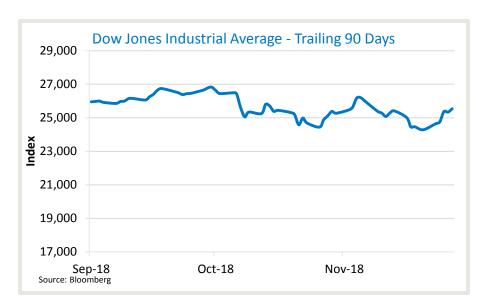


# **Weekly Market Review**

November 30, 2018

#### **Chart of the Week**



# **Weekly Highlights**

- Incomes are rising, but visible inflation remains flat. Household incomes rose by 0.5% in October, significantly higher than the 0.2% in September. Consumer spending also was higher, up 0.6% for the month, which was the biggest move in the last five months. Despite these increases, the PCE Price Index was up just 0.2% in October. For the trailing 12-month period, the index is up 2.0%, unchanged from the previous month.
- Possible sign of weakening housing market. Pending home sales, those under contract but not yet closed, fell 2.6% in October and 6.7% over the last 12 months. New home sales in October were down 8.9% to a 2.5-year low. The median new home price is down 3.1% over the same period last year.
- Initial unemployment claims creep higher. Initial jobless claims rose by 10,000 to 234,000 for the week ended November 24. However, these numbers are seasonally adjusted and may be overstated, given the Thanksgiving holiday fell earlier than usual this year. The trailing four-week average was up a more modest 4,750 to 223,250. The number of people already collecting unemployment benefits rose by roughly 3% to 1.7 million.

### **Talking Points**

- Thanksgiving week by rallying roughly 6%, led by technology stocks and large cap issues. European equities also rallied, though much more modestly, ranging from 0.5% to 2.5%. The emerging markets also were broadly higher, up roughly 3% on the week.
- Treasury yields were mixed. A
  relatively quiet post-holiday
  week for Treasurys ended with
  mixed results. Yields on five- and
  ten-year issues were down
  roughly three basis points,
  whereas two-year yields were up
  two basis points and 30-year
  yields were flat.
- The US Dollar Index was up slightly this week. The Fed's dovish comments early in the week created some weakness, but the trade-weighted index perked up on Friday as the G-20 meeting kicked off in Buenos Aires.
- Crude oil had its best week, essentially unchanged, in two months. It did test the \$50 level twice before ending the week slightly above \$51.
- Among other economic data released this week: The Commerce Department's first revision of third quarter GDP was unchanged at 3.5%. An early estimate of the trade deficit showed a widening of 1.3% to \$77.2 billion. The Chicago region PMI jumped eight points in October to 66.4, a four-and-half-year high.

## **Market Dashboard**

	Last Price	Change	% Chg.	YTD %
S&P 500	2,760.16	127.60	4.85%	3.2%
Dow Industrials	25,538.46	1,252.51	5.16%	3.3%
Nasdaq	7,330.54	391.55	5.64%	6.2%
Russell 2000	1,533.27	44.58	2.99%	-0.1%
Euro Stoxx Index	357.49	3.51	0.99%	-8.1%
Shanghai Composite	2,588.19	8.70	0.34%	-21.7%
Russell Global	2,031.14	57.57	2.91%	-5.0%

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

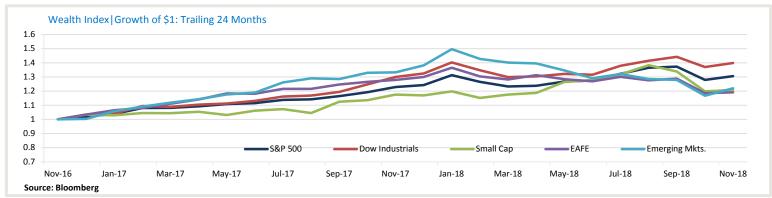
	Last Price	Change	% Chg.	YTD %
Russell Global EM	3,119.47	87.24	2.88%	-14.4%
10-Year US Treas.	3.01	-4 bps	NM	NM
Bloomberg Cmdts. Idx.	82.56	1.08	1.32%	-6.4%
Gold	\$1,221.90	-\$1.29	-0.11%	-6.2%
Crude Oil	\$50.75	\$0.29	0.58%	-12.2%
Dollar Index	97.23	0.30	0.31%	5.5%
VIX Index	18.07	-3.45	-16.03%	63.7%

3000 2950						
2900						
2850						
2800			<b>√</b>			
2750						
2700 -						
2650 -						
2600 -					, i	
2550 -						
2500 -						
2450						
	1 6/10 7/2	7/16 7/30 8/	12 9/27 0/1	0 0/24 10/	0 10/22 11/5 11	/10
0/	+ 0/10 //2	. //10 //30 8/	13 0/2/ 3/10	0 3/24 10/	5 10/22 11/5 11	113

