not worked. In the past decade, US equities (S&P 500 Index) have generated an annualized return of 13.5% vs. 4.9% for the rest of the world (MSCI ACWI ex-US). This includes outperformance in 8 of 10 calendar years. With the emergence of China as a global economic power and historically unprecedented growth rates, surely emerging market returns have added additional value to investor portfolios? Not exactly. Emerging markets have generated annualized returns of 3.6% over the past decade, averaging nearly 10% less than the US market per year. Beyond geographic diversification, we are also generally taught that diversifying across business sectors and market capitalizations is essential for risk-adjusted performance. During the 2010's small cap stocks generated annualized returns of 11.8% lagging their large cap brethren by nearly 2% per year, while Technology stocks handily outpaced all others to provide consistent market leadership throughout the decade.

Technology and innovation are the threads that run through and tie these performance differences together. While narrow market leadership is not a new phenomenon (look no further than the prior Technology bubble of the 1990s), the emergence of a handful of Technology companies, domiciled in the US and operating on a global platform, with few if any competitors has driven extensive profit growth in the US. Cumulative earnings growth for the S&P 500 for the past 10 years is 111% vs. total stock returns of 134%. Point being, P/E expansion has been moderate, and gains have been largely supported by strong earnings fundamentals of innovative global companies. Technology stocks with global market presence continue to make up a much larger percentage of the US stock market than other developed markets. Based on GICS statistics, Technology stocks represent roughly 25-30% of the domestic stock market. For comparison, Technology represents 5-10% of developed European markets and 10-15% in Japan. Not only are these innovators higher percentages of the domestic equity markets, but US Technology companies also consistently generate higher returns on assets. The combination of significantly higher returns on assets and higher market weights currently provide a structural advantage for domestic equity markets relative to the rest of the developed world.

**RETURN ON ASSETS (%)**

COUNTRY	CONSUMER STAPLES	CONSUMER DISCRETIONARY	TECHNOLOGY	HEALTHCARE	COMMUNICATION SVCS	FINANCIALS
US	5.9	6.1	9.8	5.6	5.6	1.2
EUROPE	6.3	4.2	5.3	5.5	1.6	0.4
JAPAN	3.5	3.6	4.3	4.2	4.1	0.3

Source: Bloomberg, December 31, 2019.

While diversification is not broken, a globalized economy demands and rewards innovators with higher returns on assets and larger end markets (growth opportunities). Companies demonstrating innovation and the ability to expand into global markets should be expected to generate structurally higher returns over longer time periods. This would also suggest the market indices on which these companies trade will outperform over the long-term. There is a strong case to be made that the superior domestic returns of the 2010's merely reflect US leadership in innovative global Technology companies. Investors are then left to evaluate whether that leadership is sustainable and whether those leaders remain reasonably priced.

