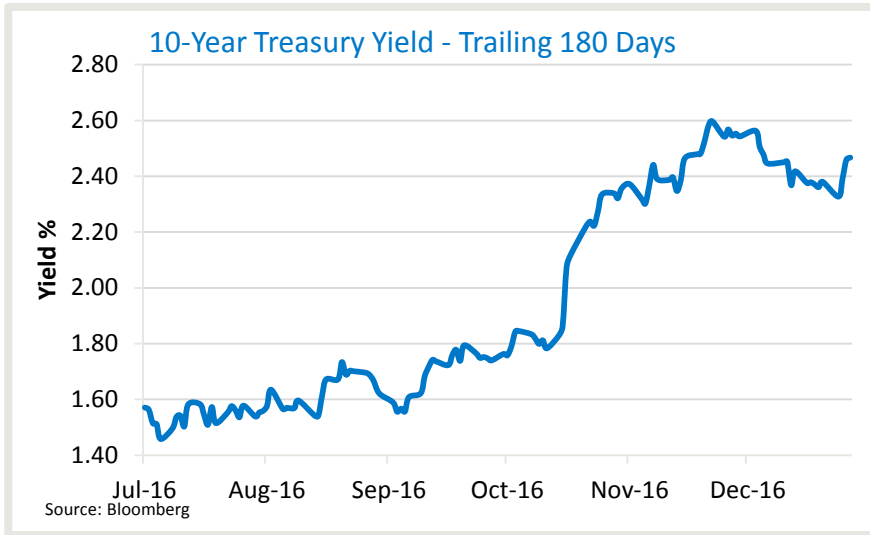


# Weekly Market Review

January 20, 2017

## Chart of the Week



## Weekly Highlights

- **New president is inaugurated.** Donald J. Trump has officially become the 45<sup>th</sup> President of the United States.
- **4Q earnings season has started** and will reach its climax in the next couple of weeks. S&P 500 companies are expected to report a modest earnings growth in 4Q.
- **No surprise in inflation.** December/2016 headline CPI rose 2.1% year-over-year and core CPI rose 2.2% year-over-year, respectively, both in line with expectations.

## Talking Points

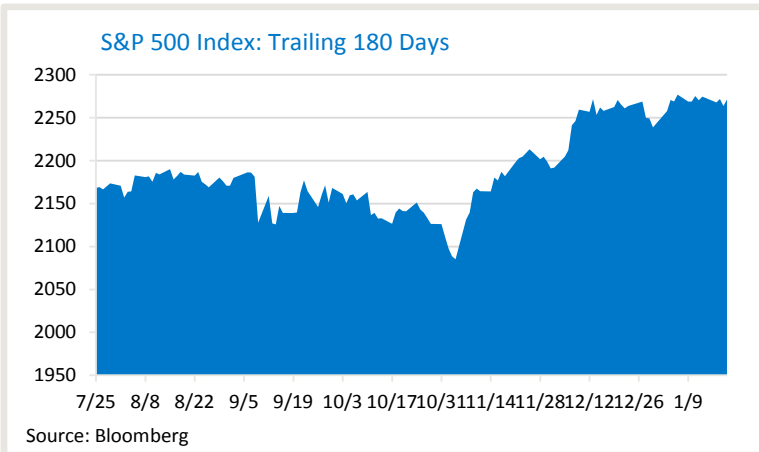
- **Among equities,** large caps outperformed small caps; growth stocks matched the performance of value stocks; domestic stocks beat international stocks; and emerging markets and developed markets had similar performance.
- **Treasury yields rose this week.** The 10-Year Treasury yield advanced towards 2.5% level.
- **Commodity indices were little changed.** Both crude oil and gold prices were little changed.
- **The dollar index was essentially flat.** The dollar little changed versus most major currencies.
- **It was a shortened holiday week, with scant economic data.** December/2016 headline CPI rose 2.1% year-over-year and core CPI rose 2.2% year-over-year, respectively, both in line with expectations.

## Market Dashboard

	Last Price	Change	% Chg.	YTD %
<b>S&amp;P 500</b>	2,271.31	-3.33	-0.15%	1.5%
<b>Dow Industrials</b>	19,827.25	-58.48	-0.29%	0.3%
<b>Nasdaq</b>	5,555.33	-18.78	-0.34%	3.2%
<b>Russell 2000</b>	1,351.85	-20.20	-1.47%	-0.4%
<b>Euro Stoxx Index</b>	362.58	-3.36	-0.92%	0.3%
<b>Shanghai Composite</b>	3,123.14	10.37	0.33%	0.6%
<b>Russell Global</b>	1,789.87	-12.40	-0.69%	1.5%

Source: Bloomberg; Index % change is based on price.

	Last Price	Change	% Chg.	YTD %
<b>Russell Global EM</b>	2,828.43	-4.85	-0.17%	3.6%
<b>10-Year US Treas.</b>	2.47	9 bps	NM	NM
<b>DJ UBS Comm. Idx.</b>	88.38	-0.17	-0.19%	1.0%
<b>Gold</b>	\$1,209.18	\$10.23	0.85%	5.2%
<b>Crude Oil</b>	\$53.20	\$0.03	0.06%	-2.7%
<b>Dollar Index</b>	100.85	-0.33	-0.33%	-1.3%
<b>VIX Index</b>	11.54	0.32	2.85%	-17.7%



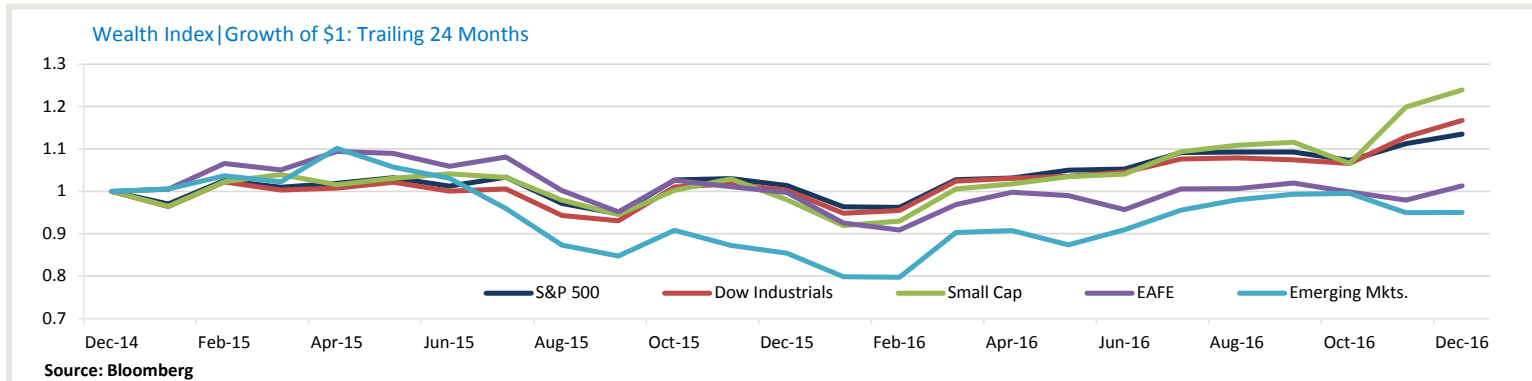
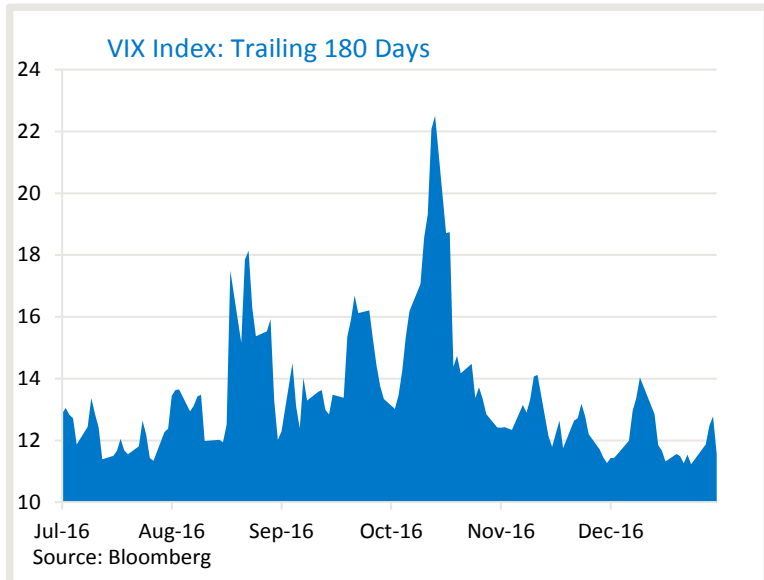
	One Week			YTD		
	Value	Growth		Value	Growth	
<b>L</b>	-0.35%	-0.17%	0.01%	0.21%	1.46%	2.67%
	-0.16%	-0.20%	-0.25%	1.05%	1.72%	2.56%
<b>S</b>	-1.30%	-1.47%	-1.66%	-1.24%	-0.39%	0.56%

Source: Bloomberg

**Sector Performance:**  
**S&P/Global Industry Classification Sectors (GICS)**

	% Wgt in S&P 500	Week % Chg.	YTD % Chg.
<b>Consumer Discretionary</b>	12.2	0.07%	3.1%
<b>Consumer Staples</b>	9.4	1.93%	1.4%
<b>Energy</b>	7.4	0.08%	-1.3%
<b>Financials</b>	14.5	-1.64%	-0.6%
<b>Health Care</b>	13.6	-1.49%	1.3%
<b>Industrials</b>	10.3	0.13%	1.7%
<b>Information Technology</b>	21.2	0.23%	3.5%
<b>Materials</b>	2.9	0.49%	2.8%
<b>Telecom Services</b>	2.6	0.79%	-1.5%
<b>Utilities</b>	3.1	0.27%	0.1%

Source: Bloomberg



## The Economy and Markets

### ***A Macro View – Handling Currency Hedging in International Equity Investing in 2017***

Over the past three years, international equity not only trailed US equity by significant margins, but registered a negative total return. From 12/31/2013 to 12/31/2016, the MSCI EAFE Index (the proxy for international equity), had a total return of -3.1% versus +29.0% for the S&P 500 Index (the proxy for US equity), a whopping 3,200 basis points of underperformance. Most of the underperformance can be attributed to the strong dollar, which jumped more than 27% during the past three years versus the world's other major currencies, as measured by the dollar index (DXY). For investors with a contrarian mindset, 2017 may be a good time to take a stab at international equity. However, it is important to handle the currency hedge appropriately and treat the various regions/countries differently.

The Eurozone is the largest common currency region/country in the MSCI EAFE Index, with approximately 32% of the index weighting. Although the common currency, the euro, fell 24% versus the dollar over the past three years, it did not boost the region's economy. The euro was created mainly to facilitate trading among countries within the Eurozone, and its devaluation versus the dollar does not matter a lot. For the Eurozone's equity market, the rule of thumb is basically a stronger economy, a stronger stock market, and a stronger currency. Aggressive US investors should "double down" and invest in the Eurozone *without* currency hedging, potentially benefiting from both a higher stock market and a higher euro, as they generally go hand in hand. Conservative US investors, on the other hand, should invest in the Eurozone *with* currency hedging, to avoid the "double whammy" of both a lower stock market and a lower euro.

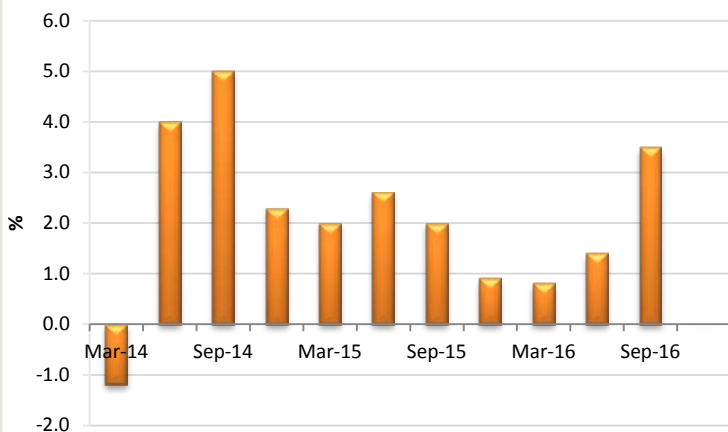
Japan is the second largest common currency region/country in the MSCI EAFE Index, with approximately 24% of the index weighting. In contrast to the Eurozone, the rule of thumb for Japan is basically "bad news is good news"—the weaker the economy, the lower the currency, and the higher the stock market. Japan's stock market is dominated by exporters, especially those exporting to the US, such as car makers, and thus a lower yen versus the dollar is critical. For a US investor, either aggressive or conservative, currency hedging is almost "mandatory" for investing in Japan; otherwise, gains from the stock market will be offset by losses from currency translation.