		One Week	(		YTD	
	Value		Growth	Value		Growth
L	4.00%	5.26%	6.43%	0.78%	4.35%	7.27%
	2.65%	3.45%	4.66%	-3.92%	-0.57%	3.82%
S	2.11%	2.99%	3.87%	-2.53%	-0.15%	2.07%
	Source: B	loomberg				

	% Wgt in	Week %	
	S&P 500	Chg.	YTD % Chg
Consumer Discretionary	9.9	6.43%	8.79
Consumer Staples	7.4	2.85%	-1.9%
Energy	5.4	3.50%	-8.89
Financials	13.7	3.85%	-3.69
Health Care	15.8	5.90%	14.79
Industrials	9.4	4.05%	-4.79
Information Technology	19.9	6.13%	7.69
Materials	2.6	2.40%	10.09
Real Estate	2.9	2.74%	2.5%
<b>Communication Services</b>	9.9	5.51%	-9.89
Utilities	3.1	2.70%	5.09





## The Economy and Markets

#### Re-Thinking the "Core" In a Core Bond Allocation

One of the fastest-growing areas of the wealth management business today is the multiasset model portfolio. Each model is actually a series (usually five to seven) of risk-based portfolios, suiting the needs of most investors. These managed account strategies are available from a wide range of providers with different goals and objectives, but they generally tend to be long-term, diversified, strategic asset allocations, using passive or active investment vehicles (or both) to achieve their allocation targets. Some model providers stick to very high-level asset classes; some broaden their opportunity set to include very specific asset classes, such as small cap non-US equities or local currency emerging markets debt. But present in nearly all of these models is exposure to the domestic, investment grade fixed income market, with significant allocations in the most conservative portfolios. This allocation is designed to provide income, preserve capital, and offset the volatility of the global equity markets. Typically, this exposure is achieved via a mutual fund or ETF that tracks maturities from 1-15 years like the Bloomberg Barclays Intermediate Government/Credit Index or the full spectrum of maturities like the Aggregate Index.

However, investors today are faced with a bit of a problem when it comes to this core fixed income allocation. Namely, it is unlikely to generate anything like the levels of income or total return over the next decade as it did over the last ten years, let alone the last 30. August 2016 likely marked the end of a 35-year bull market in US interest rates (as far as we know), and we now potentially face an extended period of flat (in a best case) to rising rates. In response to the financial crisis, the Federal Reserve (Fed) cut short-term rates to zero to stimulate the economy, and since then investors have struggled to generate the appropriate level of income in their core allocations. They have been forced to either extend the maturity of their portfolios (adding interest rate risk) or invest more in lower-rated, riskier credits (adding default risk), or both, to achieve their income or return goals.

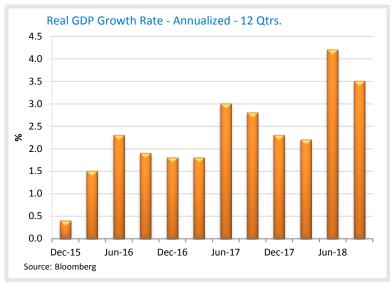
At the end of 2007, the Aggregate Index had an average annual return of nearly 6.0% over the preceding decade and an average coupon of more than 5%. Falling rates and spread tightening (due to the high demand for corporate and securitized debt) boosted returns from 2008 to 2017. But companies and homeowners moved to refinance older, higher-coupon debt at much lower interest rates, limiting investor gains from falling rates and lowering the income component every year. By the end of 2017, the ten-year average annual return for the Aggregate Index had dropped to slightly more than 4.0%, and the average coupon had fallen roughly 200 basis points, to just above 3%. In short, the average return for the index (and really any intermediate-term bond index) over the coming decade is likely to be lower than the 2008-2017 period, and the income component, although likely to rise over the next ten years, will not match that of the previous ten-year period.

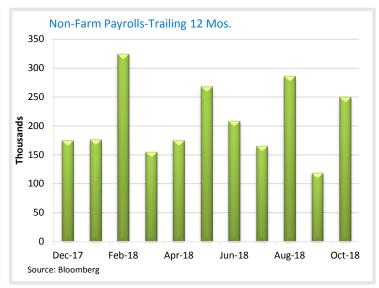
It is certainly possible domestic or global macroeconomic issues could force interest rates lower across the yield curve, but the potential gains from reverting even to the post-financial crisis lows are relatively limited. Spreads on corporate and securitized bonds will have a bias to widen over the next ten years, as corporate spreads are at or near all-time lows. Securitized spreads have already started to revert to their long-term averages, driven in part by the Fed no longer reinvesting principal and interest into new MBS securities for its balance sheet. Thus, investors should strongly consider the possibility that total returns in the first half of the next decade will be lower than the current coupon, as modestly rising rates and widening spreads create capital losses. The second half of the next decade is less clear (as always), but total returns should be close to then-prevailing income levels (i.e., modestly higher than today).

