



CRYPTOCURRENCIES

Monero, Ether, Ripple... and of course Bitcoin are gaining household recognition and prompting many to consider investing in cryptocurrencies. Bitcoin, in particular, has emerged as a leader in the controversial cryptocurrency market. Proponents of cryptocurrency cite this emergence as the natural evolution of currency in a global consumer market dominated by e-commerce. Critics will cite the trend as little more than the next speculative bubble, a slightly more creative high-tech Ponzi scheme. While we will not attempt to divine the crypto future in this commentary, we will seek to educate investors on the risks and attributes of these unique assets.

Contrary to popular opinion, cryptocurrencies are not new. Cryptocurrencies and the blockchain technology behind them have been around for nearly a decade. However, they remained largely in the realm of digital enthusiasts and darknet markets looking for alternative solutions to today's fiat (government sponsored) currencies. Unlike traditional money, no physical notes or coins are circulated and the money exists exclusively in the form of unique code made and stored digitally. It is also important to note that no central bank, regulator or nation stands behind the currency.

New currencies are brought to market in initial coin offerings (ICOs). ICOs are largely unregulated and bypass traditional listing and capital-raising processes faced by newly issued public companies. Herein lies one of the primary challenges to maintaining value in cryptocurrencies - new issues are largely uncontrolled. One of the key qualities of value for any asset and/or currency is scarcity of supply. While each cryptocurrency may limit its own issuance and thereby control supply, there are few restrictions on the issuance of new ICOs. The first ICO was held in 2013 with limited additional fundraising occurring in 2014. However, as these new currencies became embraced by the broader public, values and new issuance skyrocketed. By the end of 2017, issuance was averaging around 50 new ICOs per month.

The aggregate cryptocurrency market capitalization increased by a stunning 3,300% in 2017. Growth of this nature garners a lot of attention, not only from speculators, but from global governmental regulators as well. At present, around a half-dozen countries have fully banned cryptocurrencies. Many others are scrambling to regulate and/or restrict markets. The impact of future regulation provides for extreme uncertainty in the marketplace. This uncertainty and the subsequent price volatility is a major obstacle to mainstream adoption as a valid currency. At present, cryptocurrencies should be considered speculative assets, not currencies.

So how do we value these non-traditional assets? What makes traditional asset classes valuable is their claim on future income produced by the assets themselves. Unlike traditional investments in stocks, bonds or real estate, cryptocurrencies or fiat currencies for that matter, do not represent claims on specific future income streams. One could argue that fiat currencies are indirectly supported by future income streams from the sponsor's ability to tax citizens and

industry. This is not the case for today's cryptocurrencies. Hence, in the current form, cryptocurrencies derive their value purely from speculative demand. Beyond this early speculative stage, investors should ask themselves what would drive long-term appreciation if a cryptocurrency were able to make the transition to a universally accepted form of currency. Currencies have historically been designed to store and transfer wealth, not create it.

The ultimate question is what place, if any, should cryptocurrencies play in an investor's portfolio? The underlying blockchain and distributed ledger technology utilized to create and track cryptocurrencies has potentially significant implications for the future of banking and e-commerce. However, transitioning a new technology into a viable long-term investable asset is fraught with challenges. At the present time, cryptocurrencies neither meet the definition of a currency nor represent any claim to future streams of cashflow, the primary value proposition of traditional assets. They have no discernable fundamental value and are dependent on capital flows from new investors to drive any price appreciation. As with any speculative investment, risks and potential gains/losses are high. For those investors set on "not missing out" we have one very important caveat: invest only what you are prepared and can afford to lose should the investment not work out.