## GLOBAL ECONOMIC LANDSCAPE

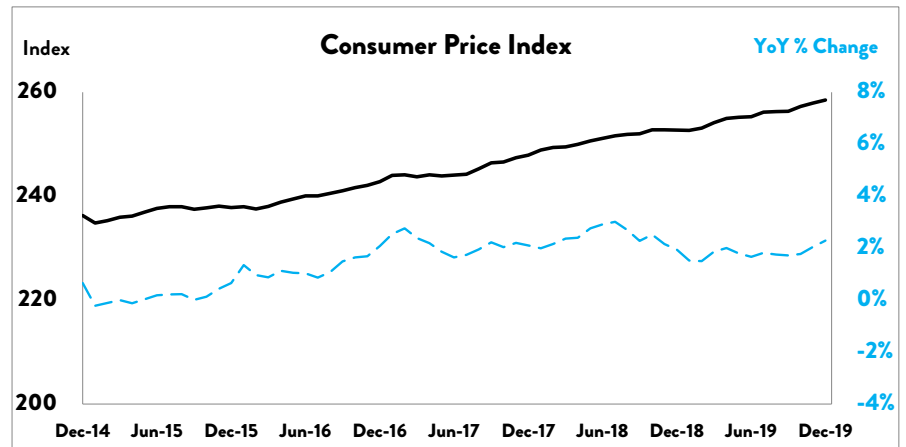
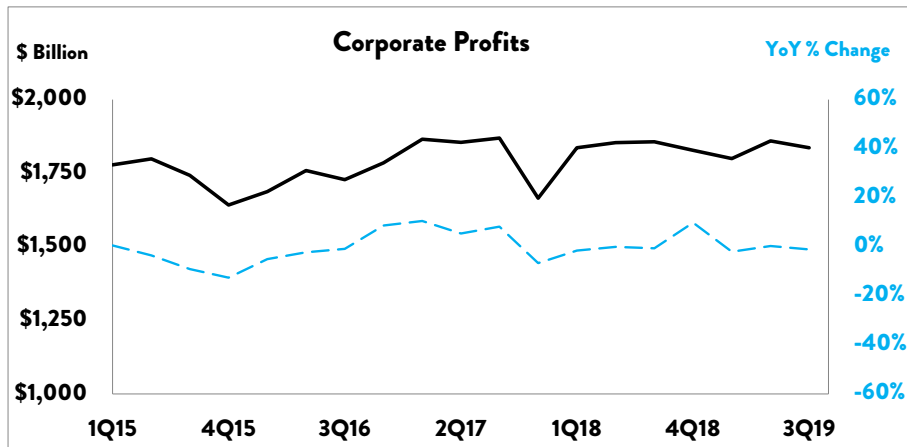
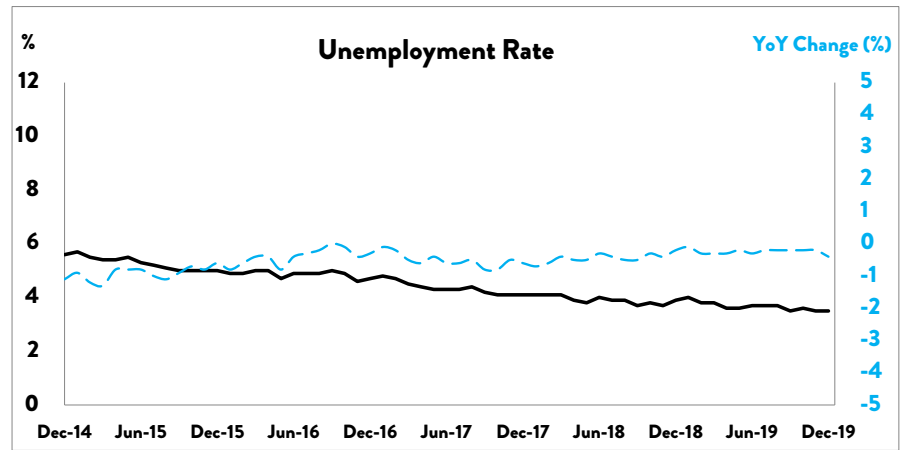
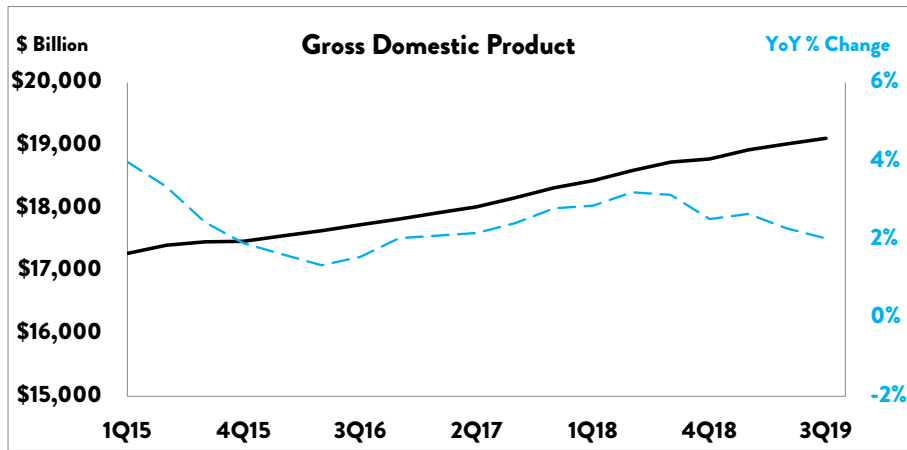
- After raising rates in December of 2018, the Federal Reserve (Fed) indicated that investors should expect multiple interest rate hikes in 2019. After a subsequent stock market collapse the Fed responded with a more neutral stance of no rate hikes in 2019. This “pause” then turned to a full “pivot” as global economic growth appeared to stall and turn negative. The Fed pivot resulted in three rate cuts in 2019 that essentially erased all the Fed’s rate increases of 2018.
- The unemployment rate held steady at 3.5% to end the year, its lowest reading since December 1969. This is well below the 50-year average rate of 6.2% and indicates an economy operating near full capacity. Contrary to popular opinion, this economy has benefited a broad range of employees. Unemployment for those with less than a high school education recently declined to 5.3%, a 30-year low. Wage growth continued its deliberate rise and now stands at 3.7%, just shy of its 50-year average rate of 4.0%.
- After much anticipation and plenty of false starts, the US and China agreed to a “Phase One” trade deal in December. In some small or not so small way, global investors may have pigs to thank for this progress. More specifically, China has come down with African swine fever, but this goes far beyond a prescription and extended bed rest. The fever has wiped out nearly half of China’s domestic pig herd in just over a year. China is the largest global pork consumer and local pork prices have increased over 100% in the last year. This has driven consumer price inflation (CPI) in China to 4.5% YOY, well above the central bank’s 3.0% target. Excluding the price increases of pork, CPI rose at a mere 1.0%. With higher inflation, China has less tolerance for the inflationary impact of a trade war.