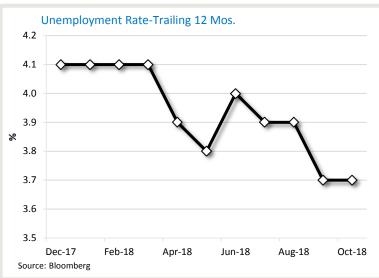
As a replacement option, investors could consider focusing on the ends of the yield curve rather than the middle. Placing 60%-80% of the core bond allocation in a short-term portfolio and the remainder in a long-term portfolio could very well provide more income and better total returns. The short-term portfolio, focused on the first three years of the yield curve, will be less affected by rising interest rates and more able to quickly add higher-coupon bonds, as 20%-40% of the portfolio will mature every year. A long-term portfolio, invested primarily in Treasurys focusing on the last ten years of the yield curve, can provide additional income. This portfolio will be very sensitive to interest rates, but rates in this portion of the curve are driven almost entirely by inflation expectations rather than by Fed policy or short-term macroeconomic events. Although this solution might not be appropriate for every investor in every situation, it is definitely worth taking the time to examine the assumptions built into any core bond allocation.

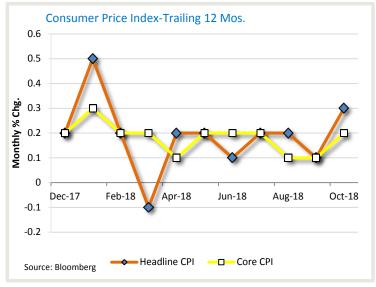
Nathan W. Behan, CFA, CAIA | Senior Vice President, Investment Research

## **Economic Data**

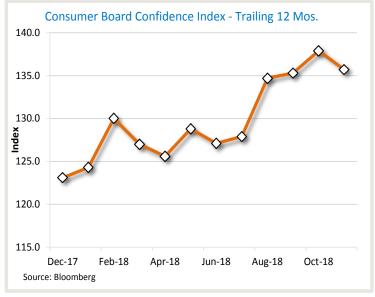












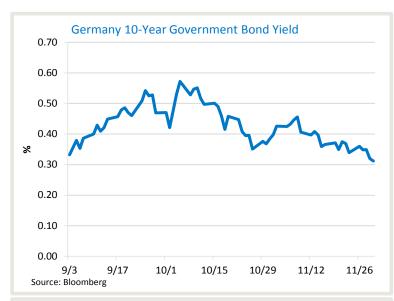
### **Eurozone**

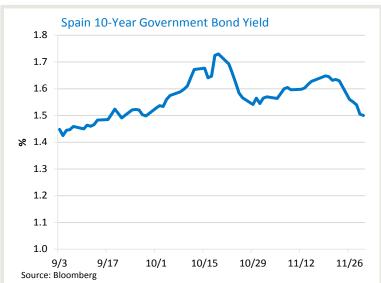
#### SELECTED EUROPEAN SOVEREIGN YIELD PERFORMANCE

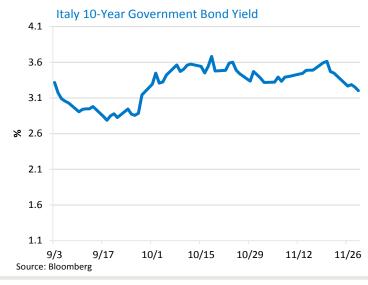
	Last	Change	% Chg.	YTD %
Germany 10-Yr. Govt.	0.31	3 bps	NM	NM
Greece 10-Yr. Govt.	4.25	21 bps	NM	NM
Italy 10-Yr. Govt.	3.21	16 bps	NM	NM
Spain 10-Yr. Govt.	1.50	12 bps	NM	NM
Belgium 10-Yr. Govt.	0.76	3 bps	NM	NM

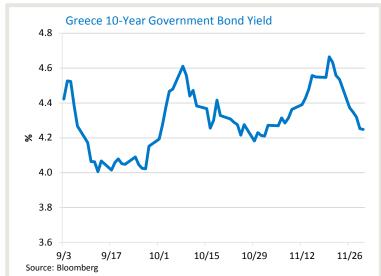
	Last	Change	% Chg.	YTD %
France 10-Yr. Govt.	0.68	4 bps	NM	NM
Ireland 10-Yr. Govt.	0.91	6 bps	NM	NM
Portugal 10-Yr. Govt.	1.82	10 bps	NM	NM
Netherlands 10-Yr. Govt.	0.44	4 bps	NM	NM
U.K. 10-Yr. Govt.	1.36	2 bps	NM	NM