GLOBAL ECONOMIC LANDSCAPE

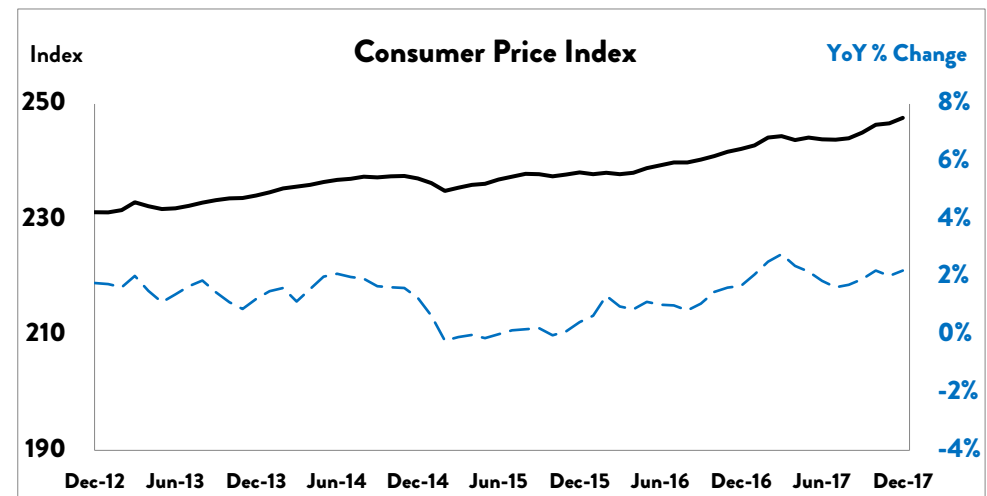
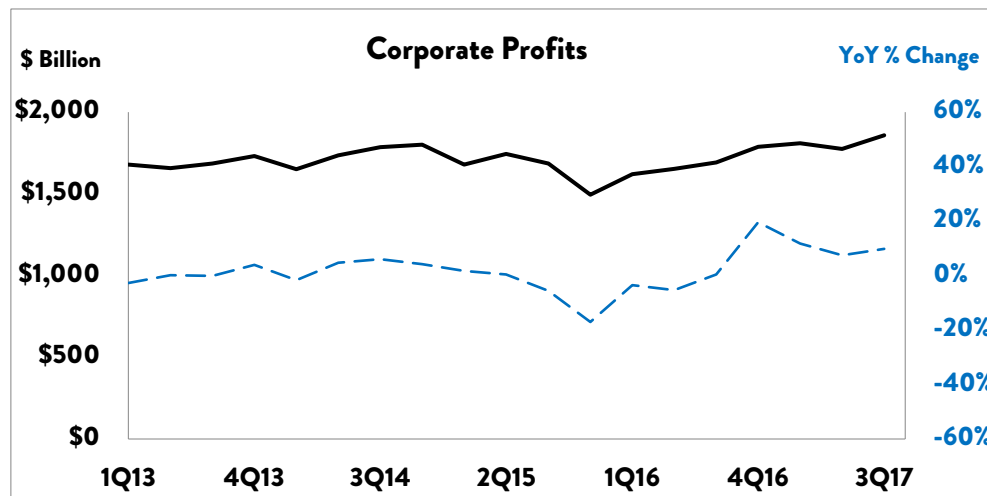
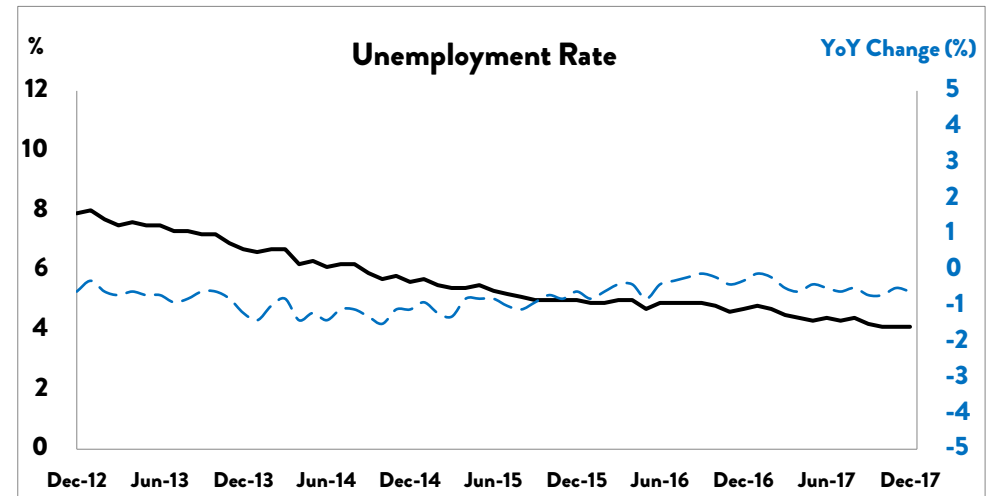
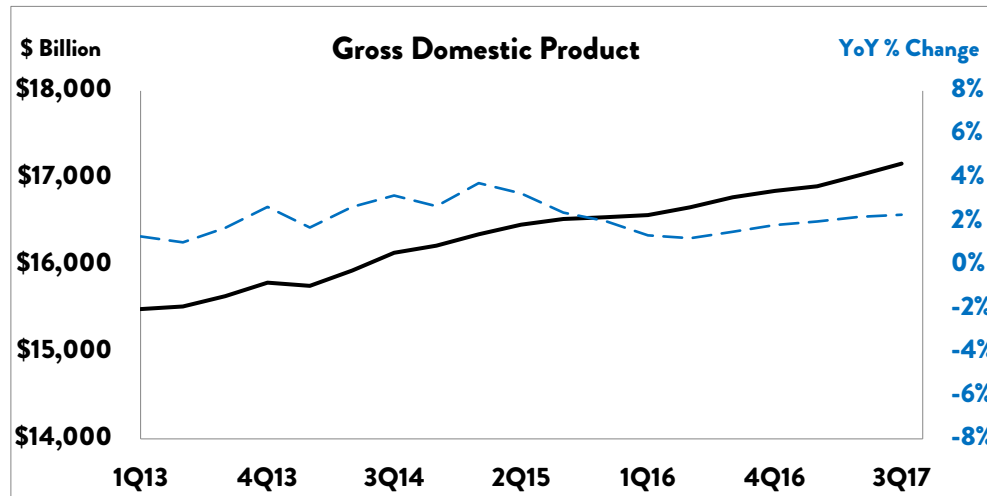
- Political concerns dominated global headlines of late. This included the US tax reform bill, Germany's efforts to form a coalition government and Saudi Arabia's crackdown on internal corruption.
- The US tax reform bill passed Congress in the late hours of 2017 and was signed into law.
- Current baseline expectations are for the US Federal Reserve to raise fed fund rates three times in 2018, placing rates in the 2%-2.25% range by the end of 2018.
- The European Central bank is widely expected to end bond purchases by the end of 2018 signaling a first rise in short-term rates in 2019.
- Shifts away from accommodative global central bank policies pose significant risks to markets and economies that have become accustomed to easy money policies.
- US fiscal expansion and increasingly synchronized global economic expansion would indicate rising risks of cyclical inflation.