Lastly, the United Kingdom (UK) is the third largest common currency region/country in the MSCI EAFE Index, with approximately 18% of the index weighting. The UK has become a wild card since the Brexit vote on June 23, 2016. Whereas sterling declined as much as the euro versus the dollar over the past three years, most of the damage was done after the Brexit vote, as sterling nosedived 17% versus the dollar between then and year-end. However, the UK stock market, as measured by the FTSE 100 Index, jumped nearly 15% (in sterling), more than double the S&P 500 Index's 7% gain. Although this looks much like Japan's situation (lower currency, higher stock market), it is very much a knee-jerk reaction. The UK's economy is very different from Japan's, as it does not rely heavily on exports, much less exports to the US. The UK's post-Brexit vote situation is still very fluid, and has many uncertainties. The rule of thumb in this situation is generally *no* currency hedge, as the stock market itself, especially a quite mature and efficient one like the UK's (probably second only to the US's), will reflect and adjust to the sudden changes naturally, and thus the extra cost for a currency hedge is not warranted during the transition time.

*Frank Wei, CFA, CAIA*  
*VP, Senior Investment Analyst*

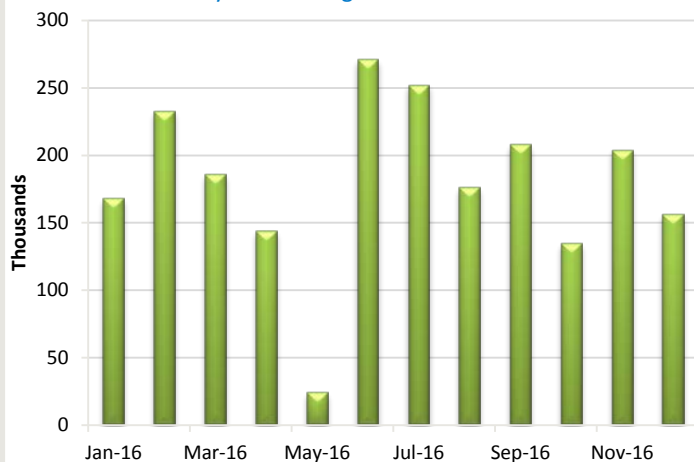
## Economic Data

Real GDP Growth Rate - Annualized - 12 Qtrs.



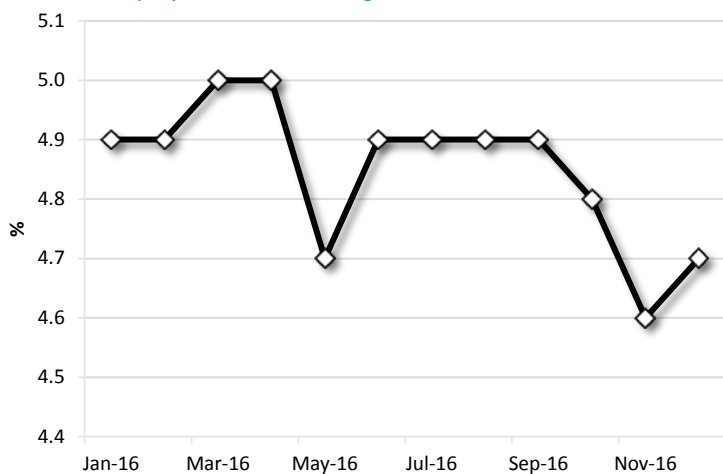
Source: Bloomberg

Non-Farm Payrolls-Trailing 12 Mos.



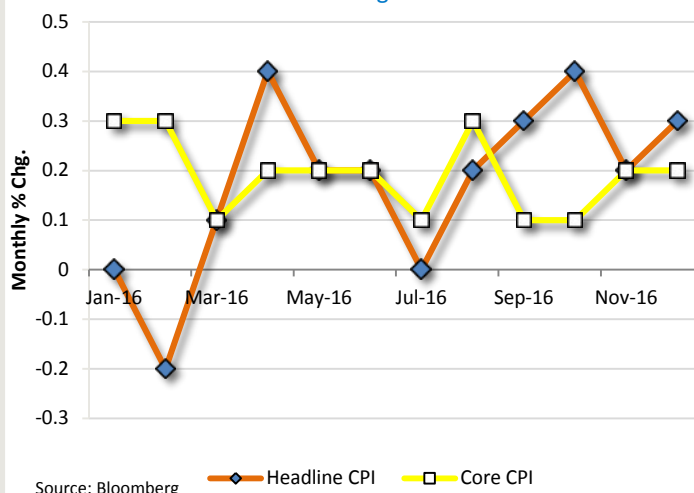
Source: Bloomberg

Unemployment Rate-Trailing 12 Mos.



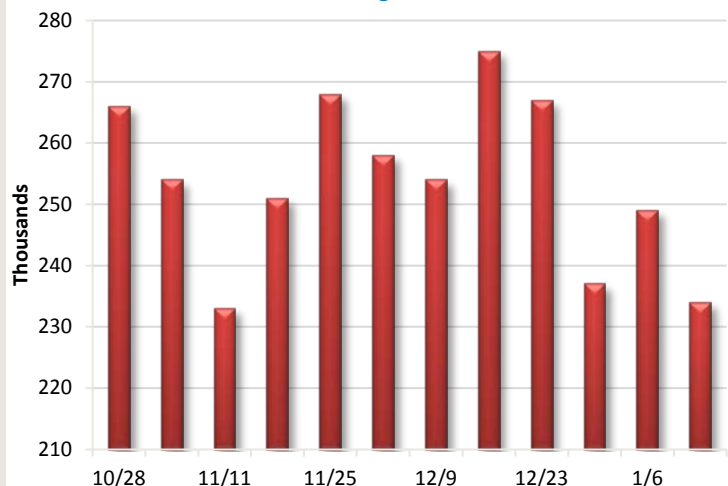
Source: Bloomberg

Consumer Price Index-Trailing 12 Mos.



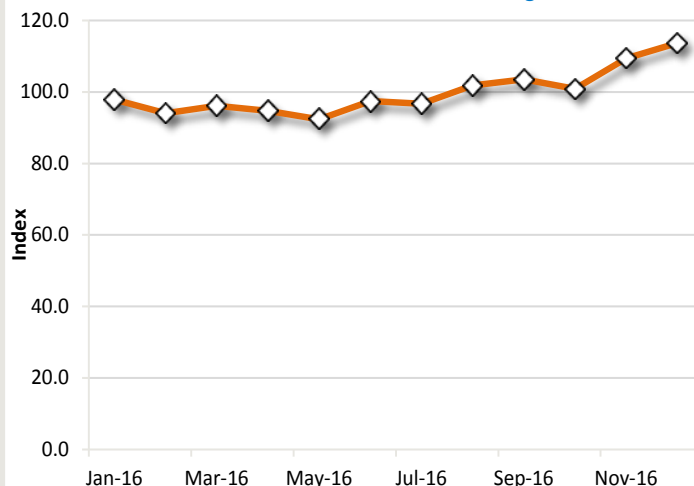
Source: Bloomberg

Initial Jobless Claims-Trailing 12 Wks.



Source: Bloomberg

Consumer Board Confidence Index - Trailing 12 Mos.



Source: Bloomberg

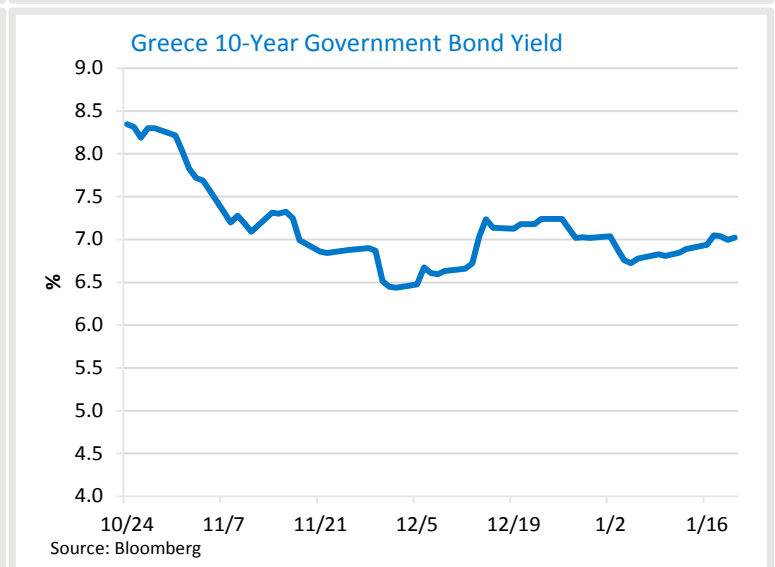
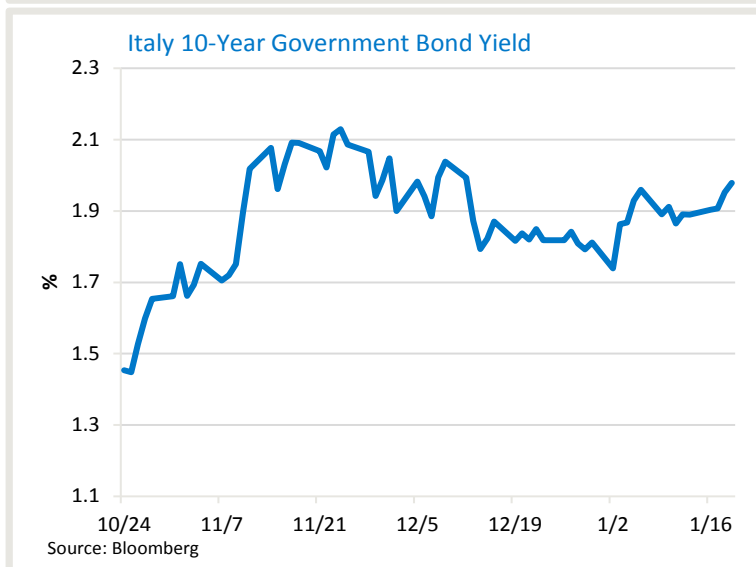
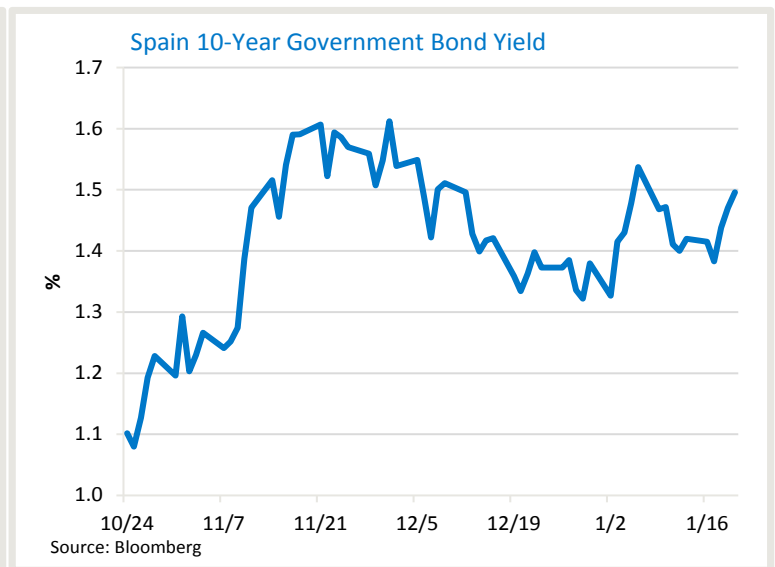
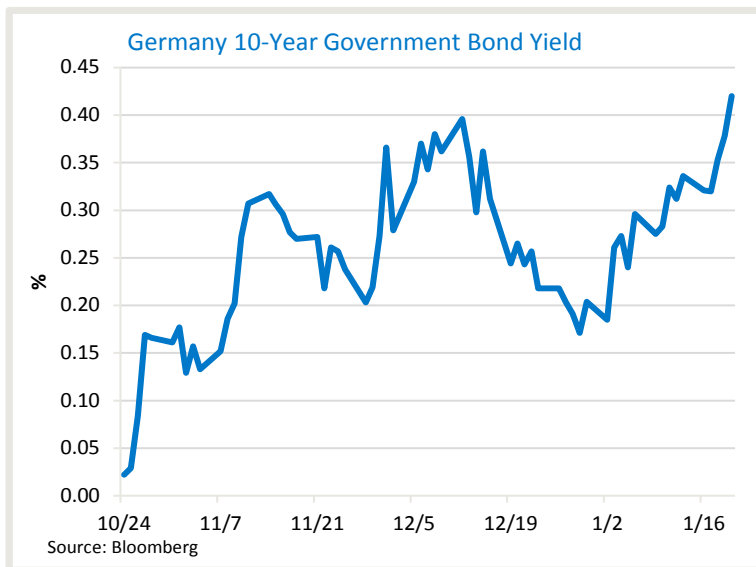
## Eurozone