Source: Bloomberg Basis points (bps)









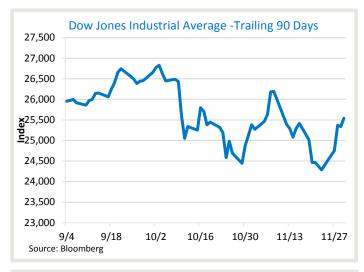
# **Equities**

#### **WORLD MARKET PERFORMANCE**

1101=111				
	Last	Change	% Chg.	YTD %
S&P 500	2,760.16	127.60	4.85%	3.24%
Dow Industrials	25,538.46	1252.51	5.16%	3.31%
Nasdaq Composite	7,330.54	391.55	5.64%	6.19%
Russell Global	2,031.14	57.57	2.91%	-5.0%
Russell Global EM	3,119.47	87.24	2.88%	-14.4%
S&P/TSX (Canada)	15,197.82	187.09	1.25%	-6.24%
Mexico IPC	41,732.78	588.45	1.43%	-15.44%
Brazil Bovespa	89,504.06	3273.81	3.80%	17.15%
Euro Stoxx 600	357.49	3.51	0.99%	-8.14%
FTSE 100	6,980.24	27.38	0.39%	-9.20%
IBEX 35 (Spain)	9,077.20	160.50	1.80%	-9.62%

	Last	Change	% Chg.	YTD %
Swiss Market Index	9,037.76	191.86	2.17%	-3.67%
CAC 40 Index (France)	5,003.92	56.97	1.15%	-5.81%
DAX Index (Germany)	11,257.24	64.55	0.58%	-12.85%
Irish Overall Index	5,818.65	-109.56	-1.85%	-17.33%
Nikkei 225	22,351.06	704.51	3.25%	-1.82%
Hang Seng Index	26,506.75	579.07	2.23%	-11.41%
Shanghai Composite	2,588.19	8.70	0.34%	-21.74%
Kospi Index (S. Korea)	2,096.86	39.38	1.91%	-15.02%
Taiwan Taiex Index	9,888.03	220.73	2.28%	-7.09%
Tel Aviv 25 Index	1,629.94	22.40	1.39%	7.96%
MOEX Index (Russia)	2,392.50	49.53	2.11%	13.40%

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









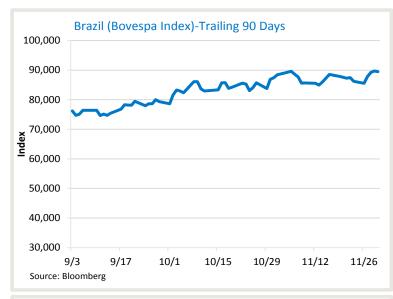
# **Equities – Emerging and Frontier Markets**

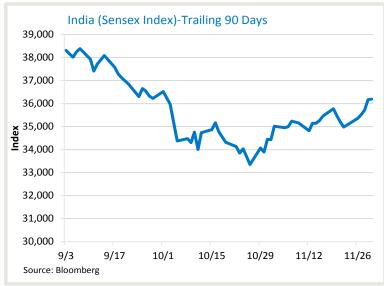
#### EMERGING AND FRONTIER MARKET PERFORMANCE

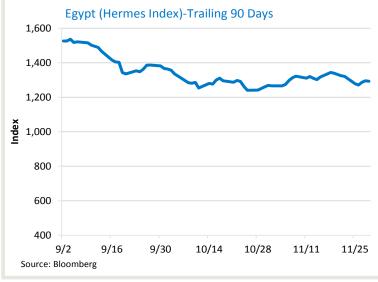
	Last	Change	% Chg.	YTD %
Mexico IPC	41,732.78	588.45	1.4%	-15.4%
Brazil (Bovespa Index)	89,504.06	3273.81	3.8%	17.1%
MOEX Index (Russia)	2,392.50	49.53	2.1%	13.4%
Czech Republic (Prague)	1,068.65	6.23	0.6%	-0.9%
Turkey (Istanbul)	95,416.03	2412.76	2.6%	-17.3%
Egypt (Hermes Index)	1,292.43	-28.63	-2.2%	-10.1%
Kenya (Nairobi 20 Index)	2,797.44	36.60	1.3%	-24.6%
Saudi Arabia (TASI Index)	7,702.99	95.67	1.3%	6.6%
Lebanon (Beirut BLOM Index)	980.94	15.75	1.6%	-14.6%
Palestine	527.12	0.76	0.1%	-8.3%