GLOBAL FINANCIAL MARKETS

- US equity market volatility reached all-time lows in 2017. The S&P 500 Index posted gains in each month of 2017, a first in the nearly 40-year history of the Index. In addition, the largest intra-year decline was a mere 3% versus a historical average of 14%.
- The US equity market became increasingly narrow in 2017. Large cap stocks dominated small cap stocks for the year, outperforming by over 7.0%. Even more striking was the narrow leadership by large cap technology stocks. Technology stocks within the S&P 500 Index rose nearly 40.0% for the year. Materials was the next best performing sector within the Index rising 23.8% while the broad Index returned 21.8%.
- Both emerging and developed market equities outside of the US outperformed the S&P 500 Index in dollar terms for the first time since 2012. This generally reflects investor expectations for improved economic growth prospects on a global basis.

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4Q2017 Economic Data



Labor Market Statistics (Monthly)					
Category	Recent	5-Yr High	5-Yr Low	5-Yr Avg.	Date
Jobs Added/Lost Monthly	148,000	344,000	38,000	205,133	Dec-17
Unemployment Rate	4.1%	8.0%	4.1%	5.6%	Dec-17
Median Unemployment Length (Weeks)	8.8	20.0	7.6	12.7	Dec-17
Average Hourly Earnings	\$26.63	\$26.63	\$23.76	\$25.09	Dec-17

