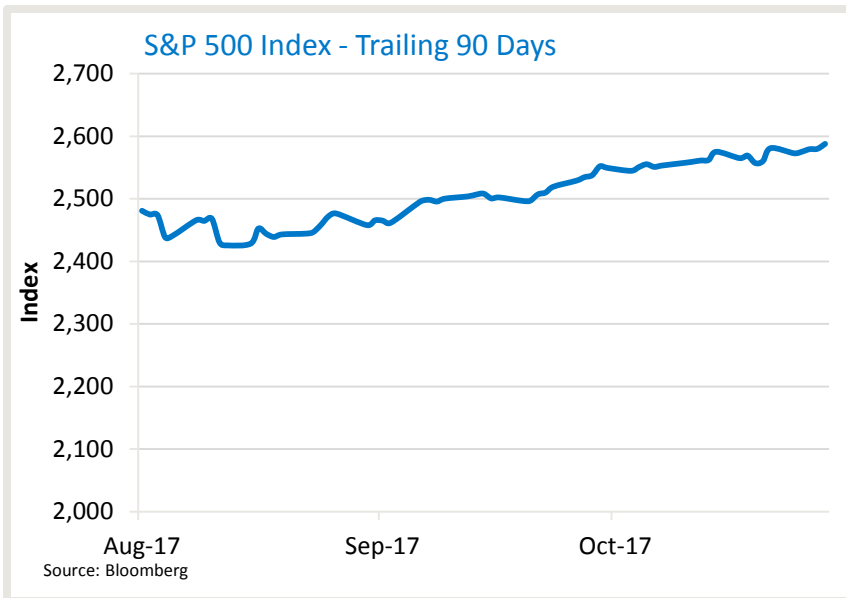


Weekly Market Review

November 3, 2017

Chart of the Week



Weekly Highlights

- The Federal Reserve (Fed) stands pat, gets new Chair nominee.** As was widely expected, the Federal Reserve left the federal funds rate target unchanged this week. Calling economic growth “solid,” Chair Yellen left the door wide open for the planned rate hike in December. On Thursday, President Trump nominated current Federal Reserve Governor Jerome Powell as the next chairman, replacing Ms. Yellen when her term ends early next year.
- Solid October Jobs Report.** The US economy added an estimated 261,000 jobs in October, and the headline unemployment rate fell to 4.1%, down 0.1% from September. Despite the solid increase, the total was well below the average expectation of 325,000 jobs, and the drop in the unemployment rate stemmed in large part from more than 750,000 people exiting the labor force.
- Inflation remains weak.** The Personal Consumption Expenditures (PCE) Index, the Fed’s preferred inflation gauge, rose 0.4% in September, but just 0.1% after stripping out the volatile food and energy expenditures. The index is up 1.6% over the trailing 12-month period, with the “core” rate up just 1.3%. Both are well below the Fed’s target of 2.0%.

Talking Points

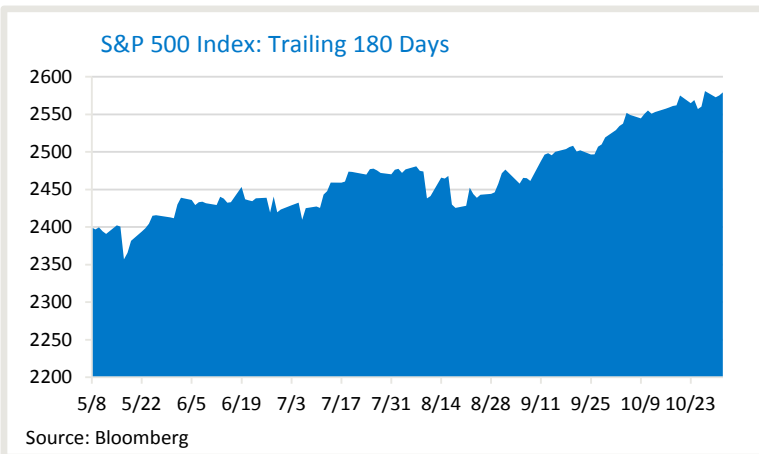
- Among equities,** Europe dominated the week, with most country indices rallying more than 1% and Spain, Italy, and Germany all rallying more than 2.5%. US equities were flat to down slightly for the week, with small caps faring the worst. Emerging markets equities were generally positive as well, with the exception of Latin America, which was down nearly 2.0%.
- Treasury yields were mixed.** Short-term Treasury yields were up 4-5 basis points on the week, but 10-year yields were down 2 basis points, and 30-year yields were down 6 basis points.
- The US Dollar Index ended the week mostly unchanged.** A slight drawdown early in the week was reversed on Thursday and Friday, and the Index remains at its highest point since mid-July.
- Crude oil rallied modestly this week,** with December contracts up roughly \$1.50 by early Wednesday before giving back about a third of the gain over the remainder of the week. Oil now has rallied more than 25% off the year’s low in June.
- Among other economic data released this week:** The Employment Cost Index (ECI) was up 0.7% for the third quarter, as the cost of both wages and benefits rose. The ISM Manufacturing Index fell to 58.7% in October after hitting a 13-year high last month. The Non-Manufacturing Index was up in October, reaching 60.1%, its best level since 2005.