## GLOBAL FINANCIAL MARKETS

- Over the last 20 years, the 50 largest stocks in the Russell 3000 Index have averaged a combined total market cap of roughly four times the total market cap of the Russell 2000. At the end of 2019, that ratio was more than six times – higher than it was even at the height of the internet bubble of 2000.
- Despite domestic equity markets demonstrating historically high operating earnings and margins, valuations remain consistently above historical averages. The current forward price/earnings ratio for the S&P 500 Index is 18.2 times expected 2020 earnings. This compares to the 25-year average of 16.3. Price-to-book and price-to-cash flow also remain well above their historical averages.
- Developed market interest rates have declined consistently over the past decade, with several countries declining into negative rate territory. Declining interest rates have been strongly correlated to outperformance by momentum growth and low volatility stocks at the expense of value stocks. In the fourth quarter, global rates reversed course across nearly all developed markets. Correlations followed suit, with value stocks performing especially well versus low volatility stocks.
- Yield seekers with a penchant for volatility continue to be well rewarded for investing in emerging market debt. Despite the high-profile collapse of Argentinian debt, which saw bond prices cut in half in 3Q2019, the Barclays EM Debt Index rose over 2.0% for the quarter and 13.0% for the year. This often-dismissed asset class has benefited from significant gains in breadth. The asset class has five times more countries than at its inception in 1993 while the maximum weight to any single country has declined from 20.0% to less than 5.0%.

This report is being provided for informational purposes only. The information and opinions presented in this report do not constitute investment advice and have been obtained from sources believed by Hyas Group to be reliable. Hyas Group makes no representation as to their accuracy or completeness. All opinions expressed herein are subject to change.

# 4Q2019 Economic Data



Key: — Economic Series    - - - Year-Over-Year Change

Labor Market Statistics (Monthly)					
Category	Recent	5-Yr High	5-Yr Low	5-Yr Avg.	Date
Jobs Added/Lost Monthly	145,000	351,000	14,000	200,500	Dec-19
Unemployment Rate	3.5%	5.7%	3.5%	4.4%	Dec-19
Median Unemployment Length (Weeks)	8.4	13.5	6.6	10.2	Dec-19
Average Hourly Earnings	\$28.32	\$28.32	\$24.75	\$26.41	Dec-19

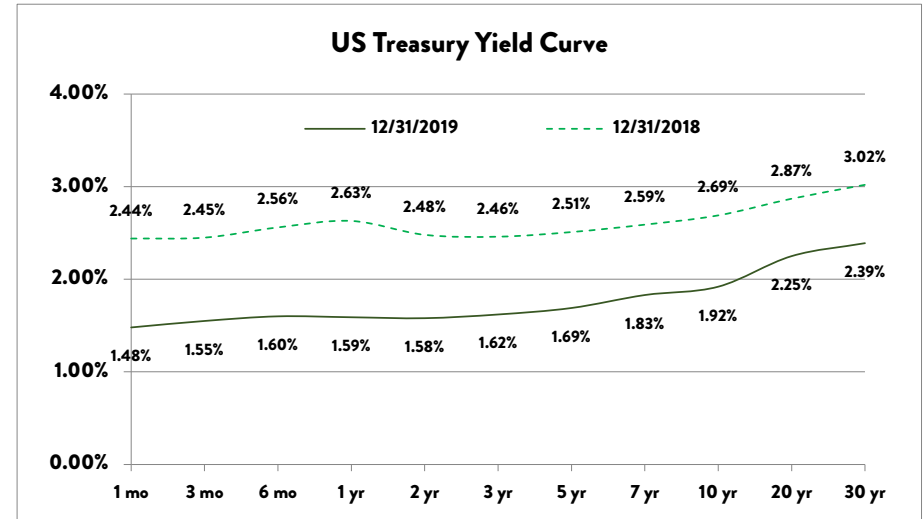
Source: Federal Reserve Bank of St. Louis and Bureau of Labor Statistics

Other Prices and Indexes (Monthly)					
Category	Recent	5-Yr High	5-Yr Low	% Off Peak	Date
Gas: Price per Gallon	\$2.54	\$2.88	\$1.79	-11.9%	Dec-19
Spot Oil	\$59.88	\$70.98	\$30.32	-15.6%	Dec-19
Case-Shiller Home Price Index	218.1	218.1	173.1	26.0%*	Oct-19
Medical Care CPI	511.7	511.7	441.0	16%*	Dec-19