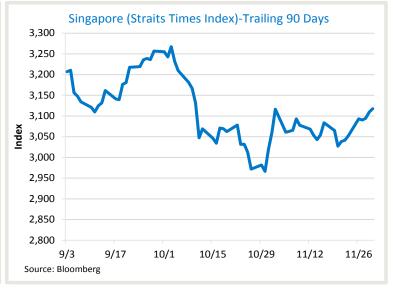
	Last	Change	% Chg.	YTD %
Hang Seng Index	26,506.75	579.07	2.2%	-11.4%
India (Sensex 30)	36,194.30	1213.28	3.5%	6.3%
Malaysia (KLCI Index)	1,679.86	-16.02	-0.9%	-6.5%
Singapore (Straits Times Index)	3,117.61	65.12	2.1%	-8.4%
Thailand (SET Index)	1,641.80	19.70	1.2%	-6.4%
Indonesia (Jakarta)	6,056.13	49.92	0.8%	-4.7%
Pakistan (Karachi KSE 100)	40,496.03	-373.25	-0.9%	0.1%
Vietnam (Ho Chi Minh)	926.54	8.57	0.9%	-5.9%
Sri Lanka (Colombo)	6,019.33	89.35	1.5%	-5.5%
Cambodia (Laos)	825.27	-3.38	-0.4%	-17.3%

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









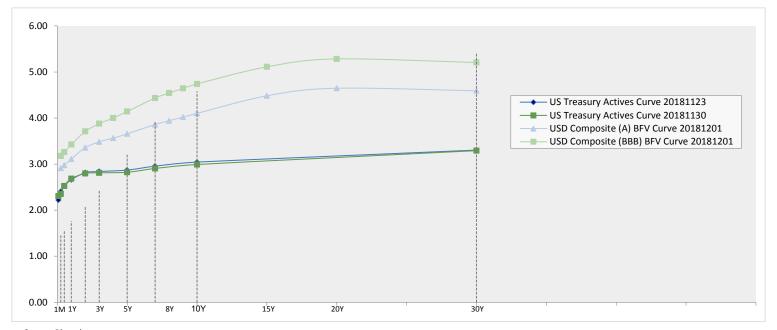
## **Interest Rates**

#### **SELECTED INTEREST RATES**

	Last	Change	% Chg.	YTD %
2-Yr. U.S. Treasury	2.80%	0 bps	NM	NM
5-Yr. U.S. Treasury	2.85%	-3 bps	NM	NM
10-Yr. U.S. Treasury	3.01%	-4 bps	NM	NM
30-Yr. U.S. Treasury	3.31%	0 bps	NM	NM
German 10-Yr. Govt.	0.31%	3 bps	NM	NM
France 10-Yr.	0.68%	4 bps	NM	NM
Italy 10-Yr.	3.21%	16 bps	NM	NM
Fed 5-Yr Fwd BE Inf.	2.04%	1 bps	NM	NM

	Last	Change	% Chg.	YTD %
Prime Rate	5.25%	0.00	NM	NM
Fed Funds Rate	2.25%	0.00	NM	NM
Discount Rate	2.75%	0.00	NM	NM
LIBOR (3 Mo.)	2.74%	5 bps	NM	NM
Bond Buyer 40 Muni	4.30%	-4 bps	NM	NM
Bond Buyer 40 G.O.	4.22%	NA	NM	NM
Bond Buyer 40 Rev.	4.68%	NA	NM	NM

Source: Bloomberg







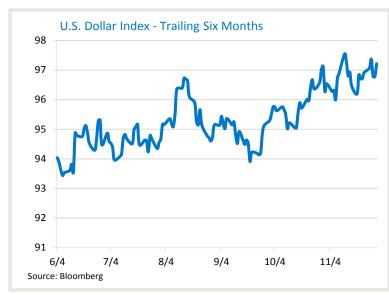
## **Currencies**

### **SELECTED CURRENCY PERFORMANCE**

	Last	Change	% Chg.	YTD %
Dollar Index	97.23	0.301	0.31%	5.53%
Euro	1.13	-0.002	-0.19%	-5.74%
Japanese Yen	113.54	0.590	-0.52%	-0.76%
<b>British Pound</b>	1.27	-0.007	-0.56%	-5.71%
<b>Canadian Dollar</b>	1.33	0.006	-0.41%	-5.43%

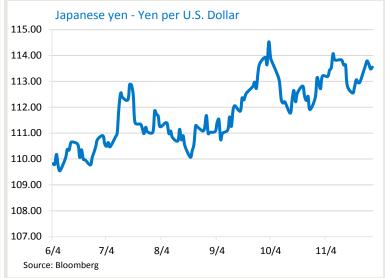
	Last	Change	% Chg.	YTD %
Chinese Yuan	6.96	0.012	-0.17%	-6.52%
Swiss Franc	1.00	0.002	-0.17%	-2.48%
<b>New Zealand Dollar</b>	0.69	0.009	1.39%	-3.14%
Brazilian Real	3.87	0.038	-0.99%	-14.43%
Mexican Peso	20.40	0.005	-0.03%	-3.69%