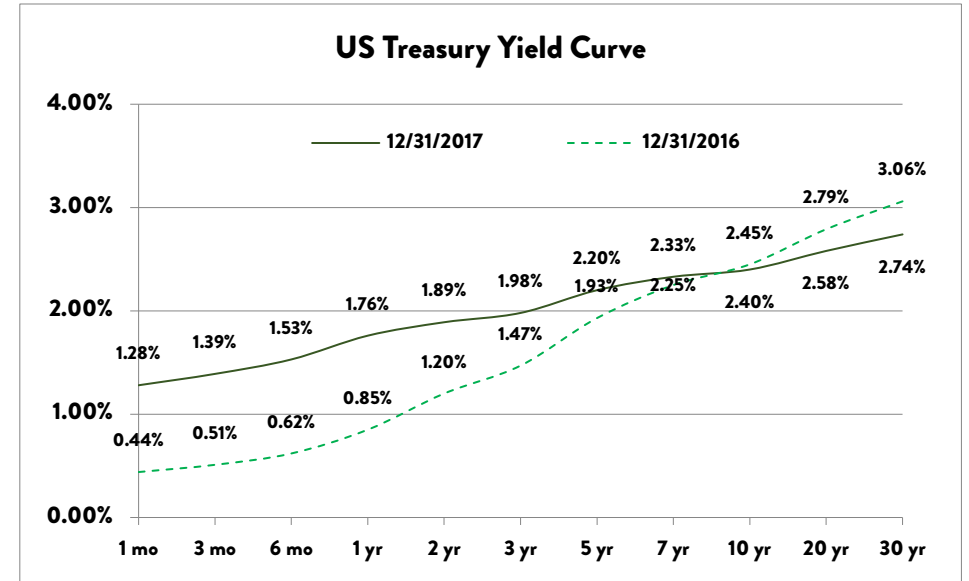
Other Prices and Indexes (Monthly)					
Category	Recent	5-Yr High	5-Yr Low	% Off Peak	Date
Gas: Price per Gallon	\$2.51	\$3.71	\$1.79	-32.5%	Dec-17
Spot Oil	\$57.88	\$106.57	\$30.32	-45.7%	Dec-17
Case-Shiller Home Price Index	203.1	203.1	145.8	39.4%*	Oct-17
Medical Care CPI	479.7	479.7	421.1	13.9%*	Dec-17

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

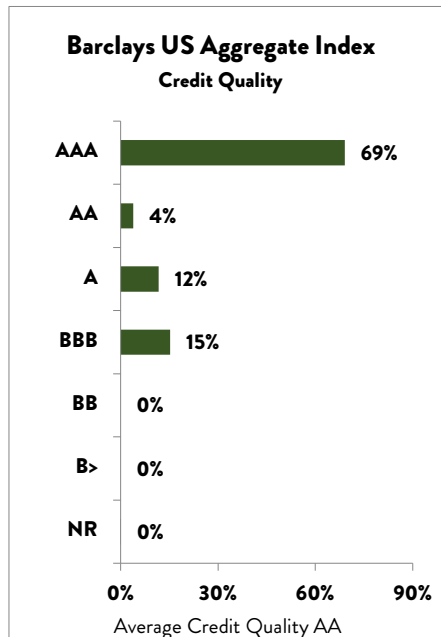
*% Off Low

4Q2017 Bond Market Data

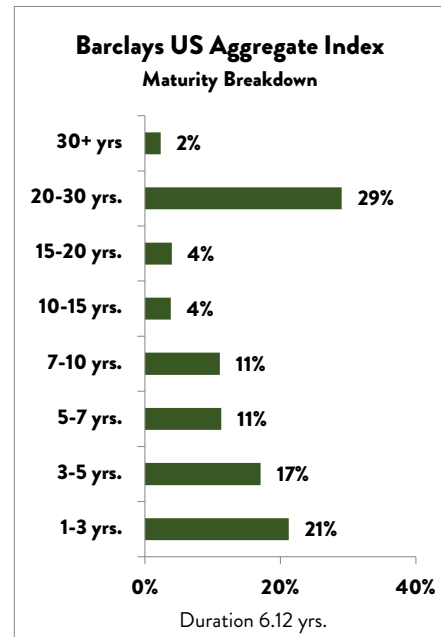
Index	QTR	YTD	1 yr.	3 yrs.	5 yrs.	10 yrs.
90-Day T-Bill	0.21%	0.71%	0.71%	0.33%	0.22%	0.38%
Barclays US Aggregate	0.39%	3.54%	3.54%	2.24%	2.10%	4.01%
Barclays Short US Treasury	0.23%	0.81%	0.81%	0.49%	0.34%	0.55%
Barclays Int. US Treasury	-0.41%	1.14%	1.14%	1.13%	0.91%	2.75%
Barclays Long US Treasury	2.37%	8.53%	8.53%	2.80%	3.48%	6.55%
Barclays US TIPS	1.26%	3.01%	3.01%	2.05%	0.13%	3.53%
Barclays US Credit	1.05%	6.18%	6.18%	3.63%	3.24%	5.42%
Barclays US Mortgage-Backed	0.15%	2.47%	2.47%	1.88%	2.04%	3.84%
Barclays US Asset-Backed	-0.01%	1.55%	1.55%	1.61%	1.28%	2.96%
Barclays US 20-Yr Municipal	1.78%	7.47%	7.47%	3.92%	3.93%	5.36%
Barclays US High Yield	0.47%	7.50%	7.50%	6.35%	5.78%	8.03%
Barclays Global	1.08%	7.39%	7.39%	2.02%	0.79%	3.09%
Barclays International	1.63%	10.51%	10.51%	1.77%	-0.20%	2.40%
Barclays Emerging Market	0.62%	8.17%	8.17%	6.38%	3.87%	7.01%