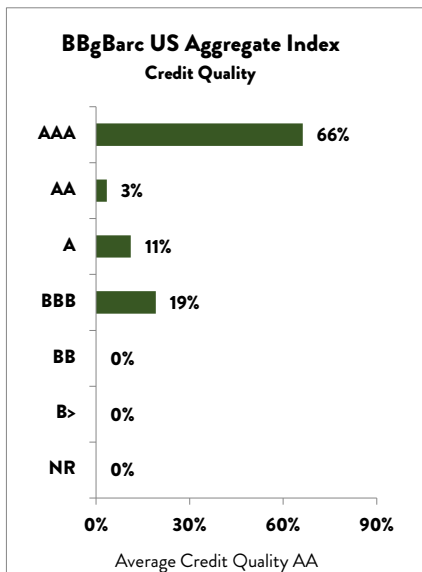
\*% Off Low

# 4Q2019 Bond Market Data

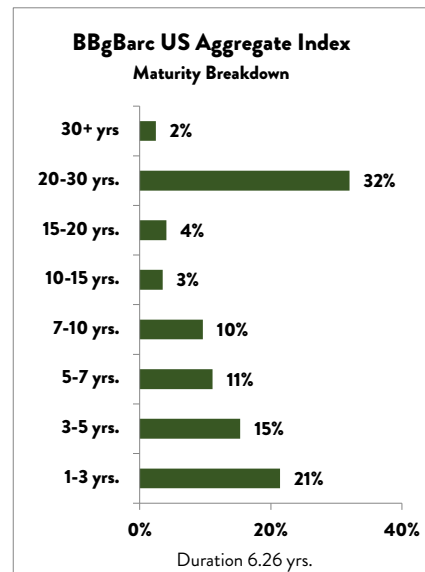
Index	QTR	YTD	1 yr.	3 yrs.	5 yrs.	10 yrs.
90-Day T-Bill	0.46%	2.30%	2.30%	1.57%	0.99%	0.54%
BBgBarc US Aggregate	0.18%	8.72%	8.72%	4.03%	3.05%	3.75%
BBgBarc Short US Treasury	0.50%	2.46%	2.46%	1.71%	1.16%	0.67%
BBgBarc Int. US Treasury	0.01%	5.22%	5.22%	2.57%	1.99%	2.46%
BBgBarc Long US Treasury	-4.12%	14.83%	14.83%	6.95%	4.13%	7.01%
BBgBarc US TIPS	0.79%	8.43%	8.43%	3.32%	2.62%	3.36%
BBgBarc US Credit	1.05%	13.80%	13.80%	5.75%	4.39%	5.32%
BBgBarc US Mortgage-Backed	0.71%	6.35%	6.35%	3.25%	2.58%	3.15%
BBgBarc US Asset-Backed	0.39%	4.53%	4.53%	2.61%	2.22%	2.72%
BBgBarc US 20-Yr Municipal	0.65%	9.29%	9.29%	5.89%	4.39%	5.46%
BBgBarc US High Yield	2.61%	14.32%	14.32%	6.37%	6.13%	7.57%
BBgBarc Global	0.49%	6.84%	6.84%	4.27%	2.31%	2.48%
BBgBarc International	0.67%	5.09%	5.09%	4.36%	1.62%	1.50%
BBgBarc Emerging Market	2.09%	13.11%	13.11%	6.07%	5.84%	6.62%