Market Dashboard

	Last Price	Change	% Chg.	YTD %
S&P 500	2,587.84	6.77	0.26%	15.6%
Dow Industrials	23,539.19	105.00	0.45%	19.1%
Nasdaq	6,764.43	63.17	0.94%	25.7%
Russell 2000	1,494.91	-13.41	-0.89%	10.2%
Euro Stoxx Index	396.06	2.63	0.67%	9.6%
Shanghai Composite	3,371.74	-45.07	-1.32%	8.6%
Russell Global	2,080.57	11.19	0.54%	18.0%

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

	Last Price	Change	% Chg.	YTD %
Russell Global EM	3,533.87	50.05	1.44%	29.4%
10-Year US Treas.	2.34	-9 bps	NM	NM
DJ UBS Comm. Idx.	86.88	1.01	1.18%	-0.7%
Gold	\$1,270.30	-\$3.24	-0.25%	10.7%
Crude Oil	\$55.70	\$1.77	3.28%	-2.4%
Dollar Index	94.91	-0.02	-0.02%	-7.2%
VIX Index	9.14	-0.66	-6.73%	-34.9%



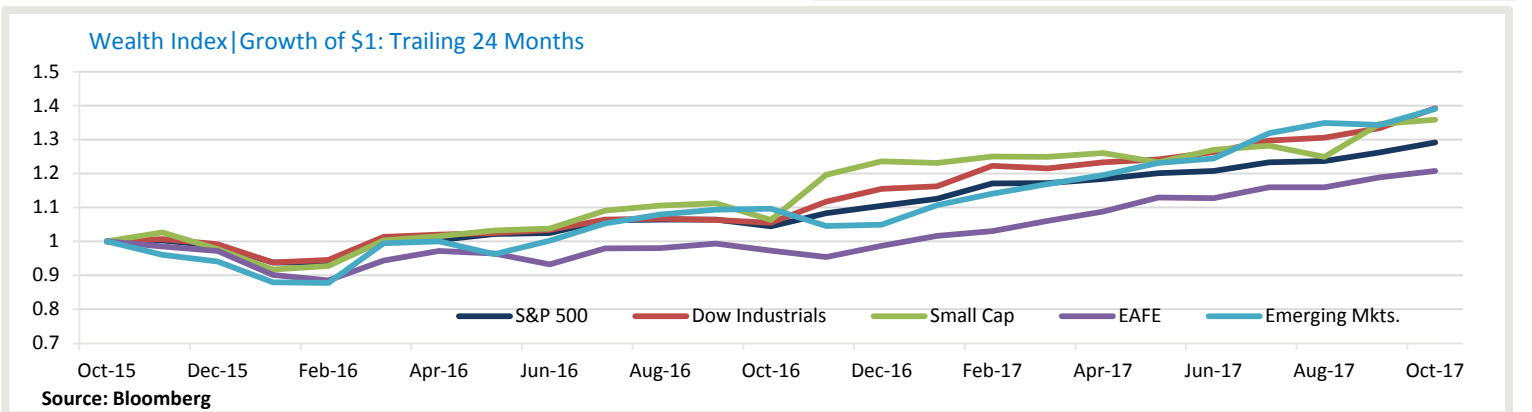
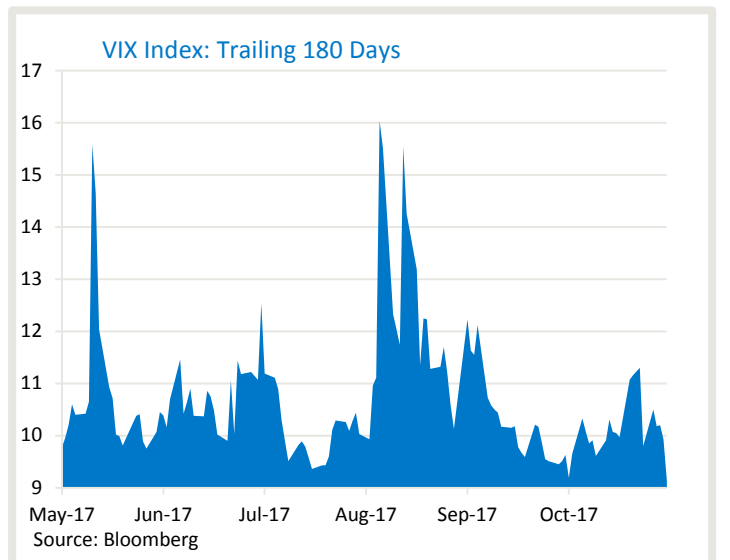
	One Week			YTD		
	Value	Growth		Value	Growth	
L	-0.19%	0.35%	0.83%	7.10%	16.78%	26.34%
	-0.10%	-0.01%	0.10%	6.60%	12.25%	19.70%
S	-1.32%	-0.89%	-0.47%	3.68%	10.15%	17.34%