Source: Bloomberg









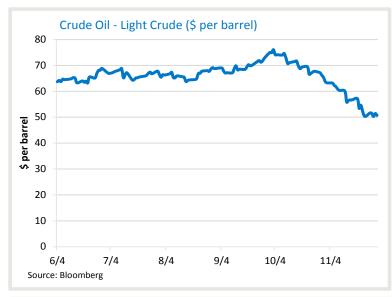
## **Commodities**

#### SELECTED COMMODITY MARKET PERFORMANCE

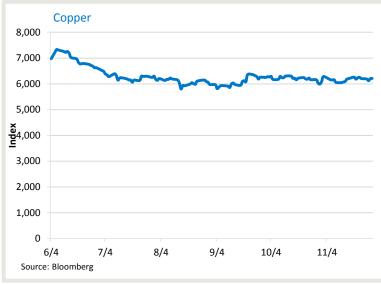
		JLL	LCTLD CO	IVIIVIODITI
	Last	Change	% Chg.	YTD %
Bloomberg Comm. ldx.	82.56	1.08	1.32%	-6.36%
Crude Oil	\$50.72	\$0.29	0.58%	-12.19%
Natural Gas	\$4.63	\$0.27	6.25%	50.18%
Gasoline (\$/Gal.)	\$2.49	-\$0.07	-2.88%	0.24%
Heating Oil	182.57	-4.57	-2.44%	-6.62%
Gold Spot	\$1,221.93	-\$1.29	-0.11%	-6.22%
Silver Spot	\$14.18	-\$0.12	-0.81%	-16.32%

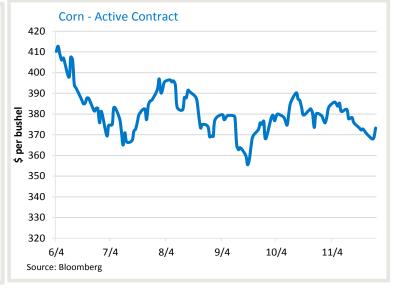
	Last	Change	% Chg.	YTD %
Platinum Spot	\$798.07	-\$45.48	-5.39%	-14.03%
Corn	377.75	7.25	1.96%	-3.94%
Wheat	515.75	8.50	1.68%	4.56%
Soybeans	894.75	13.75	1.56%	-8.98%
Sugar	12.84	0.37	2.97%	-18.16%
Orange Juice	143.95	2.35	1.66%	0.45%
Aluminum	1,940.00	-9.00	-0.46%	-14.46%
Copper	6,212.00	5.00	0.08%	-14.28%

Source: Bloomberg; % change is based on price.









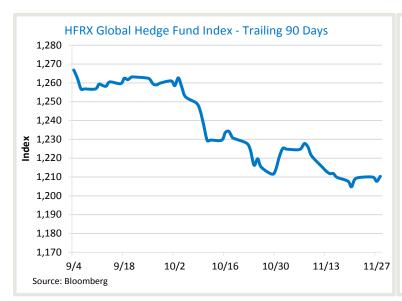
## **Alternative Investments**

#### SELECTED ALTERNATIVE INVESTMENT INDEX PERFORMANCE

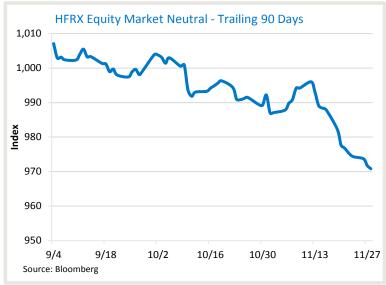
	Last	Change	% Chg.	YTD %
HFRX Global Hedge Fund Index	1210.35	0.47	0.04%	-5.12%
HFRX Equity Market Neutral	970.81	-3.66	-0.38%	-3.34%
HFRX Equity Hedge Index	1200.06	7.26	0.61%	-5.56%
HFRX Event-Driven Index	1485.41	-3.42	-0.23%	-10.83%
HFRX Absolute Return Index	1065.54	-1.47	-0.14%	0.21%