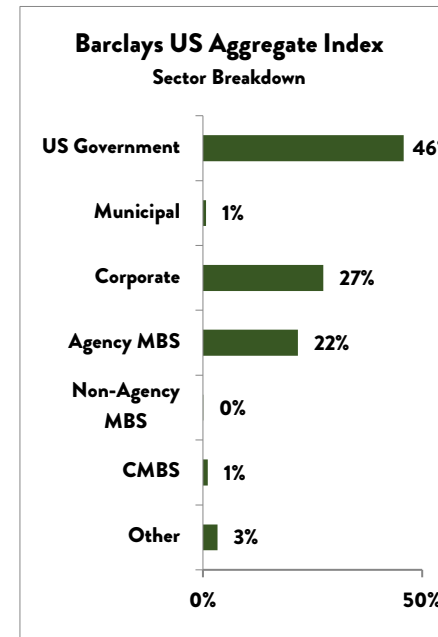
Source: Department of US Treasury



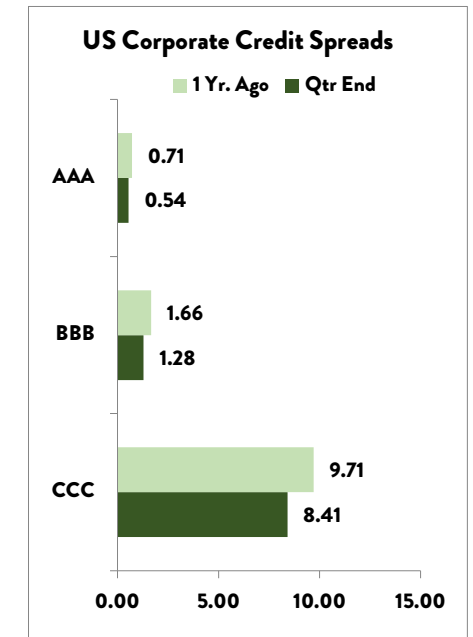
Source: Morningstar



Source: Morningstar



Source: Morningstar



Source: Federal Reserve / Bank of America

4Q2017 US Equity Market Data

Sectors Weights/Returns (ranked by quarter performance)