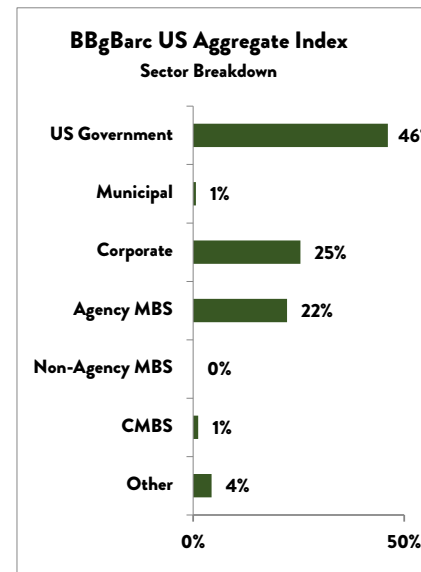
Source: Department of US Treasury



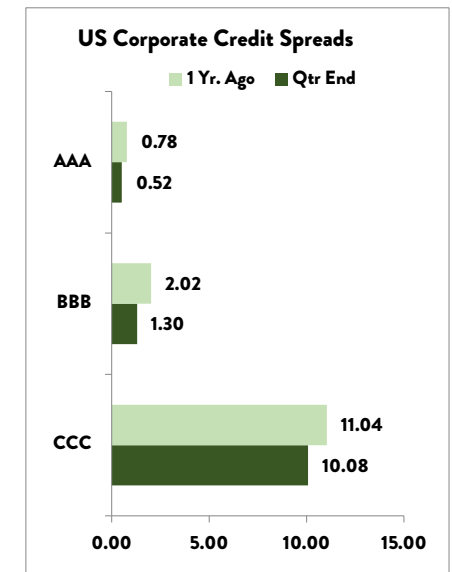
Source: Morningstar



Source: Morningstar



Source: Morningstar



Source: Federal Reserve / Bank of America

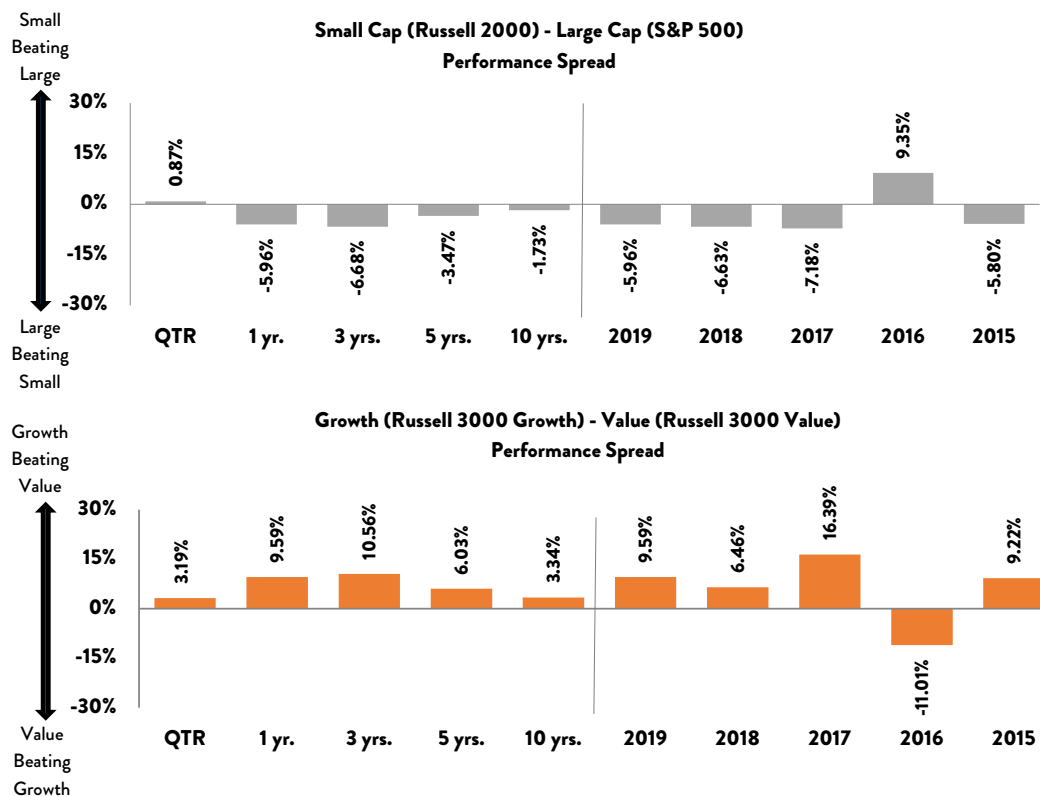
# 4Q2019 US Equity Market Data

## Sectors Weights/Returns (ranked by quarter performance)

S&P 500 Index	Wgt.	Sector	QTR	YTD	1 yr.
	23%	Information Technology	14.40%	50.29%	50.29%
	14%	Health Care	14.37%	20.82%	20.82%
	13%	Financials	10.47%	32.13%	32.13%
	10%	Communication Services	9.00%	32.69%	32.69%
	3%	Materials	6.38%	24.58%	24.58%
	9%	Industrials	5.53%	29.37%	29.37%
	4%	Energy	5.49%	11.81%	11.81%
	10%	Consumer Discretionary	4.47%	27.94%	27.94%
	7%	Consumer Staples	3.51%	27.61%	27.61%
3%	Utilities	0.75%	26.35%	26.35%	
3%	Real Estate	-0.54%	29.01%	29.01%	
S&P Midcap 400 Index	Wgt.	Sector	QTR	YTD	1 yr.
	2%	Energy	13.27%	-12.43%	-12.43%
	16%	Information Technology	11.24%	42.91%	42.91%
	10%	Health Care	11.04%	22.68%	22.68%
	16%	Industrials	8.39%	33.55%	33.55%
	13%	Consumer Discretionary	7.76%	26.57%	26.57%
	6%	Materials	6.89%	20.88%	20.88%
	17%	Financials	5.15%	26.47%	26.47%
	2%	Communication Services	3.82%	16.29%	16.29%
	3%	Consumer Staples	3.03%	10.85%	10.85%
11%	Real Estate	2.75%	24.17%	24.17%	
5%	Utilities	-2.11%	14.33%	14.33%	
S&P Smallcap 600 Index	Wgt.	Sector	QTR	YTD	1 yr.
	12%	Health Care	14.06%	20.26%	20.26%
	14%	Information Technology	11.70%	39.59%	39.59%
	4%	Consumer Staples	8.53%	16.90%	16.90%
	18%	Financials	7.85%	20.52%	20.52%
	5%	Materials	7.44%	20.57%	20.57%
	17%	Industrials	7.27%	29.64%	29.64%
	14%	Consumer Discretionary	6.85%	17.64%	17.64%
	4%	Energy	6.50%	-14.77%	-14.77%
	2%	Communication Services	2.82%	5.77%	5.77%
7%	Real Estate	2.77%	26.92%	26.92%	
2%	Utilities	0.07%	22.99%	22.99%	