### SELECTED EUROPEAN SOVEREIGN YIELD PERFORMANCE

	Last	Change	% Chg.	YTD %
Germany 10-Yr. Govt.	0.42	-8 bps	NM	NM
Greece 10-Yr. Govt.	7.02	-8 bps	NM	NM
Italy 10-Yr. Govt.	2.01	-10 bps	NM	NM
Spain 10-Yr. Govt.	1.50	-7 bps	NM	NM
Belgium 10-Yr. Govt.	0.74	-6 bps	NM	NM

	Last	Change	% Chg.	YTD %
France 10-Yr. Govt.	0.90	-9 bps	NM	NM
Ireland 10-Yr. Govt.	1.03	-11 bps	NM	NM
Portugal 10-Yr. Govt.	3.85	3 bps	NM	NM
Netherlands 10-Yr. Govt.	0.53	-8 bps	NM	NM
U.K. 10-Yr. Govt.	1.43	-6 bps	NM	NM

Source: Bloomberg  
Basis points (bps)



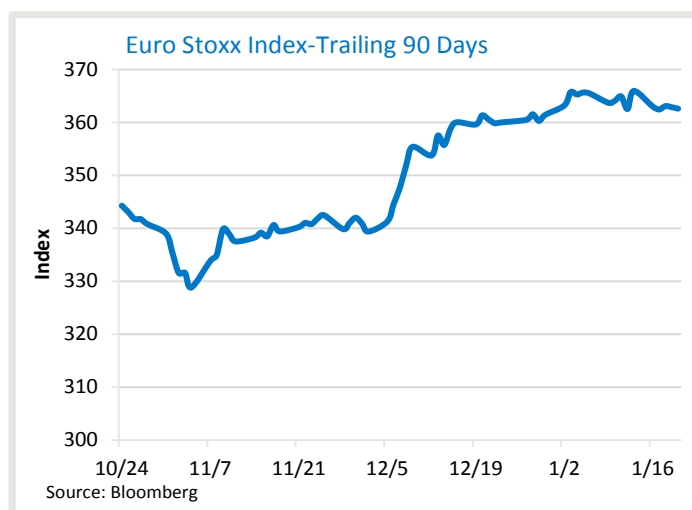
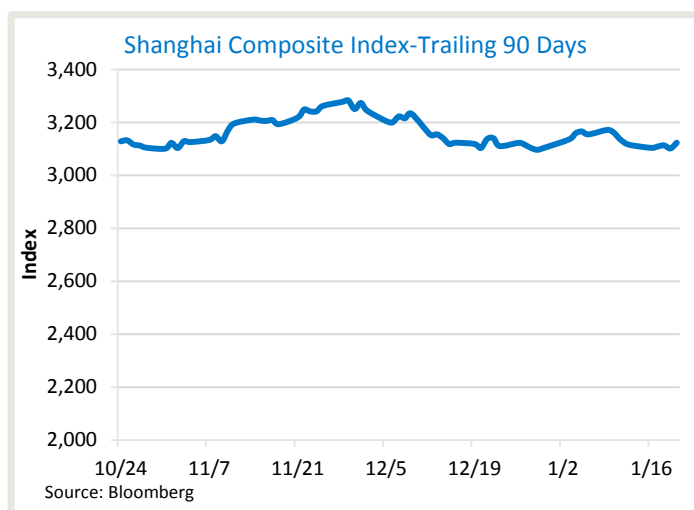
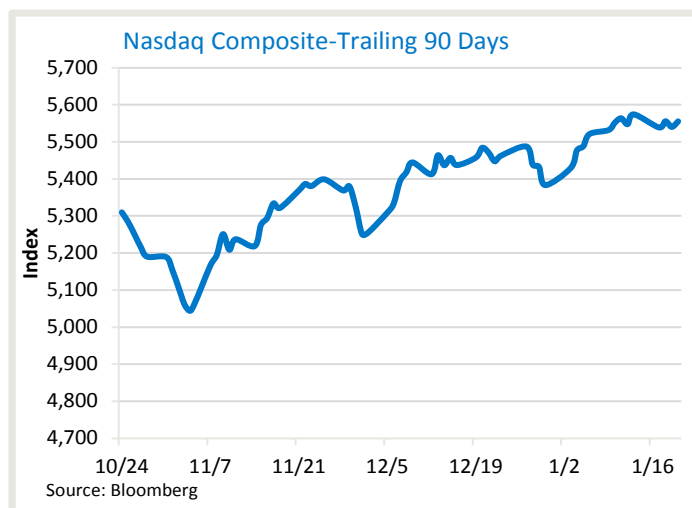
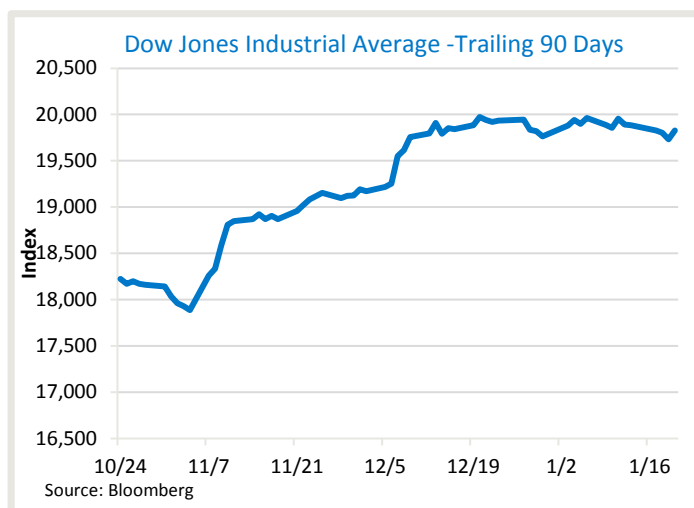
## Equities

### WORLD MARKET PERFORMANCE

	Last	Change	% Chg.	YTD %
<b>S&amp;P 500</b>	<b>2,271.31</b>	<b>-3.33</b>	<b>-0.15%</b>	<b>1.45%</b>
<b>Dow Industrials</b>	<b>19,827.25</b>	<b>-58.48</b>	<b>-0.29%</b>	<b>0.33%</b>
<b>Nasdaq Composite</b>	<b>5,555.33</b>	<b>-18.78</b>	<b>-0.34%</b>	<b>3.20%</b>
<b>Russell Global</b>	<b>1,789.87</b>	<b>-12.40</b>	<b>-0.69%</b>	<b>1.5%</b>
<b>Russell Global EM</b>	<b>2,828.43</b>	<b>-4.85</b>	<b>-0.17%</b>	<b>3.6%</b>
<b>S&amp;P/TSX (Canada)</b>	<b>15,547.88</b>	<b>50.60</b>	<b>0.33%</b>	<b>1.70%</b>
<b>Mexico IPC</b>	<b>46,331.60</b>	<b>149.17</b>	<b>0.32%</b>	<b>1.51%</b>
<b>Brazil Bovespa</b>	<b>64,521.18</b>	<b>869.66</b>	<b>1.37%</b>	<b>7.13%</b>
<b>Euro Stoxx 600</b>	<b>362.58</b>	<b>-3.36</b>	<b>-0.92%</b>	<b>0.32%</b>
<b>FTSE 100</b>	<b>7,198.44</b>	<b>-139.37</b>	<b>-1.90%</b>	<b>0.78%</b>
<b>IBEX 35 (Spain)</b>	<b>9,380.10</b>	<b>-131.50</b>	<b>-1.38%</b>	<b>0.30%</b>

	Last	Change	% Chg.	YTD %
<b>Swiss Market Index</b>	<b>8,275.13</b>	<b>-177.06</b>	<b>-2.09%</b>	<b>0.67%</b>
<b>CAC 40 Index (France)</b>	<b>4,850.67</b>	<b>-71.82</b>	<b>-1.46%</b>	<b>-0.24%</b>
<b>DAX Index (Germany)</b>	<b>11,630.13</b>	<b>0.95</b>	<b>0.01%</b>	<b>1.30%</b>
<b>Irish Overall Index</b>	<b>6,622.97</b>	<b>-35.98</b>	<b>-0.54%</b>	<b>1.62%</b>
<b>Nikkei 225</b>	<b>19,137.91</b>	<b>-149.37</b>	<b>-0.77%</b>	<b>0.12%</b>
<b>Hang Seng Index</b>	<b>22,885.91</b>	<b>-51.47</b>	<b>-0.22%</b>	<b>4.02%</b>
<b>Shanghai Composite</b>	<b>3,123.14</b>	<b>10.37</b>	<b>0.33%</b>	<b>0.63%</b>
<b>Kospi Index (S. Korea)</b>	<b>2,065.61</b>	<b>-11.18</b>	<b>-0.54%</b>	<b>1.93%</b>
<b>Taiwan Taiex Index</b>	<b>9,331.46</b>	<b>-47.37</b>	<b>-0.51%</b>	<b>0.84%</b>
<b>Tel Aviv 25 Index</b>	<b>1,421.47</b>	<b>-28.59</b>	<b>-1.97%</b>	<b>-3.35%</b>
<b>MICEX Index (Russia)</b>	<b>2,159.96</b>	<b>-35.23</b>	<b>-1.60%</b>	<b>-3.26%</b>

Source: Bloomberg; Index % change is based on price.



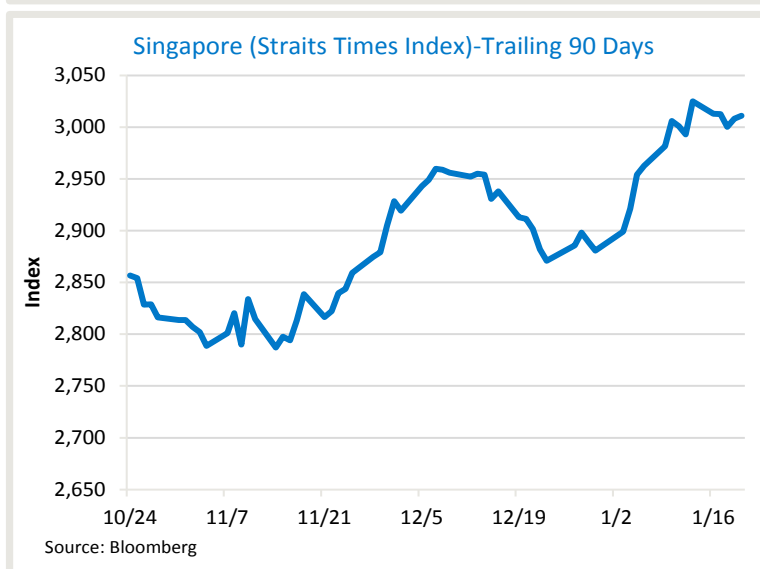
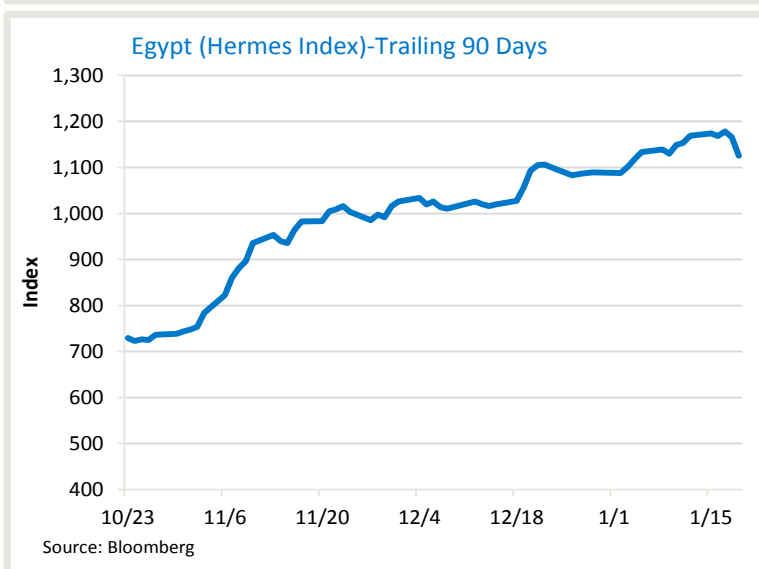
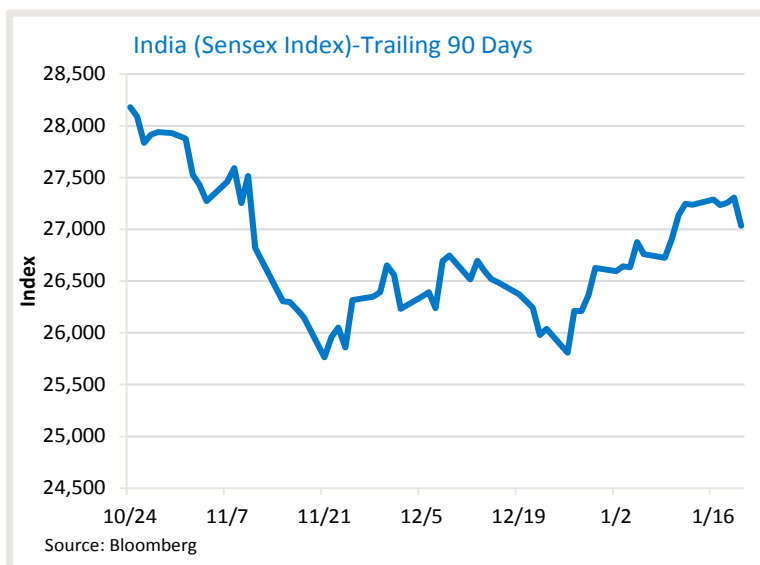
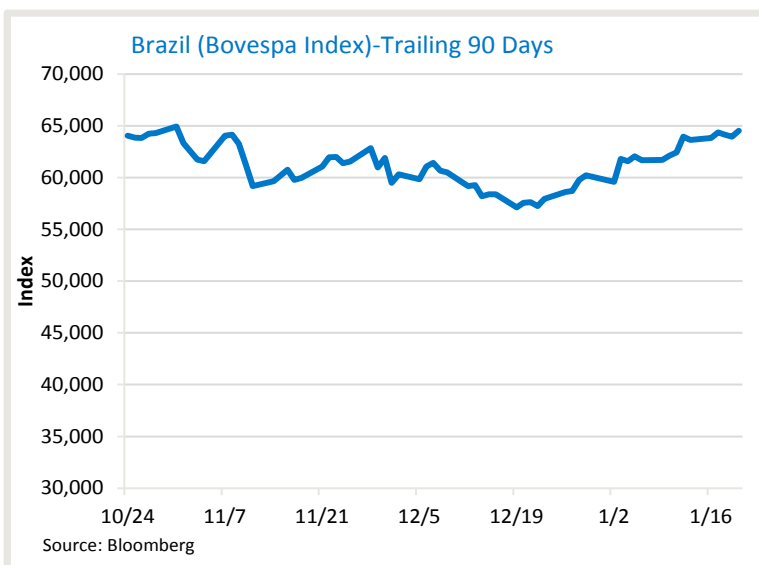
## Equities – Emerging and Frontier Markets