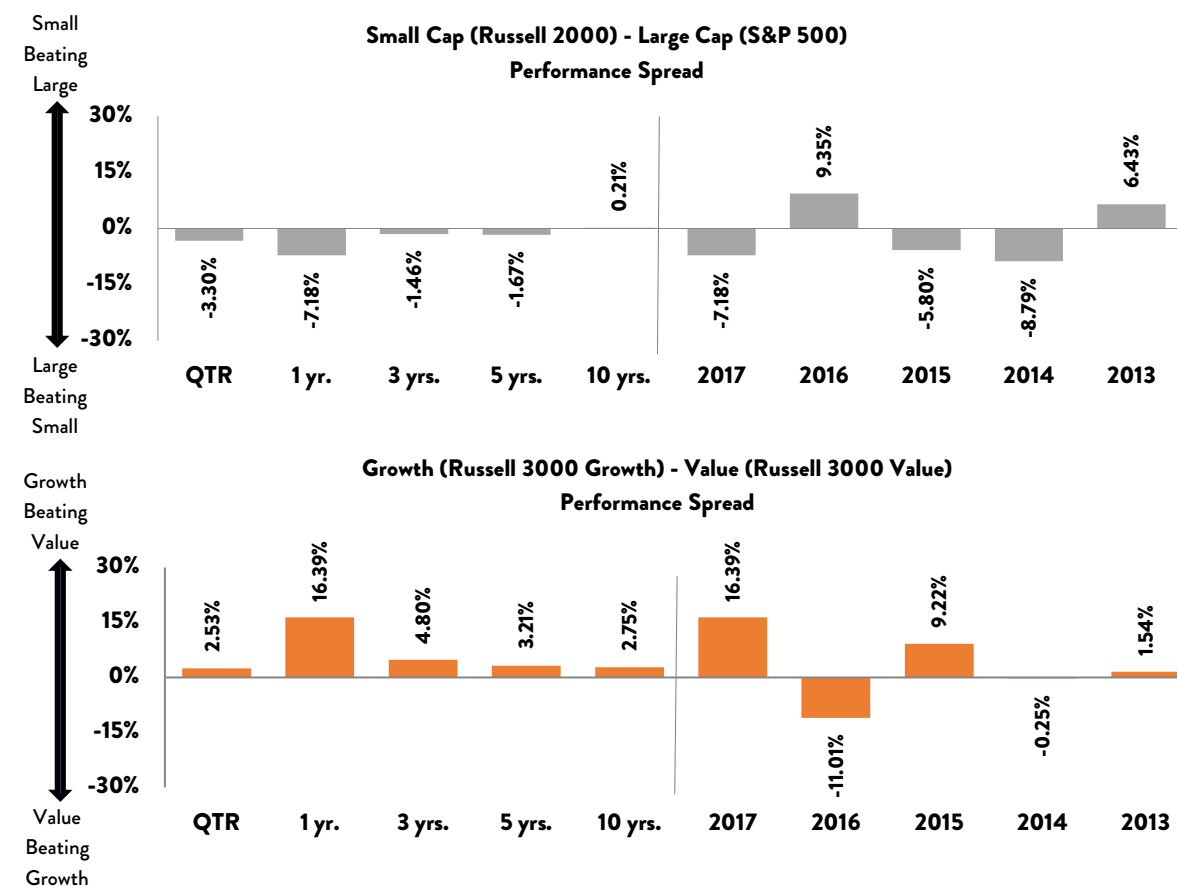
S&P 500 Index	Wgt.	Sector	QTR	YTD	1 Yr.
	12%	Consumer Discretionary	9.87%	22.98%	22.98%
	24%	Information Technology	9.01%	38.83%	38.83%
	15%	Financials	8.63%	22.18%	22.18%
	3%	Materials	6.93%	23.84%	23.84%
	8%	Consumer Staples	6.49%	13.49%	13.49%
	10%	Industrials	6.05%	21.03%	21.03%
	6%	Energy	6.02%	-1.01%	-1.01%
	2%	Telecom Services	3.61%	-1.25%	-1.25%
	3%	Real Estate	3.22%	10.85%	10.85%
	14%	Health Care	1.47%	22.08%	22.08%
	3%	Utilities	0.21%	12.11%	12.11%

S&P Midcap 400 Index	Wgt.	Sector	QTR	YTD	1 Yr.
	12%	Consumer Discretionary	10.00%	19.50%	19.50%
	4%	Energy	9.91%	-15.84%	-15.84%
	16%	Industrials	8.60%	23.54%	23.54%
	17%	Information Technology	6.50%	25.08%	25.08%
	17%	Financials	6.26%	13.96%	13.96%
	7%	Materials	6.12%	21.55%	21.55%
	4%	Consumer Staples	5.34%	3.28%	3.28%
	5%	Utilities	2.55%	11.09%	11.09%
	9%	Real Estate	2.30%	3.81%	3.81%
	8%	Health Care	1.95%	22.71%	22.71%
	0%	Telecom Services	-5.72%	-41.17%	-41.17%

S&P Smallcap 600 Index	Wgt.	Sector	QTR	YTD	1 Yr.
	16%	Consumer Discretionary	8.13%	17.13%	17.13%
	13%	Health Care	6.17%	34.71%	34.71%
	19%	Industrials	6.08%	17.21%	17.21%
	5%	Materials	5.21%	9.92%	9.92%
	3%	Consumer Staples	4.77%	9.30%	9.30%
	3%	Energy	4.31%	-26.42%	-26.42%
	17%	Financials	3.94%	6.74%	6.74%
	3%	Utilities	1.24%	19.04%	19.04%
	6%	Real Estate	-0.25%	6.08%	6.08%
	1%	Telecom Services	-1.12%	0.79%	0.79%
	14%	Information Technology	-2.91%	10.28%	10.28%