## Index Performance Data

Index	QTR	YTD	1 yr.	Annualized		
				3 yrs.	5 yrs.	10 yrs.
S&P 500	9.07%	31.49%	31.49%	15.27%	11.70%	13.56%
Russell 1000 Value	7.41%	26.54%	26.54%	9.68%	8.29%	11.80%
Russell 1000 Growth	10.62%	36.39%	36.39%	20.49%	14.63%	15.22%
Russell Mid Cap	7.06%	30.54%	30.54%	12.06%	9.33%	13.19%
Russell Mid Cap Value	6.36%	27.06%	27.06%	8.10%	7.62%	12.41%
Russell Mid Cap Growth	8.17%	35.47%	35.47%	17.36%	11.60%	14.24%
Russell 2000	9.94%	25.52%	25.52%	8.59%	8.23%	11.83%
Russell 2000 Value	8.49%	22.39%	22.39%	4.77%	6.99%	10.56%
Russell 2000 Growth	11.39%	28.48%	28.48%	12.49%	9.34%	13.01%
Russell 3000	9.10%	31.02%	31.02%	14.57%	11.24%	13.42%
DJ US Select REIT	-1.23%	23.10%	23.10%	6.95%	6.40%	11.57%



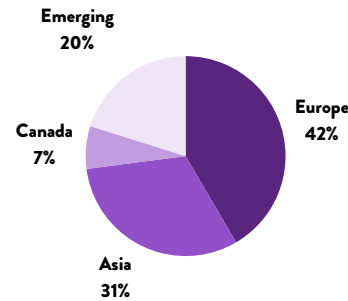
# 4Q2019 International Market Data

## Index Performance Data (net)

Index (US\$)	QTR	YTD	1 yr.	3 yrs.	5 yrs.	10 yrs.
<b>MSCI ACWI ex-US</b>	<b>8.92%</b>	<b>21.51%</b>	<b>21.51%</b>	<b>9.87%</b>	<b>5.51%</b>	<b>4.97%</b>
<b>MSCI EAFE</b>	<b>8.17%</b>	<b>22.01%</b>	<b>22.01%</b>	<b>9.56%</b>	<b>5.67%</b>	<b>5.50%</b>
<b>Europe</b>	<b>8.84%</b>	<b>23.77%</b>	<b>23.77%</b>	<b>9.77%</b>	<b>5.06%</b>	<b>5.17%</b>
United Kingdom	9.95%	21.05%	21.05%	8.32%	3.25%	5.05%
Germany	9.89%	20.77%	20.77%	6.27%	3.89%	5.18%
France	8.50%	25.72%	25.72%	12.19%	8.15%	4.99%
<b>Pacific</b>	<b>7.03%</b>	<b>19.25%</b>	<b>19.25%</b>	<b>9.35%</b>	<b>7.00%</b>	<b>6.33%</b>
Japan	7.64%	19.61%	19.61%	8.92%	7.70%	6.59%
Hong Kong	7.32%	10.34%	10.34%	11.47%	7.09%	8.12%
Australia	4.29%	22.92%	22.92%	9.07%	5.42%	5.01%
<b>Canada</b>	<b>4.89%</b>	<b>27.50%</b>	<b>27.50%</b>	<b>7.01%</b>	<b>2.97%</b>	<b>3.59%</b>
<b>MSCI EM</b>	<b>11.84%</b>	<b>18.42%</b>	<b>18.42%</b>	<b>11.57%</b>	<b>5.61%</b>	<b>3.68%</b>
<b>MSCI EM Latin America</b>	<b>10.48%</b>	<b>17.46%</b>	<b>17.46%</b>	<b>10.74%</b>	<b>4.18%</b>	<b>-0.65%</b>
<b>MSCI EM Asia</b>	<b>12.51%</b>	<b>19.24%</b>	<b>19.24%</b>	<b>12.92%</b>	<b>6.63%</b>	<b>5.76%</b>
<b>MSCI EM Eur/Mid East</b>	<b>8.49%</b>	<b>19.33%</b>	<b>19.33%</b>	<b>8.32%</b>	<b>5.68%</b>	<b>0.03%</b>
<b>MSCI ACWI Value ex-US</b>	<b>8.21%</b>	<b>15.71%</b>	<b>15.71%</b>	<b>6.88%</b>	<b>3.65%</b>	<b>3.64%</b>
<b>MSCI ACWI Growth ex-US</b>	<b>9.58%</b>	<b>27.34%</b>	<b>27.34%</b>	<b>12.89%</b>	<b>7.30%</b>	<b>6.24%</b>
<b>MSCI ACWI Sm Cap ex-US</b>	<b>11.01%</b>	<b>22.42%</b>	<b>22.42%</b>	<b>9.65%</b>	<b>7.04%</b>	<b>6.92%</b>

## Regional Exposure

MSCI ACWI ex-USA

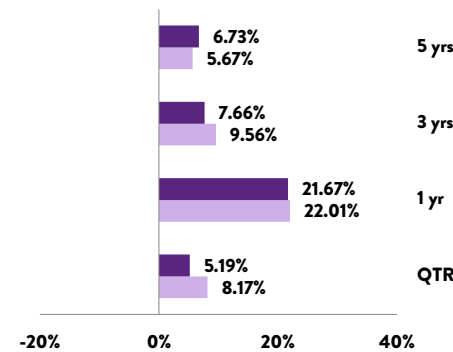


## Top 10 Countries (MSCI AC World ex-USA)

Japan	16%
UK	11%
China	9%
France	8%
Canada	6%
Switzerland	6%
Germany	6%
Australia	5%
Taiwan	3%
South Korea	3%