Source: Bloomberg

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

	% Wgt in S&P 500	Week % Chg.	YTD % Chg.
Consumer Discretionary	11.8	0.77%	12.6%
Consumer Staples	7.9	0.05%	2.9%
Energy	5.9	1.74%	-8.4%
Financials	14.7	-0.11%	14.9%
Health Care	14.1	-0.67%	18.4%
Industrials	10.0	-0.77%	12.9%
Information Technology	24.6	1.84%	37.1%
Materials	3.0	-0.52%	18.1%
Real Estate	2.9	1.60%	6.2%
Telecom Services	1.9	-2.62%	-17.4%
Utilities	3.2	0.28%	13.4%

Source: Bloomberg



The Economy and Markets

A Macro View – October Monthly Recap

Domestic equity market returns were positive in October, with gains tilted to the larger cap and growth-oriented indices. The US market's advance was driven by a combination of positive earnings growth, continued positive economic statistics, and anticipation of the Administration's tax reform/tax cut plan.

By the end of October, roughly two-thirds of the S&P 500 had reported third-quarter earnings, with a combined year-over-year EPS growth of nearly 7% (roughly 5% ex-energy companies)¹. The forward P/E ratio on the S&P 500 Index was 17.9 at the end of the month versus roughly 16.6 a year ago.

On the economic data front, the University of Michigan Consumer Sentiment Index jumped to a 13-year high of 101.1 in October, as those polled were both more satisfied with their current economic position and more hopeful about the outlook in the near future. This sentiment also appeared in the retail sales data for September, up 1.6%, the largest increase in more than two years. A significant portion of the gain, 0.6%, was from auto sales, which were boosted by households replacing cars and trucks damaged in the August hurricanes. The national employment picture continued to look rosy, as initial unemployment claims hit a 44-year low in mid-October, though the claims from the U.S. Virgin Islands and Puerto Rico are likely still inaccurate, given the lingering damage from Hurricane Maria. Late in the month, the initial third-quarter GDP estimate came in at a 3.0% annualized rate, just 0.1% lower than the second quarter, despite the August storms. During the third quarter, business investment was up 3.9%, and consumer spending was up 2.4%.