Index Performance Data

Index	QTR	YTD	1 yr.	Annualized		
				3 yrs.	5 yrs.	10 yrs.
S&P 500	6.64%	21.83%	21.83%	11.41%	15.79%	8.50%
Russell 1000 Value	5.33%	13.66%	13.66%	8.65%	14.04%	7.10%
Russell 1000 Growth	7.86%	30.21%	30.21%	13.79%	17.33%	10.00%
Russell Mid Cap	6.07%	18.52%	18.52%	9.58%	14.96%	9.11%
Russell Mid Cap Value	5.50%	13.34%	13.34%	9.00%	14.68%	9.10%
Russell Mid Cap Growth	6.81%	25.27%	25.27%	10.30%	15.30%	9.10%
Russell 2000	3.34%	14.65%	14.65%	9.96%	14.12%	8.71%
Russell 2000 Value	2.05%	7.84%	7.84%	9.55%	13.01%	8.17%
Russell 2000 Growth	4.59%	22.17%	22.17%	10.28%	15.21%	9.19%
Russell 3000	6.34%	21.13%	21.13%	11.12%	15.58%	8.60%
DJ US Select REIT	1.98%	3.76%	3.76%	4.97%	9.09%	7.07%



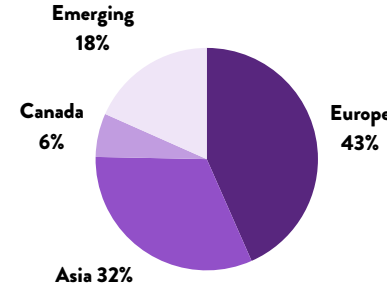
4Q2017 International Market Data

Index Performance Data (net)

Index (US\$)	QTR	YTD	1 yr.	3 yrs.	5 yrs.	10 yrs.
MSCI ACWI ex-US	5.00%	27.19%	27.19%	7.83%	6.80%	1.84%
MSCI EAFE	4.23%	25.03%	25.03%	7.80%	7.90%	1.94%
Europe	2.21%	25.51%	25.51%	6.69%	7.37%	1.34%
United Kingdom	5.72%	22.30%	22.30%	4.14%	5.21%	1.55%
Germany	2.78%	27.70%	27.70%	8.78%	8.68%	1.79%
France	1.50%	28.75%	28.75%	10.49%	8.95%	1.05%
Pacific	7.99%	24.64%	24.64%	10.16%	9.00%	3.35%
Japan	8.49%	23.99%	23.99%	11.62%	11.16%	3.17%
Hong Kong	6.58%	36.17%	36.17%	11.47%	10.08%	5.31%
Australia	6.79%	19.93%	19.93%	6.37%	3.90%	2.75%
Canada	4.26%	16.07%	16.07%	3.12%	3.29%	1.39%
MSCI EM	7.44%	37.28%	37.28%	9.10%	4.35%	1.68%
MSCI EM Latin America	-2.34%	23.74%	23.74%	3.80%	-3.20%	-1.67%
MSCI EM Asia	8.36%	42.83%	42.83%	11.00%	7.91%	3.56%
MSCI EM Eur/Mid East	4.26%	15.86%	15.86%	6.31%	-3.96%	-5.02%
MSCI ACWI Value ex-US	4.23%	22.66%	22.66%	6.31%	5.58%	1.23%
MSCI ACWI Growth ex-US	5.77%	32.01%	32.01%	9.29%	7.97%	2.40%
MSCI ACWI Sm Cap ex-US	6.56%	31.65%	31.65%	11.96%	10.03%	4.69%

Regional Exposure

MSCI ACWI ex-USA

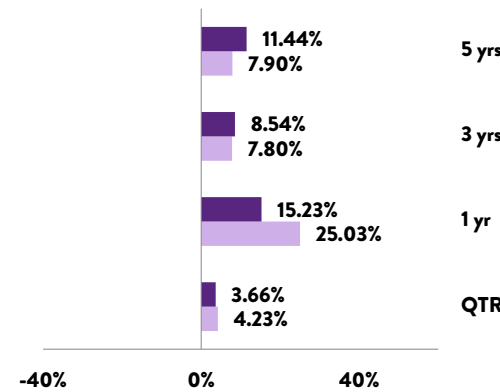


Top 10 Countries (MSCI AC World ex-USA)

Japan	17%
UK	11%
China	8%
France	7%
Canada	7%
Germany	7%
Switzerland	6%
Australia	5%
South Korea	4%
Hong Kong	3%