### EMERGING AND FRONTIER MARKET PERFORMANCE

	Last	Change	% Chg.	YTD %
Mexico IPC	46,331.60	149.17	0.3%	1.5%
Brazil (Bovespa Index)	64,521.18	869.66	1.4%	7.1%
MICEX Index (Russia)	2,159.96	-35.23	-1.6%	-3.3%
Czech Republic (Prague)	928.53	-1.89	-0.2%	0.8%
Turkey (Istanbul)	83,067.15	1542.83	1.9%	6.3%
Egypt (Hermes Index)	1,125.79	-42.92	-3.7%	3.4%
Kenya (Nairobi 20 Index)	2,913.84	-57.26	-1.9%	-8.5%
Saudi Arabia (TASI Index)	6,875.87	-45.90	-0.7%	-4.6%
Lebanon (Beirut BLOM Index)	1,201.24	-5.79	-0.5%	-0.9%
Palestine	527.53	-9.47	-1.8%	-0.5%

Source: Bloomberg; Index % change is based on price.

	Last	Change	% Chg.	YTD %
Hang Seng Index	22,885.91	-51.47	-0.2%	4.0%
India (Sensex 30)	27,034.50	-203.56	-0.7%	1.5%
Malaysia (KLCI Index)	1,664.89	-7.61	-0.5%	1.4%
Singapore (Straits Times Index)	3,011.08	-13.99	-0.5%	4.5%
Thailand (SET Index)	1,562.99	-12.25	-0.8%	1.3%
Indonesia (Jakarta)	5,254.31	-18.67	-0.4%	-0.8%
Pakistan (Karachi KSE 100)	49,364.83	154.33	0.3%	3.3%
Vietnam (Ho Chi Minh)	686.26	1.20	0.2%	3.2%
Sri Lanka (Colombo)	6,169.57	-48.15	-0.8%	-0.9%
Cambodia (Laos)	1,030.60	-73.62	-6.7%	1.6%

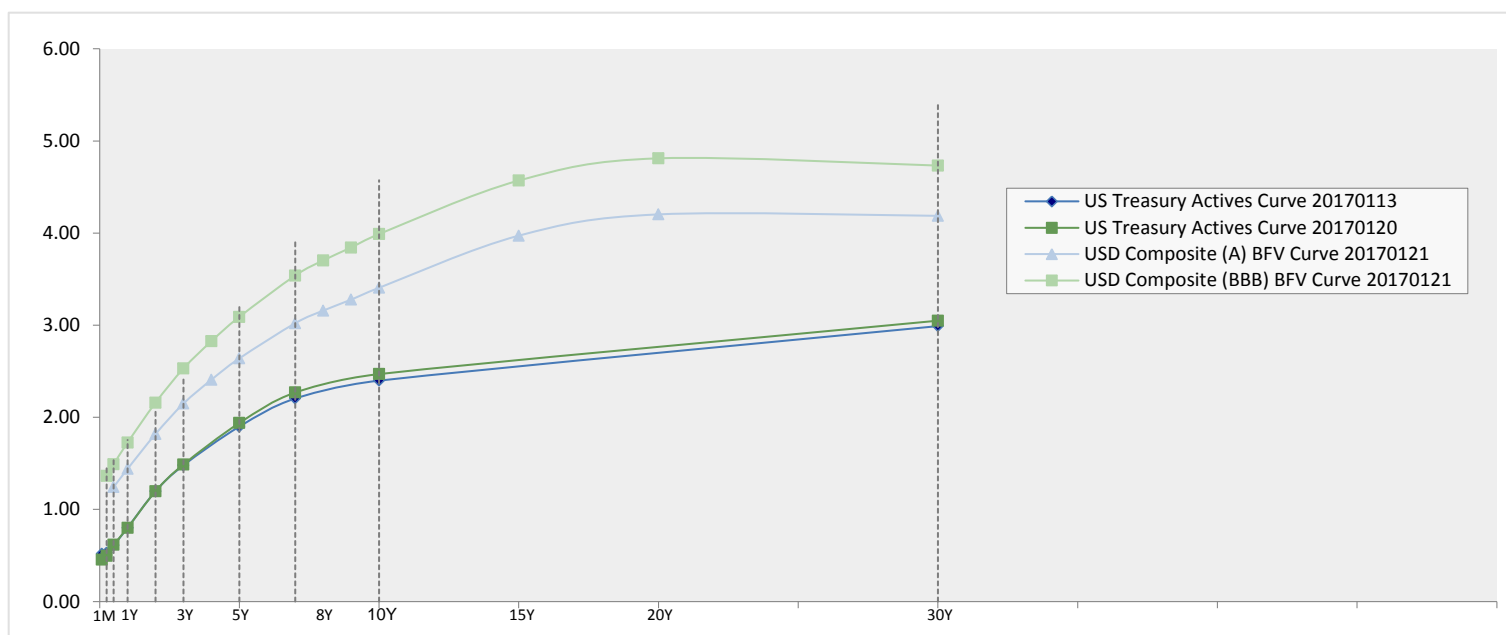


## Interest Rates

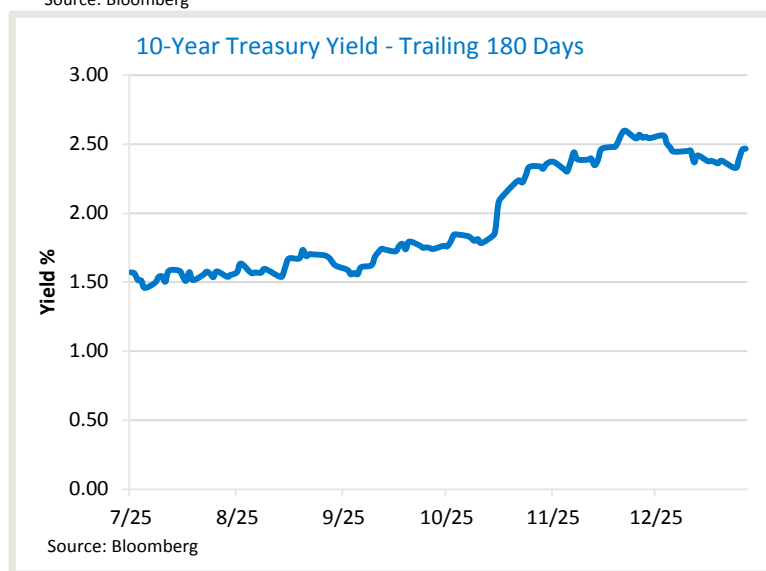
SELECTED INTEREST RATES

	Last	Change	% Chg.	YTD %		Last	Change	% Chg.	YTD %
2-Yr. U.S. Treasury	1.19%	0 bps	NM	NM	Prime Rate	3.75%	0.00	NM	NM
5-Yr. U.S. Treasury	1.94%	6 bps	NM	NM	Fed Funds Rate	0.75%	0.00	NM	NM
10-Yr. U.S. Treasury	2.47%	9 bps	NM	NM	Discount Rate	1.25%	0.00	NM	NM
30-Yr. U.S. Treasury	3.05%	7 bps	NM	NM	LIBOR (3 Mo.)	1.04%	2 bps	NM	NM
German 10-Yr. Govt.	0.42%	-8 bps	NM	NM	Bond Buyer 40 Muni	4.03%	12 bps	NM	NM
France 10-Yr.	0.90%	-9 bps	NM	NM	Bond Buyer 40 G.O.	3.83%	NA	NM	NM
Italy 10-Yr.	2.01%	-10 bps	NM	NM	Bond Buyer 40 Rev.	3.96%	NA	NM	NM
Fed 5-Yr Fwd BE Inf.	1.90%	-1 bps	NM	NM					