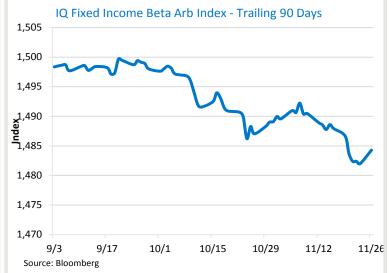
	Last	Change	% Chg.	YTD %
HFRX Distressed Index	1016.80	-1.54	-0.15%	-8.12%
HFRX Merger Arbitrage Index	1824.96	6.40	0.35%	-1.51%
HFRX Convertible Arbitrage Index	793.53	-2.37	-0.30%	-0.34%
HFRX Macro CTA Index	1114.69	-1.65	-0.15%	-4.23%
IQ Fixed Income Beta Arb Index	1483.64	1.66	0.11%	0.90%

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

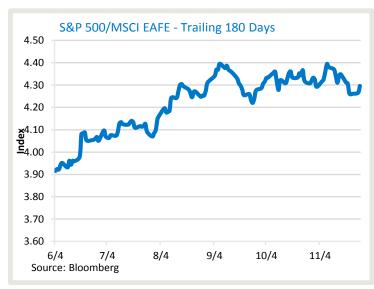


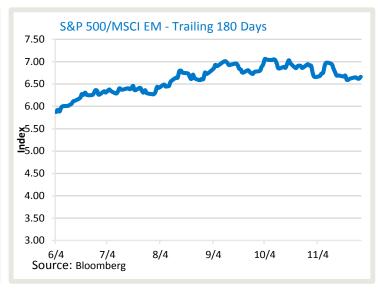


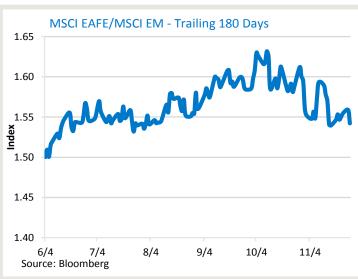




## **Portfolio Construction**



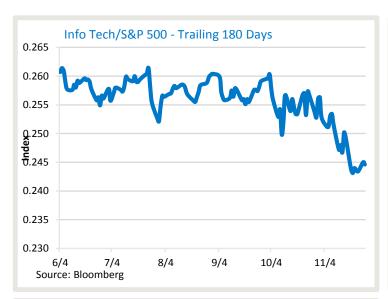


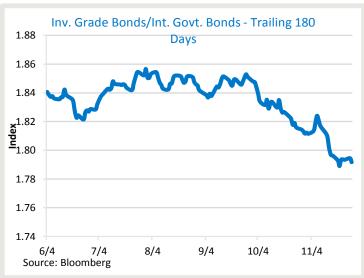


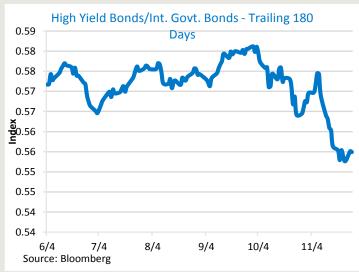


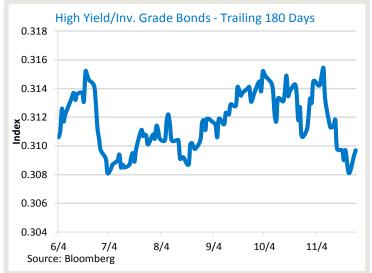


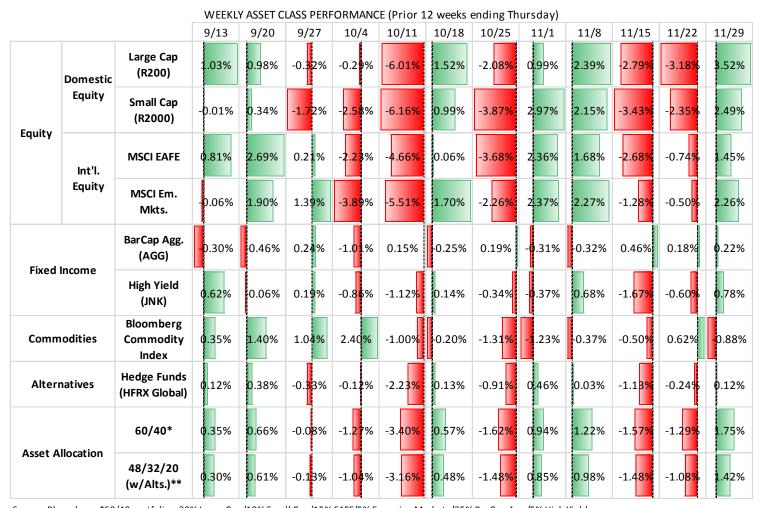
# **Portfolio Construction (continued)**