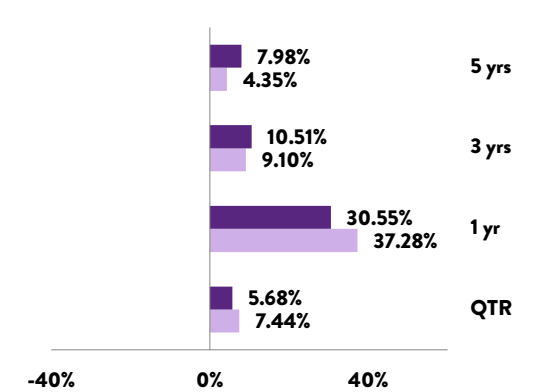
MSCI EAFE Index Return

Local US\$

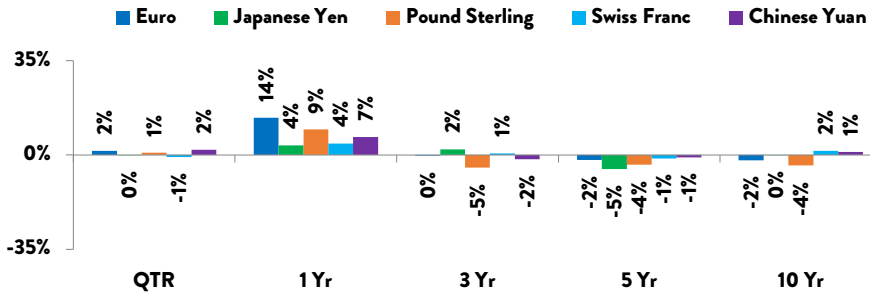


MSCI Emerging Index Return

Local US\$

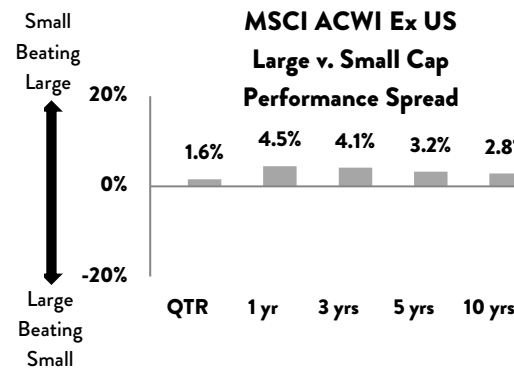


Foreign Currency v. US\$ Returns

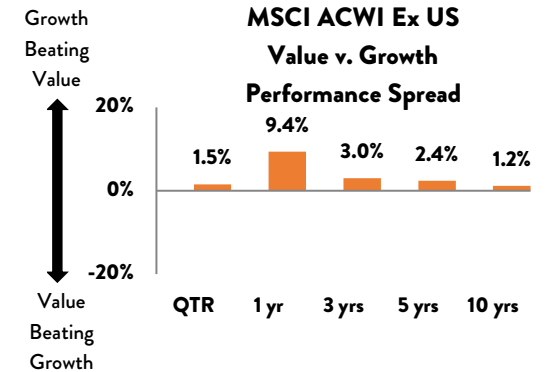


Exchange Rates	4Q17	3Q17	2Q17	1Q17	4Q16	3Q16
Japanese Yen	112.69	112.64	112.40	111.41	116.80	101.21
Euro	0.83	0.85	0.88	0.93	0.95	0.89
British Pound	0.74	0.75	0.77	0.80	0.81	0.77
Swiss Franc	0.97	0.97	0.96	1.00	1.02	0.97
Chinese Yuan	6.51	6.65	6.78	6.88	6.94	6.67

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

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	4Q17
Emerging Markets 55.82%	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%	Emerging Markets 7.44%
Small Cap 47.25%	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%	Large Cap 6.64%
Intl 40.83%	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%	Mid Cap 6.07%
Mid Cap 40.06%	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%	Intl 5.00%
High Yield 28.97%	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%	Commod. 4.71%
Large Cap 28.68%	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%	Global Balanced 3.69%
Global Balanced 24.27%	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%	Small Cap 3.34%
Commod. 23.93%	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%	Core Real Estate 1.64%
Global Bonds 12.51%	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 4.72%	TIPS 1.26%
TIPS 8.40%	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%	Global Bonds 1.08%
Core Real Estate 8.28%	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%	High Yield 0.47%
US Bonds 4.10%	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%	US Bonds 0.39%
Cash 1.03%	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%	Cash 0.21%

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