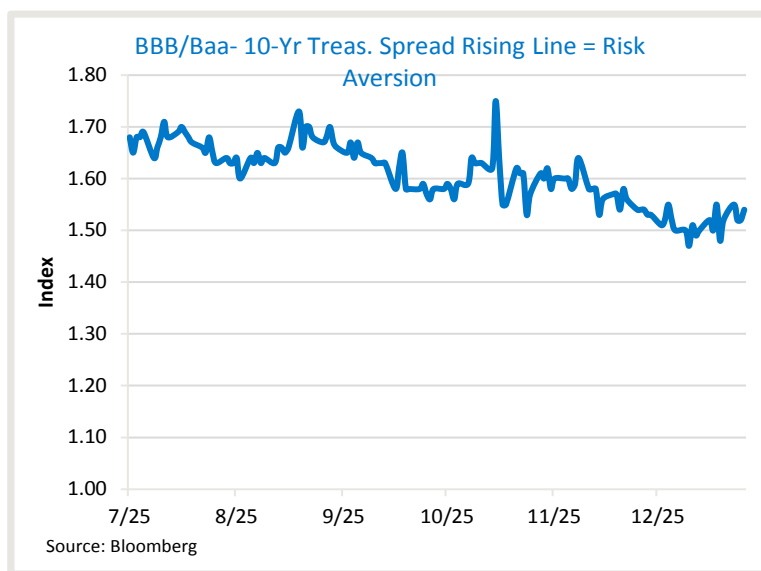
Source: Bloomberg



Source: Bloomberg



Source: Bloomberg



Source: Bloomberg



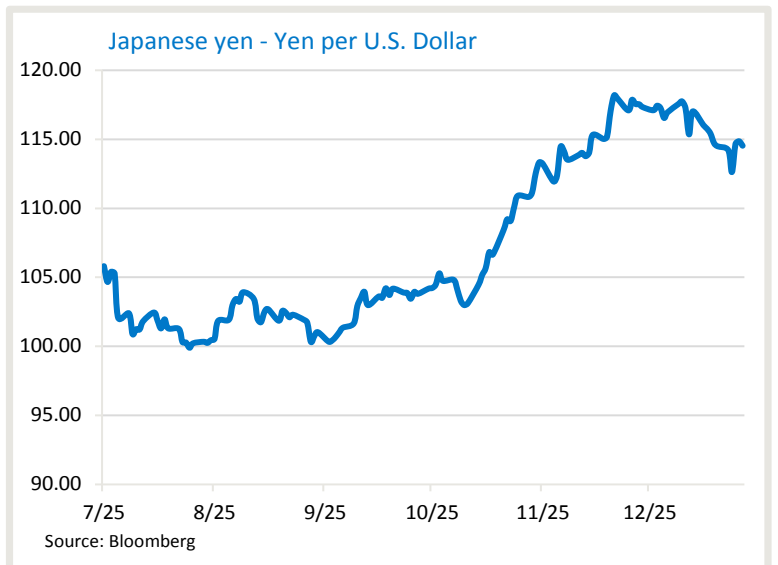
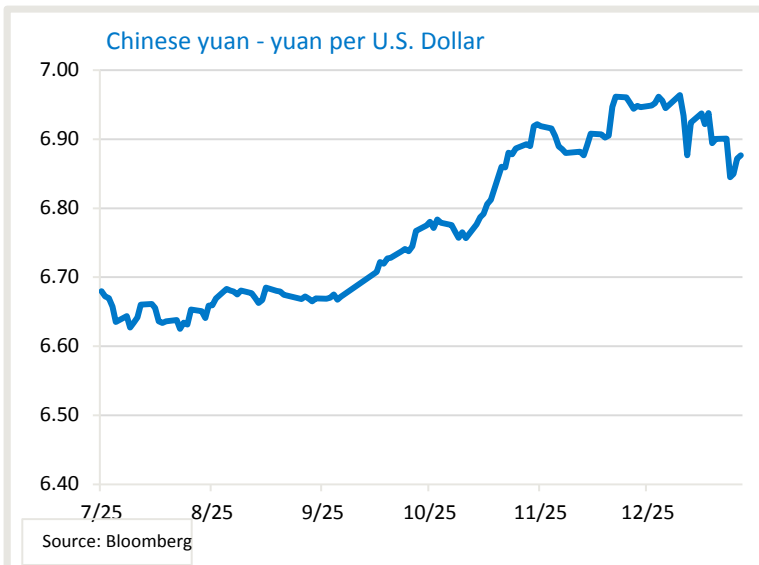
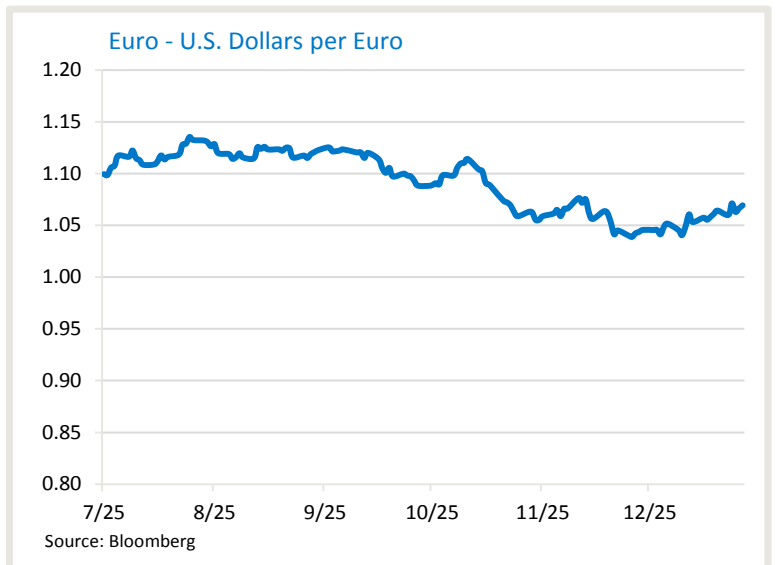
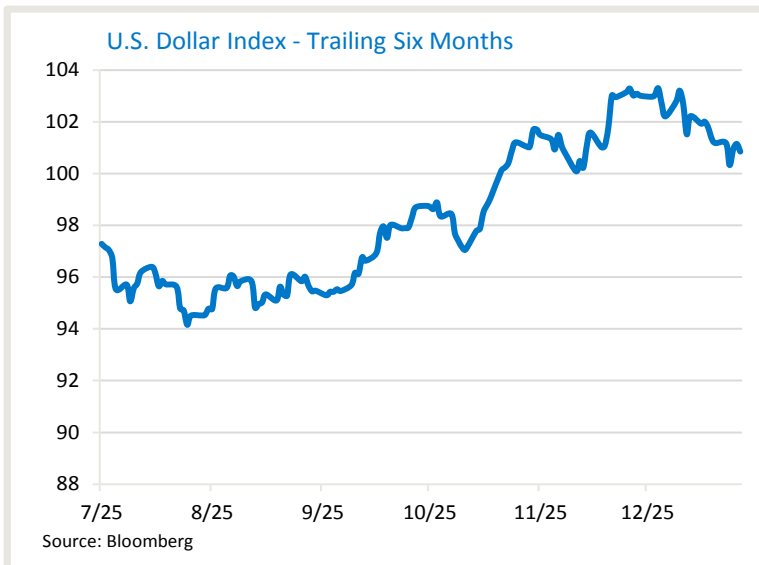
## Currencies

### SELECTED CURRENCY PERFORMANCE

	Last	Change	% Chg.	YTD %
<b>Dollar Index</b>	<b>100.84</b>	<b>-0.330</b>	<b>-0.33%</b>	<b>-1.33%</b>
<b>Euro</b>	<b>1.07</b>	<b>0.005</b>	<b>0.48%</b>	<b>1.68%</b>
<b>Japanese Yen</b>	<b>114.58</b>	<b>0.040</b>	<b>-0.03%</b>	<b>2.12%</b>
<b>British Pound</b>	<b>1.24</b>	<b>0.018</b>	<b>1.50%</b>	<b>0.20%</b>
<b>Canadian Dollar</b>	<b>1.33</b>	<b>0.021</b>	<b>-1.54%</b>	<b>0.92%</b>

	Last	Change	% Chg.	YTD %
<b>Chinese Yuan</b>	<b>6.88</b>	<b>-0.024</b>	<b>0.35%</b>	<b>1.00%</b>
<b>Swiss Franc</b>	<b>1.00</b>	<b>-0.006</b>	<b>0.62%</b>	<b>1.68%</b>
<b>New Zealand Dollar</b>	<b>0.72</b>	<b>0.004</b>	<b>0.50%</b>	<b>3.36%</b>
<b>Brazilian Real</b>	<b>3.17</b>	<b>-0.043</b>	<b>1.36%</b>	<b>2.55%</b>
<b>Mexican Peso</b>	<b>21.60</b>	<b>0.113</b>	<b>-0.53%</b>	<b>-4.00%</b>

Source: Bloomberg



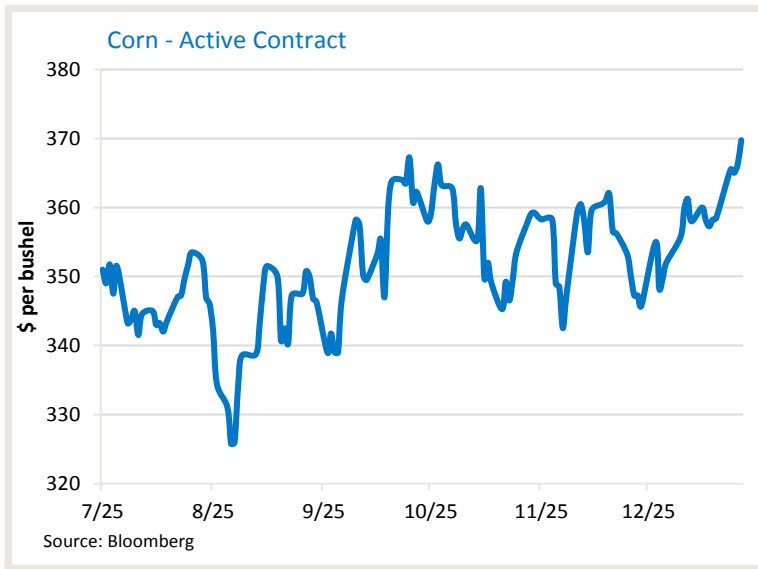
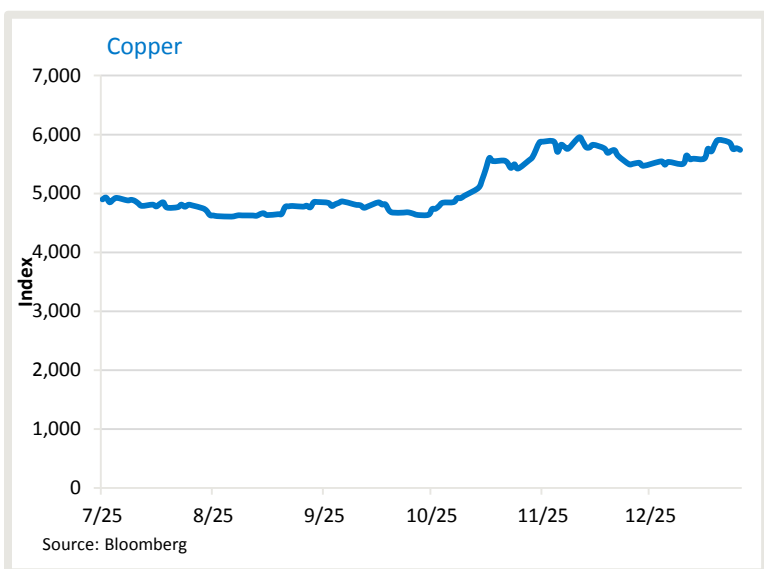
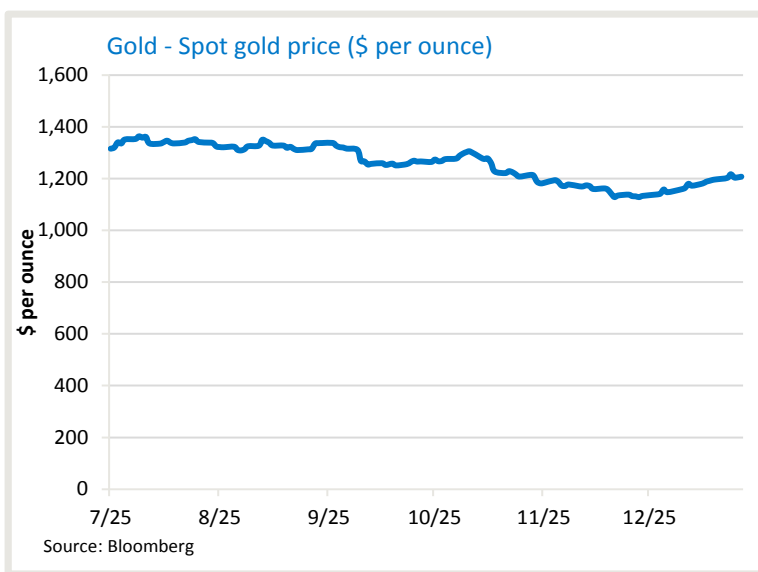
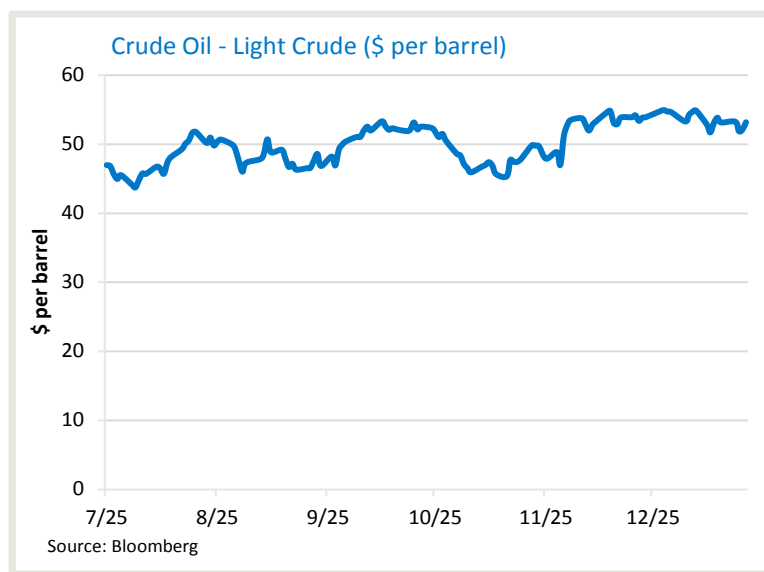
## Commodities

### SELECTED COMMODITY MARKET PERFORMANCE

	Last	Change	% Chg.	YTD %
<b>Bloomberg Comm. Idx.</b>	<b>88.38</b>	<b>-0.17</b>	<b>-0.19%</b>	<b>0.98%</b>
<b>Crude Oil</b>	<b>\$53.16</b>	<b>\$0.03</b>	<b>0.06%</b>	<b>-2.71%</b>
<b>Natural Gas</b>	<b>\$3.20</b>	<b>-\$0.22</b>	<b>-6.29%</b>	<b>-13.96%</b>
<b>Gasoline (\$/Gal.)</b>	<b>\$2.33</b>	<b>-\$0.02</b>	<b>-0.90%</b>	<b>-0.43%</b>
<b>Heating Oil</b>	<b>164.59</b>	<b>-0.90</b>	<b>-0.54%</b>	<b>-4.96%</b>
<b>Gold Spot</b>	<b>\$1,208.37</b>	<b>\$10.23</b>	<b>0.85%</b>	<b>5.23%</b>
<b>Silver Spot</b>	<b>\$17.08</b>	<b>\$0.25</b>	<b>1.47%</b>	<b>7.17%</b>

Source: Bloomberg; % change is based on price.