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

<sup>\*\*48/32/20</sup> 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	1.03	0.94	1.02	1.00	1.04	1.07	1.06	1.09	1.12	0.96	0.88	1.05	0.95	1.15
Large Cap Growth	0.97	1.00	0.91	0.99	0.97	1.01	1.04	1.02	1.05	1.08	0.93	0.85	1.02	0.92	1.11
Large Cap Value	1.06	1.10	1.00	1.08	1.06	1.10	1.14	1.12	1.15	1.18	1.01	0.93	1.11	1.01	1.21
Mid Cap Core	0.98	1.01	0.93	1.00	0.98	1.02	1.05	1.04	1.07	1.10	0.94	0.86	1.03	0.94	1.12
Mid Cap Growth	1.00	1.04	0.95	1.02	1.00	1.04	1.08	1.06	1.09	1.12	0.96	0.88	1.05	0.96	1.15
Mid Cap Value	0.96	0.99	0.91	0.98	0.96	1.00	1.03	1.02	1.05	1.07	0.92	0.84	1.01	0.92	1.10
Small Cap Core	0.93	0.96	0.88	0.95	0.93	0.97	1.00	0.99	1.01	1.04	0.89	0.82	0.98	0.89	1.07
Small Cap Growth	0.94	0.98	0.89	0.96	0.94	0.98	1.01	1.00	1.03	1.05	0.90	0.83	0.99	0.90	1.08
Small Cap Value	0.92	0.95	0.87	0.94	0.92	0.96	0.99	0.97	1.00	1.03	0.88	0.81	0.97	0.88	1.06
Int'l. Developed	0.90	0.93	0.85	0.91	0.89	0.93	0.96	0.95	0.97	1.00	0.86	0.79	0.94	0.86	1.03
Emerging Markets	1.05	1.08	0.99	1.07	1.04	1.09	1.12	1.11	1.14	1.17	1.00	0.92	1.10	1.00	1.20
REITs	1.14	1.18	1.08	1.16	1.14	1.18	1.22	1.21	1.24	1.27	1.09	1.00	1.20	1.09	1.31
Commodities	0.95	0.98	0.90	0.97	0.95	0.99	1.02	1.01	1.03	1.06	0.91	0.84	1.00	0.91	1.09
Int. Bond	1.05	1.08	0.99	1.07	1.05	1.09	1.13	1.11	1.14	1.17	1.00	0.92	1.10	1.00	1.20
High Yield	0.87	0.90	0.82	0.89	0.87	0.91	0.94	0.92	0.95	0.97	0.83	0.77	0.92	0.83	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 Purchasing Managers' Index (PMI) is an indicator of the economic health of the manufacturing sector. The PMI is based on five major indicators: new orders, inventory levels, production, supplier deliveries and the employment environment. Brexit is a commonly used term for the United Kingdom's withdrawal from the European Union. The Kansas City Fed Manufacturing Survey monitors manufacturing plants selected according to geographic distribution, industry mix and size in the Tenth Federal Reserve District. West Texas Intermediate (WTI), also known as Texas light sweet, is a grade of crude oil used as a benchmark in oil pricing. Risk Premium is the return in excess of the risk-free rate of return an investment is expected to yield. LIBOR or ICE LIBOR (previously BBA LIBOR) is a benchmark rate, which some of the world's leading banks charge each other for short-term loans. It stands for Intercontinental Exchange London Interbank Offered Rate and serves as the first step to calculating interest rates on various loans throughout the world.

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 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, assetbacked, 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 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 Growth 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 NY Empire State Manufacturing Index is 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 S&P The Dow Jones Wilshire U.S. REIT Index tracks the performance of publicly traded REITs and REIT-like securities and is designed to serve as a proxy for direct real estate investment, in part by excluding companies whose performance may be driven by factors other than the value of real estate. The Russell Top 200 Index measures the performance of the 200 largest companies in the Russell 1000 Index, with a weighted average market capitalization of \$186 billion. The Barclays 1-3 Year US Treasury Bond Index measures public US Treasury obligations with remaining maturities of one to three years. The S&P LSTA Leveraged Loan Index is an unmanaged capitalization-weighted syndicated loan index based upon market weightings, spreads and interest payments. It covers the US market back to 1997 and currently calculates on a daily basis. The NFIB Small Business Optimism Index is compiled from a survey that is conducted each month by the National Federation of Independent Business (NFIB) of its members

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. SR# 1408601 © 2018 Envestnet Asset Management, Inc. All rights reserved.

#### **ABOUT ENVESTNET®**

Envestnet, Inc. (NYSE: ENV) is a leading provider of intelligent systems for wealth management and financial wellness. Envestnet's unified technology enhances advisor productivity and strengthens the wealth management process, delivering unparalleled flexibility, accuracy, performance, and value. Envestnet enables a transparent, independent, objective, and fiduciary standard of care, and empowers enterprises and advisors to more fully understand their clients and deliver better outcomes.

For more information on Envestnet, please visit <a href="www.envestnet.com">www.envestnet.com</a>.