Finally, GOP leaders in both the House and Senate continued working on a plan for an ambitious reworking of the US tax code. The key point for the equity markets is a significant reduction in the corporate tax rate, rumored to be capped at 20% in the new plan. Also expected to be included is a "tax holiday" for companies repatriating overseas earnings, which would benefit large multinational companies if passed. The first in a long series of steps to get the tax reform package passed was completed in the final week of the month, as both houses passed a \$4.1 trillion budget "resolution." The resolution does not have the force of law, but it does provide a parliamentary vehicle the GOP can attach the tax reform bill to, and using the reconciliation process allows it to pass the tax reform bill without being subject to a filibuster in the Senate.

Within this context, domestic equities were higher for the month, as the Russell 1000 Growth Index gained 3.87%, but the Russell Top 200 Growth Index was up even more, 4.22%. The value indices ranged from +80 basis points for the Russell Midcap Value Index to just +13 basis points for the Russell 2000 Value Index. Among large caps, the Information Technology and Financials sectors drove most of the Index's return, offset by modest losses in the Consumer Staples, Energy, and Healthcare sectors. The Bloomberg Commodity Index as a whole was up 2.14% for the month, as the rally in energy and industrial metals more than offset weakness in the precious metals and agricultural sectors. The Dow Jones U.S. Select REIT Index was down 1.09% for the month.