	Last	Change	% Chg.	YTD %
<b>Platinum Spot</b>	<b>\$978.20</b>	<b>-\$7.10</b>	<b>-0.72%</b>	<b>8.27%</b>
<b>Corn</b>	<b>369.75</b>	<b>11.50</b>	<b>3.21%</b>	<b>5.04%</b>
<b>Wheat</b>	<b>428.25</b>	<b>2.00</b>	<b>0.47%</b>	<b>4.96%</b>
<b>Soybeans</b>	<b>1,067.50</b>	<b>27.25</b>	<b>2.62%</b>	<b>6.32%</b>
<b>Sugar</b>	<b>20.18</b>	<b>-0.58</b>	<b>-2.79%</b>	<b>3.43%</b>
<b>Orange Juice</b>	<b>166.25</b>	<b>-18.25</b>	<b>-9.89%</b>	<b>-14.24%</b>
<b>Aluminum</b>	<b>1,826.00</b>	<b>17.00</b>	<b>0.94%</b>	<b>7.86%</b>
<b>Copper</b>	<b>5,739.50</b>	<b>-169.50</b>	<b>-2.87%</b>	<b>3.69%</b>

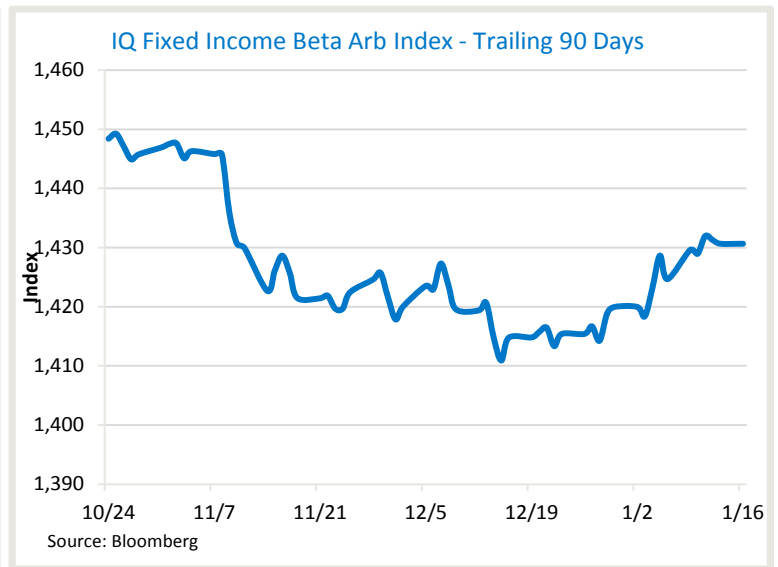
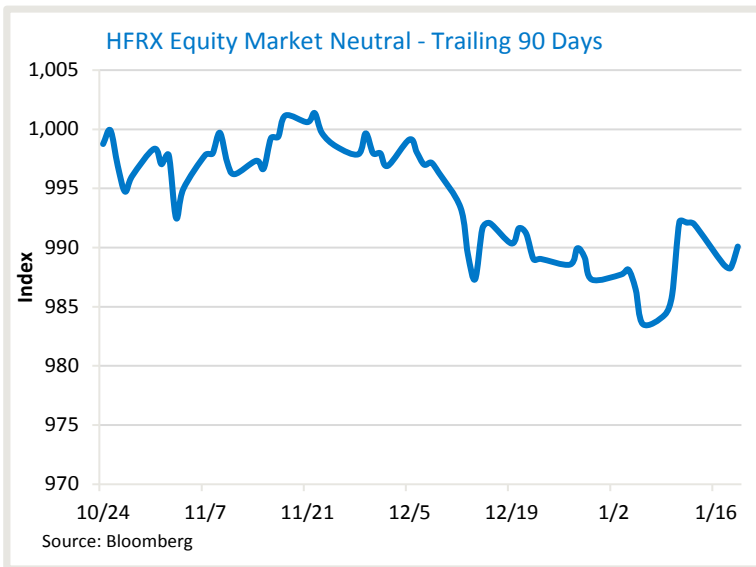
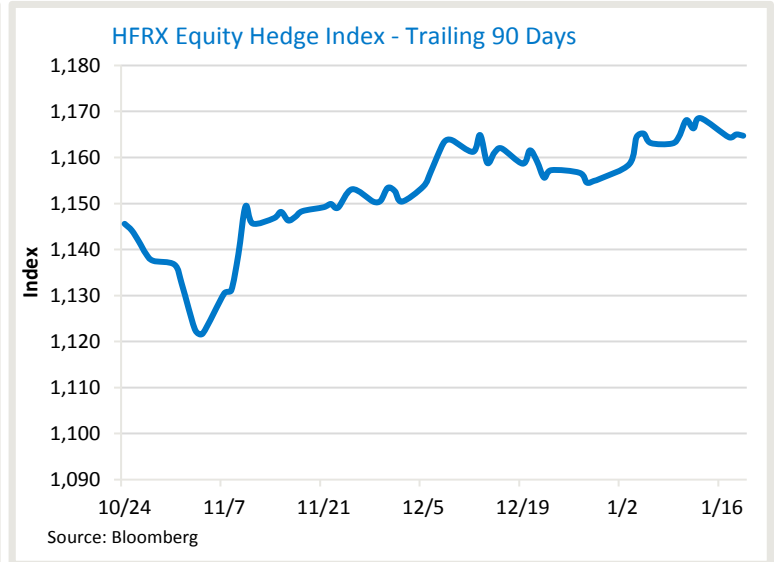
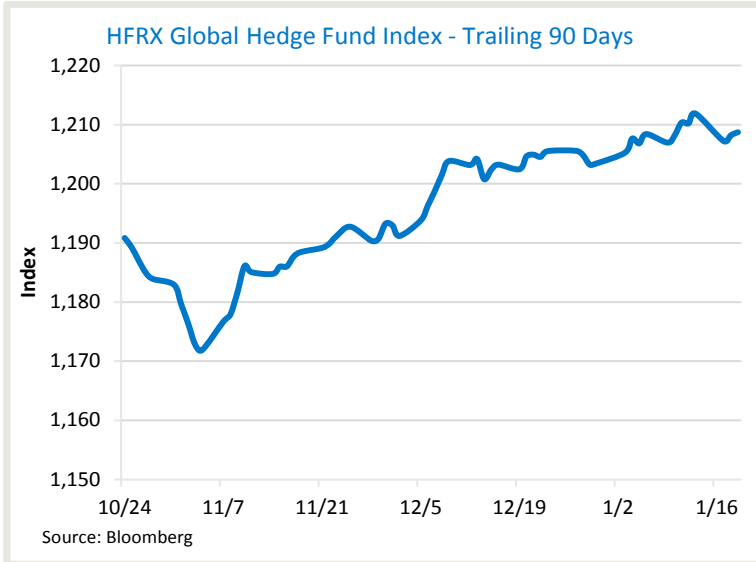


## Alternative Investments

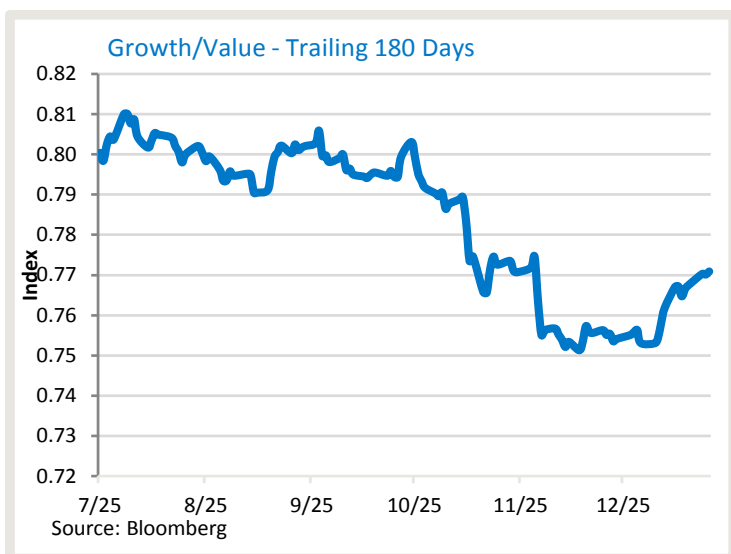
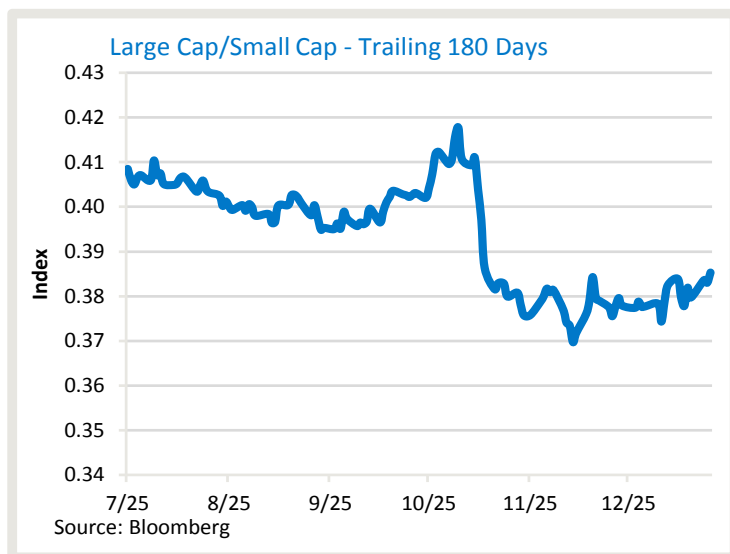
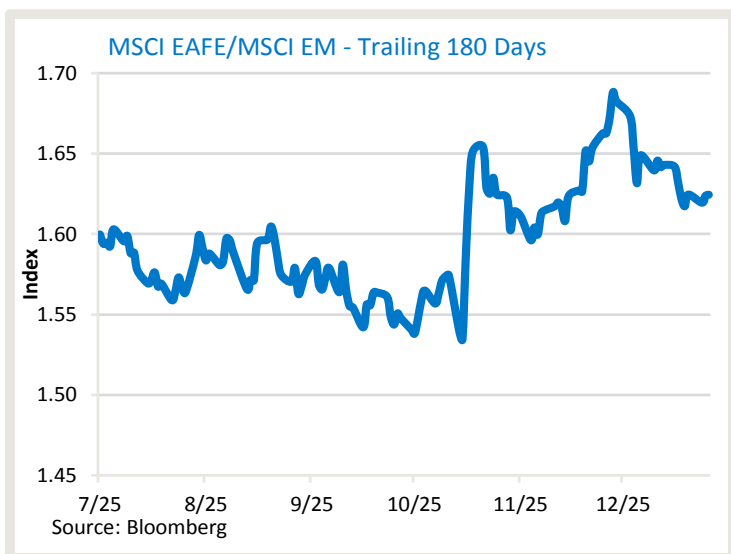
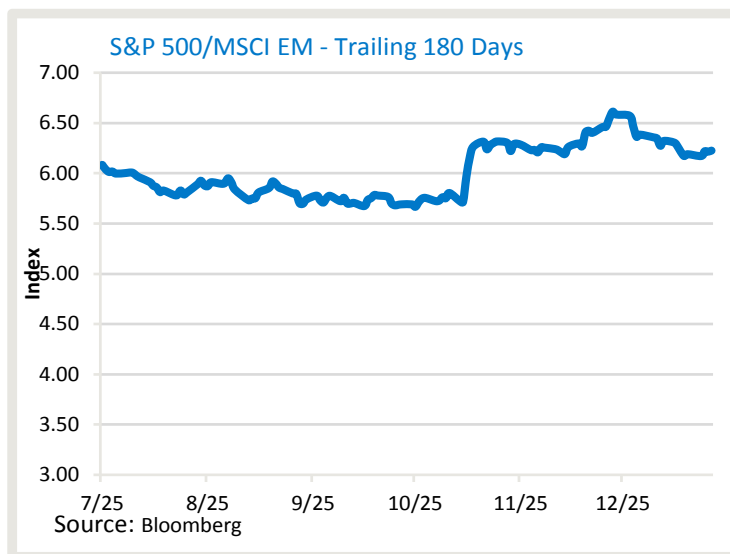
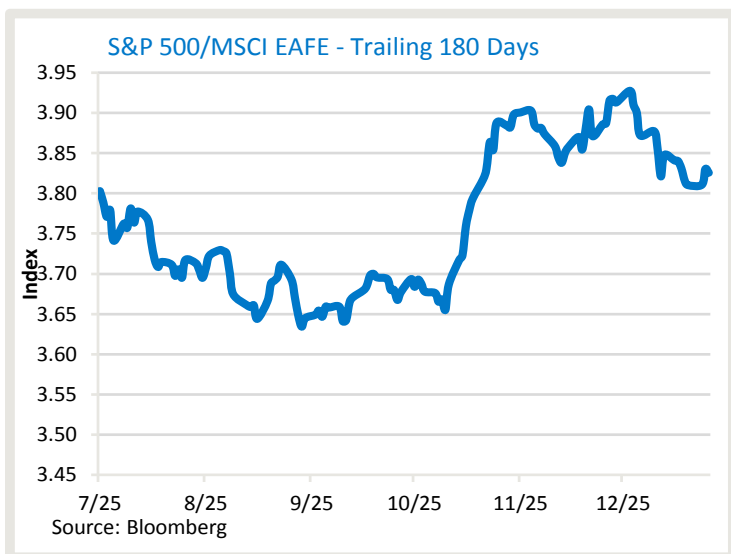
### SELECTED ALTERNATIVE INVESTMENT INDEX PERFORMANCE