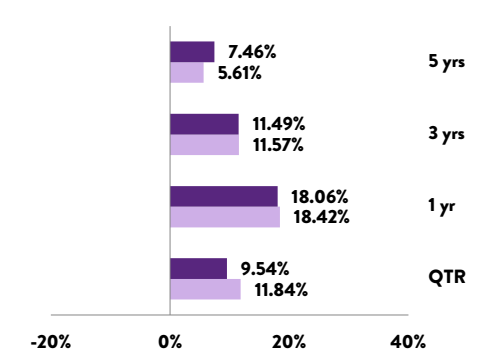
## MSCI EAFE Index Return

Local (Dark Purple) vs US\$ (Light Purple)

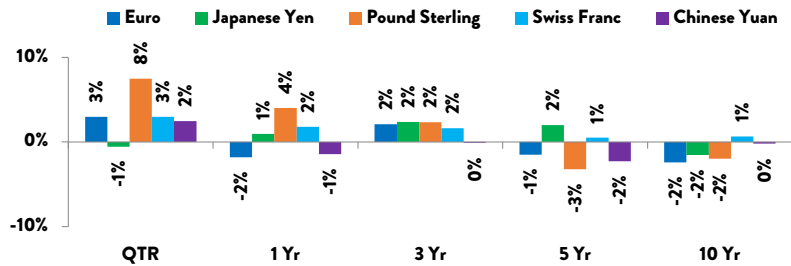


## MSCI Emerging Index Return

Local (Dark Purple) vs US\$ (Light Purple)

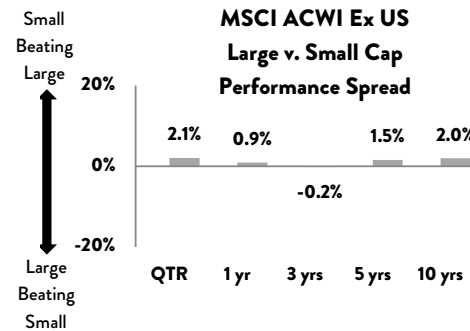


## Foreign Currency v. US\$ Returns

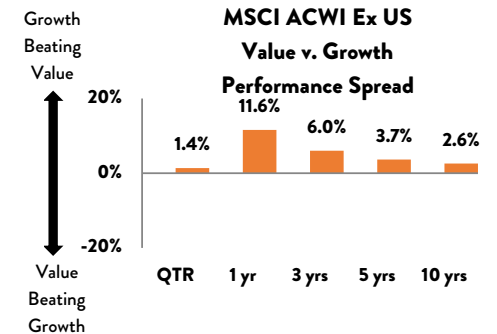


Exchange Rates	QTR	3Q19	2Q19	1Q19	4Q18	3Q18
<b>Japanese Yen</b>	108.67	108.11	107.84	110.68	109.70	113.48
<b>Euro</b>	0.89	0.92	0.88	0.89	0.87	0.86
<b>British Pound</b>	0.75	0.81	0.79	0.77	0.78	0.77
<b>Swiss Franc</b>	0.97	1.00	0.98	1.00	0.98	0.98
<b>Chinese Yuan</b>	6.96	7.15	6.87	6.71	6.88	6.87