	Last	Change	% Chg.	YTD %		Last	Change	% Chg.	YTD %
HFRX Global Hedge Fund Index	1208.71	-3.14	-0.26%	0.44%	HFRX Distressed Index	1080.56	-0.35	-0.03%	0.70%
HFRX Equity Market Neutral	990.09	-1.90	-0.19%	0.28%	HFRX Merger Arbitrage Index	1811.31	-0.06	0.00%	-0.07%
HFRX Equity Hedge Index	1164.72	-3.83	-0.33%	0.80%	HFRX Convertible Arbitrage Index	749.65	2.10	0.28%	0.95%
HFRX Event-Driven Index	1582.03	-1.62	-0.10%	1.13%	HFRX Macro CTA Index	1122.64	-8.80	-0.78%	-1.12%
HFRX Absolute Return Index	1030.37	-1.81	-0.18%	0.19%	IQ Fixed Income Beta Arb Index	1429.41	-1.23	-0.09%	0.67%

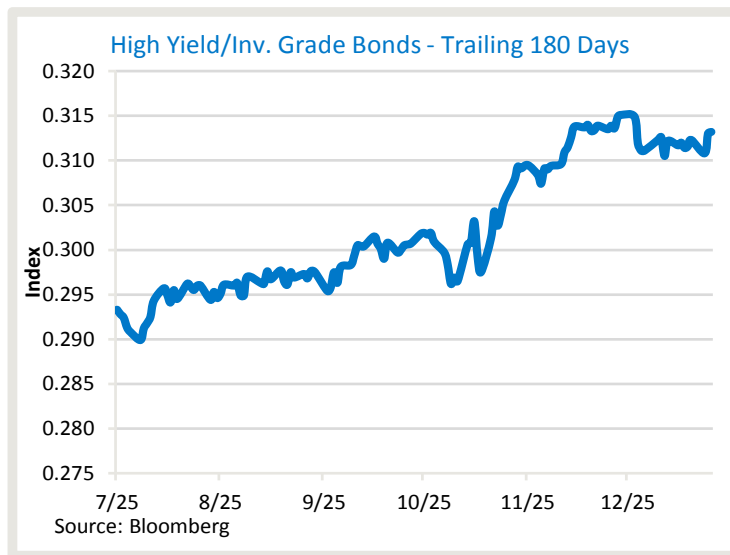
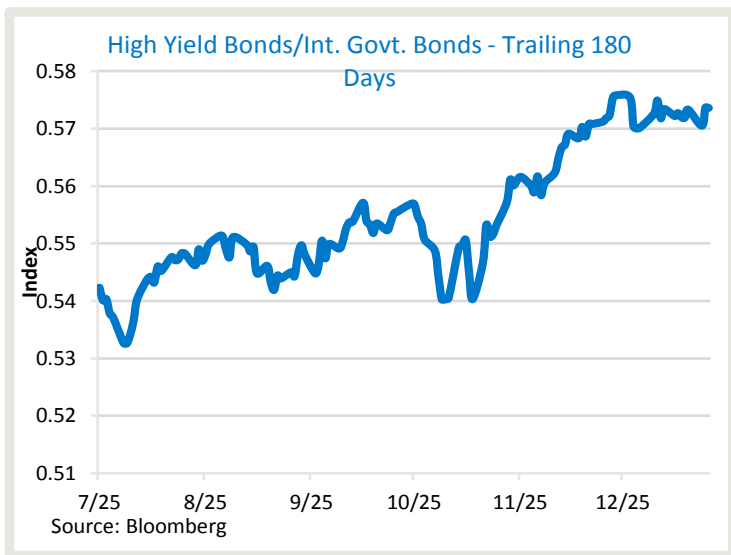
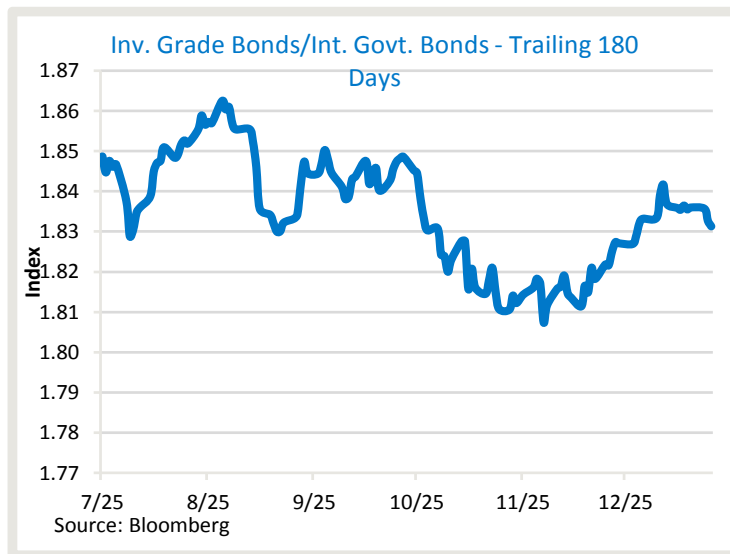
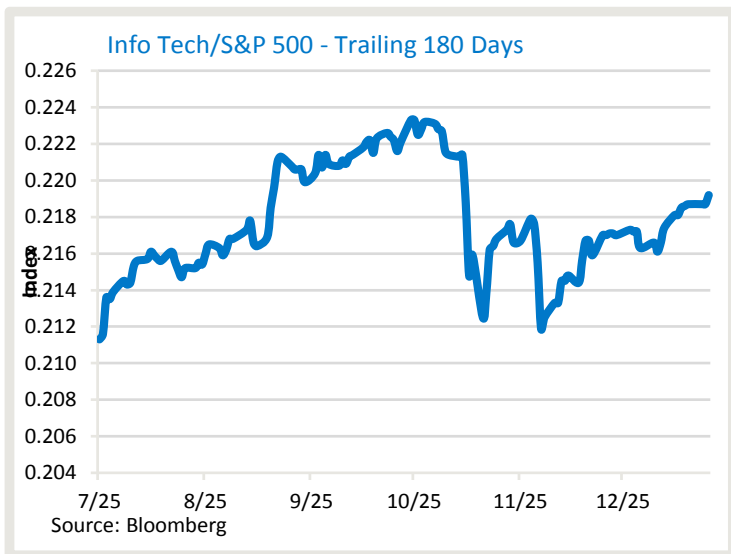
Source: Bloomberg; Index % change is based on price.



## Portfolio Construction



## Portfolio Construction (continued)



WEEKLY ASSET CLASS PERFORMANCE (Prior 12 weeks ending Thursday)

			11/3	11/10	11/17	11/24	12/1	12/8	12/15	12/22	12/29	1/5	1/12	1/19
Equity	Domestic Equity	Large Cap (R200)	-2.22%	3.78%	0.59%	0.66%	-0.51%	2.24%	1.11%	0.00%	-0.54%	0.85%	0.10%	-0.28%
		Small Cap (R2000)	-2.78%	8.19%	4.62%	2.49%	-2.11%	5.52%	-1.44%	-0.27%	0.04%	0.64%	-0.79%	-1.13%
	Int'l. Equity	MSCI EAFE	-0.87%	-0.42%	-0.79%	-0.46%	0.35%	2.71%	-0.65%	0.60%	0.06%	2.77%	0.03%	-0.58%
		MSCI Em. Mkts.	-2.25%	-1.05%	-3.25%	0.57%	0.75%	2.44%	-2.35%	-1.88%	1.89%	2.71%	1.69%	-0.24%
Fixed Income	BarCap Agg. (AGG)	-0.13%	1.41%	-0.67%	-0.50%	-0.46%	0.46%	-0.93%	0.21%	0.42%	0.75%	-0.04%	-0.52%	
	High Yield (JNK)	-2.11%	-0.78%	0.45%	1.09%	-0.64%	1.84%	-0.55%	0.85%	-0.46%	0.91%	0.11%	-0.24%	
Commodities	Bloomberg Commodity Index	-3.03%	0.28%	-1.33%	3.18%	1.83%	0.74%	-0.83%	-0.58%	1.55%	-0.16%	1.09%	-0.37%	
Alternatives	Hedge Funds (HFRX Global)	-1.02%	1.13%	0.14%	0.28%	0.15%	0.72%	0.07%	0.18%	-0.11%	0.30%	0.28%	-0.12%	
Asset Allocation	60/40*	-1.34%	1.31%	0.15%	0.29%	-0.47%	2.00%	-0.38%	0.09%	0.07%	1.18%	0.03%	-0.49%	
	48/32/20 (w/Alts.)**	-1.28%	1.27%	0.15%	0.29%	-0.34%	1.75%	-0.29%	0.10%	0.03%	1.00%	0.08%	-0.42%	

Source: Bloomberg; \*60/40 portfolio = 30% Large Cap/10% Small Cap/15% EAFE/5% Emerging Markets/35% BarCap Agg./5% High Yield.

\*\*48/32/20 portfolio = 24% Large Cap/8% Small Cap/12% EAFE/4% Emerging Markets/28% BarCap Agg./4% High Yield/20% HFRX Global Index.

RELATIVE STRENGTH MATRIX (BASED ON 30-DAY RSI)

	Large Cap Core	Large Cap Growth	Large Cap Value	Mid Cap Core	Mid Cap Growth	Mid Cap Value	Small Cap Core	Small Cap Growth	Small Cap Value	Int'l. Developed	Emerging Markets	REITs	Comm.	Int. Bond	High Yield
Large Cap Core	1.00	0.99	1.05	1.05	1.04	1.05	1.10	1.12	1.09	1.04	1.03	1.12	1.06	1.35	1.08
Large Cap Growth	1.01	1.00	1.06	1.06	1.06	1.07	1.12	1.14	1.11	1.05	1.05	1.14	1.08	1.36	1.09
Large Cap Value	0.96	0.94	1.00	1.00	0.99	1.01	1.05	1.07	1.04	0.99	0.98	1.07	1.01	1.28	1.03
Mid Cap Core	0.96	0.94	1.00	1.00	0.99	1.01	1.05	1.07	1.04	0.99	0.98	1.07	1.01	1.29	1.03
Mid Cap Growth	0.96	0.95	1.01	1.01	1.00	1.01	1.06	1.08	1.05	1.00	0.99	1.08	1.02	1.29	1.04
Mid Cap Value	0.95	0.93	0.99	0.99	0.99	1.00	1.05	1.06	1.03	0.99	0.98	1.06	1.01	1.28	1.02
Small Cap Core	0.91	0.89	0.95	0.95	0.94	0.96	1.00	1.01	0.99	0.94	0.93	1.01	0.96	1.22	0.98
Small Cap Growth	0.89	0.88	0.94	0.93	0.93	0.94	0.99	1.00	0.97	0.93	0.92	1.00	0.95	1.20	0.96
Small Cap Value	0.92	0.90	0.96	0.96	0.95	0.97	1.01	1.03	1.00	0.95	0.95	1.03	0.97	1.23	0.99
Int'l. Developed	0.96	0.95	1.01	1.01	1.00	1.01	1.06	1.08	1.05	1.00	0.99	1.08	1.02	1.29	1.04
Emerging Markets	0.97	0.96	1.02	1.02	1.01	1.02	1.07	1.09	1.06	1.01	1.00	1.09	1.03	1.31	1.05
REITs	0.89	0.88	0.94	0.93	0.93	0.94	0.99	1.00	0.97	0.93	0.92	1.00	0.95	1.20	0.96
Commodities	0.94	0.93	0.99	0.99	0.98	0.99	1.04	1.06	1.03	0.98	0.97	1.06	1.00	1.27	1.02
Int. Bond	0.74	0.73	0.78	0.78	0.77	0.78	0.82	0.83	0.81	0.77	0.77	0.83	0.79	1.00	0.80
High Yield	0.93	0.91	0.97	0.97	0.96	0.98	1.02	1.04	1.01	0.96	0.96	1.04	0.98	1.25	1.00

Source: Bloomberg

The Relative Strength Matrix provides an indication of how the various asset classes have performed relative to one another over the past 30 days. A number greater than 1.0 indicates that the asset class in the far left column has outperformed the corresponding asset class in the top row over the past 30 days. A number below 1.0 means the asset class on the left has underperformed the asset class at the top. The green shading indicates outperformance, and the red shading indicates underperformance.

**Index Overview & Key Definitions**

**Fed, The Fed or FED** refers to the Federal Reserve System, the central bank of the United States. The **Federal Open Market Committee (FOMC)** is the monetary policymaking body of the Federal Reserve System. **Fed Funds Rate**, the interest rate at which a depository institution lends funds maintained at the Federal Reserve to another depository institution overnight. The **European Central Bank (ECB)** is the central bank for Europe's single currency, the euro. The ECB's main task is to maintain the euro's purchasing power and thus price stability in the euro area. The euro area comprises the 19 European Union countries that have introduced the euro since 1999. The **Gross Domestic Product (GDP)** rate is a measurement of the output of goods and services produced by labor and property located in the United States. **Basis Point(s)** is a unit that is equal to 1/100th of 1%, and is used to denote the change in a financial instrument. The basis point is commonly used for calculating changes in interest rates, equity indexes and the yield of a fixed-income security. A **separately managed account (SMA)** is an individual managed investment account offered typically by a brokerage firm through one of their brokers or financial consultants and managed by independent investment management firms (often called money managers for short) and have varying fee structures. The **Consumer Price Index (CPI)** measures the change in the cost of a fixed basket of products and services. The **Producer Price Index (PPI)** program measures the average change over time in the selling prices received by domestic producers for their output. The prices included in the PPI are from the first commercial transaction for many products and some services. **Core CPI** is an additional CPI Index, excludes energy and food item price changes, and measures the "core" or "underlying" rate of inflation. The **PCE (Personal Consumption Expenditure) Index of Prices** is a US-wide indicator of the average increase in prices for all domestic personal consumption. Using a variety of data including U.S. Consumer Price Index and Producer Price Index prices, it is derived from personal consumption expenditures; essentially a measure of goods and services targeted towards individuals and consumed by individuals.

The **Dow Jones Industrial Average (DOW or DJIA)** is an unmanaged index of 30 common stocks comprised of 30 actively traded blue chip stocks, primarily industrials and assumes reinvestment of dividends. The **S&P 500 Index** is an unmanaged index comprised of 500 widely held securities considered to be representative of the stock market in general. The **S&P/Case-Shiller Home Price Indices** measure the residential housing market, tracking changes in the value of the residential real estate market in 20 metropolitan regions across the United States. The **Nasdaq Composite Index** is a stock market index of the common stocks and similar securities listed on the NASDAQ stock market. The **US Dollar Index** is a measure of the value of the United States dollar relative to a basket of foreign currencies. It is a weighted geometric mean of the dollar's value relative to other select currencies (Euro, Japanese yen, Pound sterling, Canadian dollar, Swedish krona (SEK) & Swiss franc). The **Nikkei Index (Nikkei 225 or Nikkei)** is a stock market index for the Tokyo Stock Exchange calculated daily by the Nihon Keizai Shimbun (Nikkei) newspaper since 1950. It is a price-weighted index (the unit is yen), and the components are reviewed once a year. The **FTSE 100 Index (FTSE 100)** is a share index of the 100 companies listed on the London Stock Exchange (LSE) with the highest market capitalization. The **Bloomberg Commodity Index (formerly the Dow Jones-UBS Commodity Index)** tracks prices of futures contracts on physical commodities on the commodity markets and is designed to minimize concentration in any one commodity or sector (currently 22 commodity futures in seven sectors). The **Barclays Capital US Credit Index** is an unmanaged index considered representative of publicly issued, SEC-registered US corporate and specified foreign debentures and secured notes. The **Barclays Capital US Aggregate Bond Index** is a market capitalization-weighted index of investment-grade, fixed-rate debt issues, including government, corporate, asset-backed, and mortgage-backed securities, with maturities of at least one year. The **Barclays Capital US Corporate High Yield Index** covers the USD-denominated, non-investment grade, fixed-rate, taxable corporate bond market. Securities are classified as high-yield if the middle rating of Moody's, Fitch and S&P is Ba1/BB+/BB+ or below. The index may include emerging market debt. The **Barclays Capital Municipal Bond Index** is an unmanaged index comprised of investment-grade, fixed-rate municipal securities representative of the tax-exempt bond market in general. The **Barclays Capital US Treasury Total Return Index** is an unmanaged index of public obligations of the US Treasury with a remaining maturity of one year or more. The **Barclays Capital Global Aggregate ex-U.S. Index** is a market capitalization-weighted index, meaning the securities in the index are weighted according to the market size of each bond type. Most U.S. traded investment grade bonds are represented. Municipal bonds, and Treasury Inflation-Protected Securities are excluded, due to tax treatment issues. The index includes Treasury securities, Government agency bonds, Mortgage-backed bonds, Corporate bonds, and a small amount of foreign bonds traded in U.S. The **Barclays Capital U.S. 5-10 Year Corporate Bond Index** measures the investment return of U.S. dollar denominated, investment-grade, fixed rate, taxable securities issued by industrial, utility, and financial companies with maturities between 5 and 10 years. Treasury securities, mortgage-backed securities (MBS) foreign bonds, government agency bonds and corporate bonds are some of the categories included in the index. The **Barclays Capital U.S. Corporate High-Yield Index** is composed of fixed-rate, publicly issued, non-investment grade debt. The **Barclays Capital U.S. Corporate 5-10 Year Index** includes U.S. dollar-denominated, investment-grade, fixed-rate, taxable securities issued by industrial, utility, & financial companies, with maturities between 5 & 10 years. The **DJ-UBS Commodity Index Total Return SM** measures the collateralized returns from a basket of 19 commodity futures contracts representing the energy, precious metals, industrial metals, grains, softs and livestock sectors. The **Russell 1000 Index** is a market capitalization-weighted benchmark index made up of the 1000 largest U.S. companies in the Russell 3000 Index. The **Russell 1000 Growth Index** is an unmanaged index considered representative of large-cap growth stocks. The **Russell 1000 Value Index** is an unmanaged index considered representative of large-cap value stocks. The **Russell 2000 Index** is an unmanaged index considered representative of small-cap stocks. The **Russell 2000 Growth Index** is an unmanaged index considered representative of small-cap growth stocks. The **Russell 2000 Value Index** is an unmanaged index considered representative of small-cap value stocks. The **Russell 3000 Index** is an unmanaged index considered representative of the US stock market. The **Russell Midcap Index** is a subset of the Russell 1000 Index. It includes approximately 800 of the smallest securities based on a combination of their market cap and current index membership. The **Russell Midcap Growth Index** is an unmanaged index considered representative of mid-cap growth stocks. The **Russell Midcap Value Index** is an unmanaged index considered representative of mid-cap value stocks. The **HFRX Indices** are a series of benchmarks of hedge fund industry performance which are engineered to achieve representative performance of a larger universe of hedge fund strategies. Hedge Fund Research, Inc. employs the HFRX Methodology (UCITS compliant), a proprietary and highly quantitative process by which hedge funds are selected as constituents for the HFRX Indices. The **University of Michigan Consumer Sentiment Index (MCSI)** is a survey of consumer confidence conducted by the University of Michigan using telephone surveys to gather information on consumer expectations regarding the overall economy. The **CBOE Volatility Index (VIX)** is an up-to-the-minute market estimate of expected volatility that is calculated by using real-time S&P 500 Index option bid/ask quotes. The Index uses nearby and second nearby options with at least 8 days left to expiration and then weights them to yield a constant, 30-day measure of the expected volatility of the S&P 500 Index. The **MSCI EAFE Index** is designed to measure the equity market performance of developed markets outside of the U.S. & Canada. The **MSCI EAFE Growth Index** is an unmanaged index considered representative of growth stocks of Europe, Australasia and the Far East. The **MSCI EAFE Value Index** is an unmanaged index considered representative of value stocks of Europe, Australasia and the Far East. The **MSCI EM (Emerging Markets) Latin America Index** is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of emerging markets in Latin America. The **MSCI World ex-U.S. Index** captures large and mid-cap representation across 22 of 23 Developed Markets (DM) countries - excluding the US. With 1,002 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country. The **MSCI Japan Index** is designed to measure the performance of the large and mid-cap segments of the Japanese market. With 320 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in Japan. The **MSCI Emerging Markets Index** is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets. The **MSCI Europe Index** is an unmanaged index considered representative of stocks of developed European countries. The **MSCI Pacific Index** is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of the developed markets in the Pacific region. The **Barclays Intermediate US Government/Credit Bond Index** is a market capitalization-weighted index of investment-grade, fixed-rate debt issues, including Treasuries, government-related and U.S. corporate securities, with maturities of at least one year and less than 10 years. The **Philadelphia Fed Manufacturing Index** is a regional Federal Reserve Bank index measuring changes in business growth and is constructed from a survey of participants who voluntarily answer questions regarding the direction of change in their overall business activities. The **ISM Non-Manufacturing Index** is an index based on surveys of more than 400 non-manufacturing firms' purchasing and supply executives, within 60 sectors across the nation, by the Institute of Supply Management (ISM) and also tracks economic data, like the ISM Non-Manufacturing Business Activity Index. A composite diffusion index is created based on the data from these surveys that monitors economic conditions of the nation. The **Housing Market Index (HMI)** is based on a monthly survey of NAHB members designed to take the pulse of the single-family housing market. In May 2007, **Markit's U.S. PMI** research was extended out to cover producers of metal goods. In October 2009, Markit's U.S. Manufacturing PMI survey panel was extended further to cover all areas of U.S. manufacturing activity. The **NY Empire State Index** is an index based on the monthly survey of manufacturers in New York State - known as the Empire State Manufacturing Survey - conducted by the Federal Reserve Bank of New York. The headline number for the NY Empire State Index refers to the survey's main index, which summarizes general business conditions in New York State.

The information, analysis, and opinions expressed herein are for general and educational purposes only. Nothing contained in this weekly review is intended to constitute legal, tax, accounting, securities, or investment advice, nor an opinion regarding the appropriateness of any investment, nor a solicitation of any type. All investments carry a certain risk, and there is no assurance that an investment will provide positive performance over any period of time. An investor may experience loss of principal. Investment decisions should always be made based on the investor's specific financial needs and objectives, goals, time horizon, and risk tolerance. The asset classes and/or investment strategies described may not be suitable for all investors and investors should consult with an investment advisor to determine the appropriate investment strategy. Past performance is not indicative of future results.

Information obtained from third party sources are believed to be reliable but not guaranteed. Envestnet|PMC™ makes no representation regarding the accuracy or completeness of information provided herein. All opinions and views constitute our judgments as of the date of writing and are subject to change at any time without notice.

Investments in smaller companies carry greater risk than is customarily associated with larger companies for various reasons such as volatility of earnings and prospects, higher failure rates, and limited markets, product lines or financial resources. Investing overseas involves special risks, including the volatility of currency exchange rates and, in some cases, limited geographic focus, political and economic instability, and relatively illiquid markets. Income (bond) securities are subject to interest rate risk, which is the risk that debt securities in a portfolio will decline in value because of increases in market interest rates.

Exchange Traded Funds (ETFs) are subject to risks similar to those of stocks, such as market risk. Investing in ETFs may bear indirect fees and expenses charged by ETFs in addition to its direct fees and expenses, as well as indirectly bearing the principal risks of those ETFs. ETFs may trade at a discount to their net asset value and are subject to the market fluctuations of their underlying investments. Investing in commodities can be volatile and can suffer from periods of prolonged decline in value and may not be suitable for all investors.

Index Performance is presented for illustrative purposes only and does not represent the performance of any specific investment product or portfolio. An investment cannot be made directly into an index.

Alternative Investments may have complex terms and features that are not easily understood and are not suitable for all investors. You should conduct your own due diligence to ensure you understand the features of the product before investing. Alternative investment strategies may employ a variety of hedging techniques and non-traditional instruments such as inverse and leveraged products. Certain hedging techniques include matched combinations that neutralize or offset individual risks such as merger arbitrage, long/short equity, convertible bond arbitrage and fixed-income arbitrage. Leveraged products are those that employ financial derivatives and debt to try to achieve a multiple (for example two or three times) of the return or inverse return of a stated index or benchmark over the course of a single day. Inverse products utilize short selling, derivatives trading, and other leveraged investment techniques, such as futures trading to achieve their objectives, mainly to track the inverse of their benchmarks. As with all investments, there is no assurance that any investment strategies will achieve their objectives or protect against losses.

Neither Envestnet, Envestnet|PMC™ nor its representatives render tax, accounting or legal advice. Any tax statements contained herein are not intended or written to be used, and cannot be used, for the purpose of avoiding U.S. federal, state, or local tax penalties. Taxpayers should always seek advice based on their own particular circumstances from an independent tax advisor.

© 2017 Envestnet Asset Management, Inc. All rights reserved.

#### **ABOUT ENVESTNET®**

Envestnet, Inc. (NYSE: ENV) is a leading provider of unified wealth management technology and services to investment advisors. Our open-architecture platforms unify and fortify the wealth management process, delivering unparalleled flexibility, accuracy, performance and value. Envestnet solutions enable the transformation of wealth management into a transparent, objective, independent and fully-aligned standard of care, and empower advisors to deliver better results.

Envestnet's Advisor Suite® software empowers financial advisors to better manage client outcomes and strengthen their practice. Envestnet provides institutional-quality research and advanced portfolio solutions through our Portfolio Management Consultants group, Envestnet | PMC®. Envestnet | Tamarac provides leading rebalancing, reporting and practice management software.

For more information on Envestnet, please visit [www.envestnet.com](http://www.envestnet.com).