## MSCI ACWI Ex US Large v. Small Cap Performance Spread



## MSCI ACWI Ex US Value v. Growth Performance Spread



# Historical Market Returns

Ranked by Performance

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	4Q19
Emerging Markets 25.55%	Emerging Markets 34.00%	Emerging Markets 32.14%	Emerging Markets 39.42%	US Bonds 5.24%	Emerging Markets 78.51%	Small Cap 26.85%	Core Real Estate 14.96%	Emerging Markets 18.22%	Small Cap 38.82%	Large Cap 13.68%	Core Real Estate 13.95%	Small Cap 21.30%	Emerging Markets 37.28%	Core Real Estate 7.36%	Large Cap 31.49%	Emerging Markets 11.84%
Intl 20.91%	Commod. 21.36%	Intl 26.65%	Intl 16.65%	Global Bonds 4.79%	High Yield 58.21%	Mid Cap 25.48%	TIPS 13.56%	Mid Cap 17.28%	Mid Cap 34.76%	Mid Cap 13.21%	Large Cap 1.38%	High Yield 17.12%	Intl 27.19%	Cash 1.69%	Mid Cap 30.54%	Small Cap 9.94%
Mid Cap 20.22%	Core Real Estate 20.15%	Small Cap 18.37%	Commod. 16.23%	Cash 1.39%	Intl 41.45%	Emerging Markets 18.88%	US Bonds 7.84%	Intl 16.83%	Large Cap 32.39%	Core Real Estate 11.44%	US Bonds 0.55%	Mid Cap 13.79%	Large Cap 21.83%	US Bonds 0.01%	Small Cap 25.52%	Large Cap 9.07%
Small Cap 18.33%	Intl 16.62%	Large Cap 15.79%	Core Real Estate 14.84%	TIPS -2.35%	Mid Cap 40.48%	Commod. 16.83%	Global Bonds 5.64%	Small Cap 16.35%	Intl 15.29%	US Bonds 5.97%	Cash 0.03%	Large Cap 11.95%	Mid Cap 18.52%	Global Bonds -1.20%	Intl 21.51%	Intl 8.92%
Global Balanced 12.18%	Mid Cap 12.65%	Core Real Estate 15.27%	TIPS 11.64%	Core Real Estate -10.70%	Small Cap 27.17%	Core Real Estate 15.26%	High Yield 4.98%	Large Cap 16.00%	Global Balanced 14.46%	Small Cap 4.89%	TIPS -1.43%	Commod. 11.76	Global Balanced 15.87%	TIPS -1.26%	Global Balanced 18.86%	Mid Cap 7.06%
Core Real Estate 12.00%	Large Cap 4.91%	Mid Cap 15.26%	Global Bonds 9.48%	Global Balanced -24.51%	Large Cap 26.46%	High Yield 15.12%	Large Cap 2.11%	High Yield 15.81%	Core Real Estate 12.95%	TIPS 3.64%	Global Balanced -1.45%	Emerging Markets 11.18%	Small Cap 14.65%	High Yield -2.08%	Emerging Markets 18.42%	Global Balanced 5.33%
High Yield 11.13%	Small Cap 4.55%	Global Balanced 14.53%	Global Balanced 9.07%	High Yield -26.16%	Global Balanced 20.49%	Large Cap 15.06%	Cash 0.06%	Global Balanced 11.06%	High Yield 7.44%	Global Balanced 3.17%	Mid Cap -2.43%	Core Real Estate 7.76%	High Yield 7.50%	Large Cap -4.38%	High Yield 14.32%	Commod. 4.42%
Large Cap 10.88%	Global Balanced 4.16%	High Yield 11.85%	US Bonds 6.97%	Small Cap -33.79%	Commod. 18.91%	Intl 11.15%	Global Balanced -0.97%	Core Real Estate 9.76%	Cash 0.07%	High Yield 2.45%	Global Bonds -3.15%	Global Balanced 5.38%	Global Bonds 7.39%	Global Balanced -5.30%	US Bonds 8.72%	High Yield 2.61%
Global Bonds 9.27%	Cash 3.25%	Global Bonds 6.64%	Mid Cap 5.60%	Commod. -35.65%	TIPS 11.41%	Global Balanced 9.40%	Mid Cap -1.55%	TIPS 6.98%	US Bonds -2.02%	Global Bonds 0.59%	Small Cap -4.41%	TIPS 4.68%	Core Real Estate 6.66%	Mid Cap -9.06%	TIPS 8.43%	Core Real Estate 1.29%
Commod. 9.15%	TIPS 2.84%	Cash 4.85%	Large Cap 5.49%	Large Cap -37.00%	Global Bonds 6.93%	US Bonds 6.54%	Small Cap -4.18%	Global Bonds 4.32%	Global Bonds -2.60%	Cash 0.04%	High Yield -4.46%	Intl 4.50%	US Bonds 3.54%	Small Cap -11.01%	Commod. 7.69%	TIPS 0.79%
TIPS 8.46%	High Yield 2.74%	US Bonds 4.33%	Cash 4.44%	Mid Cap -41.46%	US Bonds 5.93%	TIPS 6.31%	Commod. -13.32%	US Bonds 4.21%	Emerging Markets -2.60%	Emerging Markets -2.18%	Intl -5.66%	US Bonds 2.65%	TIPS 3.01%	Commod. -11.25%	Global Bonds 6.84%	Global Bonds 0.49%
US Bonds 4.34%	US Bonds 2.43%	Commod. 2.07%	High Yield 1.87%	Intl -45.53%	Cash 0.16%	Global Bonds 5.54%	Intl -13.71%	Cash 0.08%	TIPS -8.61%	Intl -3.86%	Emerging Markets -14.90%	Global Bonds 2.09%	Commod. 1.70%	Intl -14.20%	Core Real Estate 4.41%	Cash 0.46%
Cash 1.44%	Global Bonds -4.49%	TIPS 0.41%	Small Cap -1.57%	Emerging Markets -53.33%	Core Real Estate -30.40%	Cash 0.15%	Emerging Markets -18.42%	Commod. -1.06%	Commod. -9.52%	Commod. -17.00%	Commod. -24.60%	Cash 0.25%	Cash 0.71%	Emerging Markets -14.58%	Cash 2.30%	US Bonds 0.18%

Global Balanced is composed of 60% MSCI World Stock Index, 35% BBgBarc Global Aggregate Bond Index, and 5% US 90-Day T-Bills.