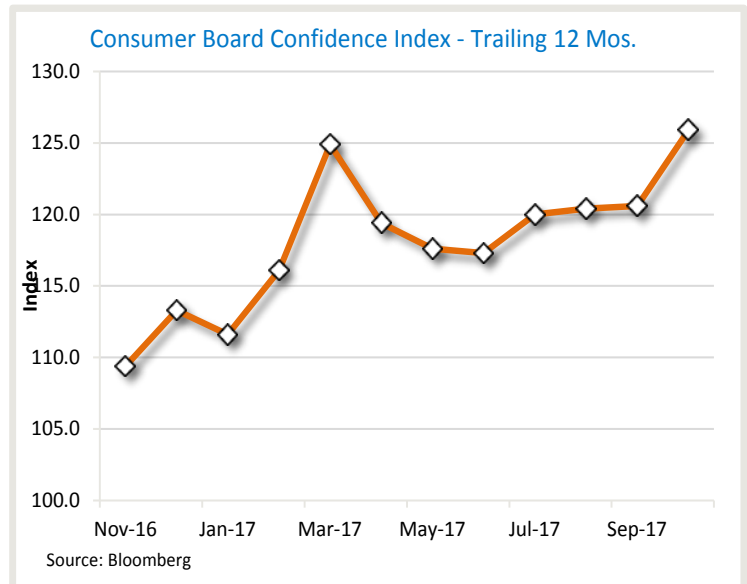
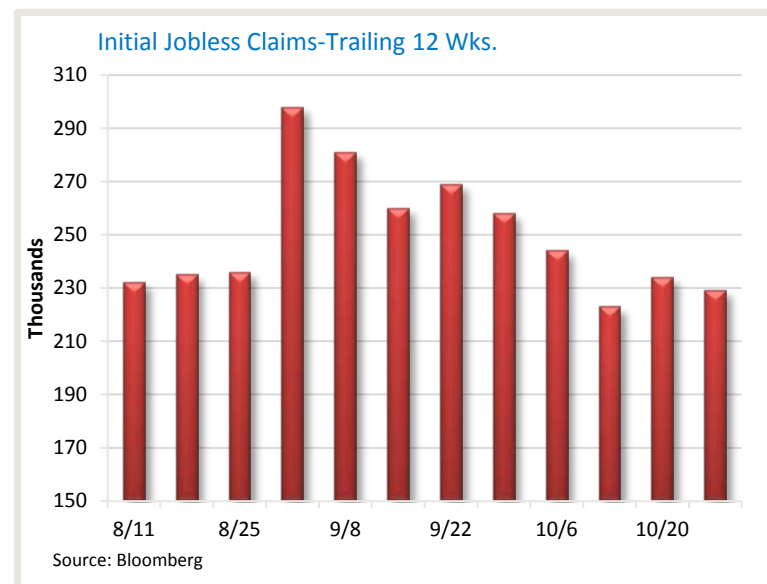
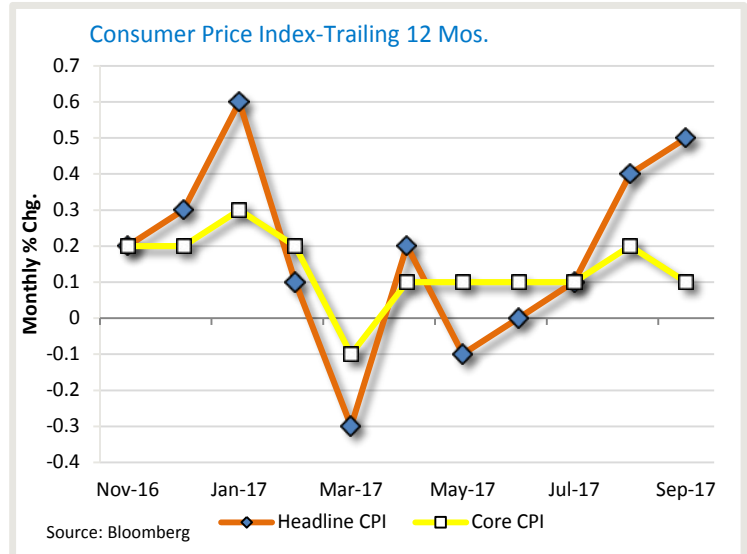
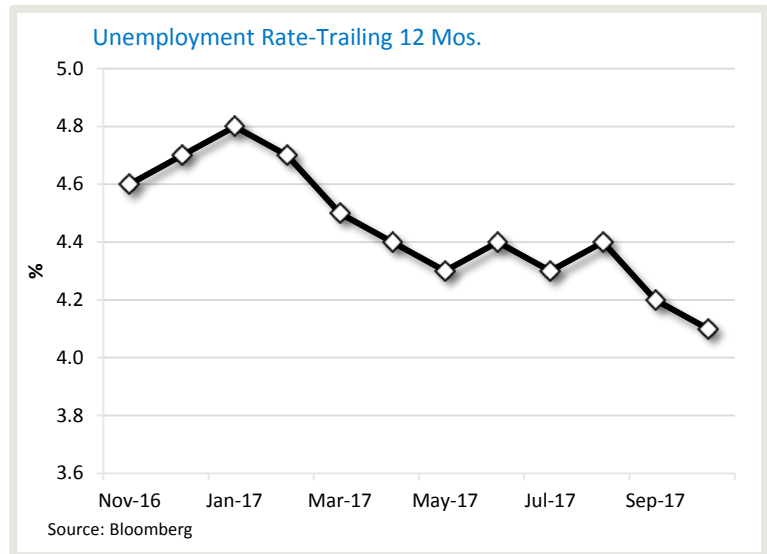
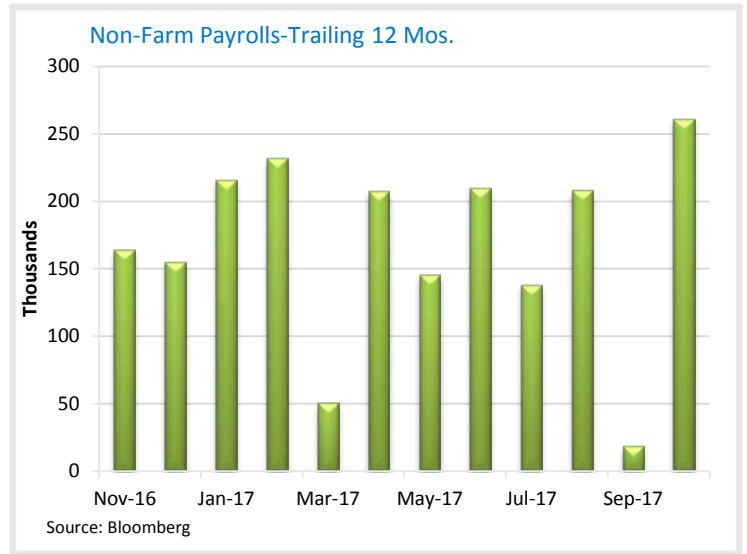
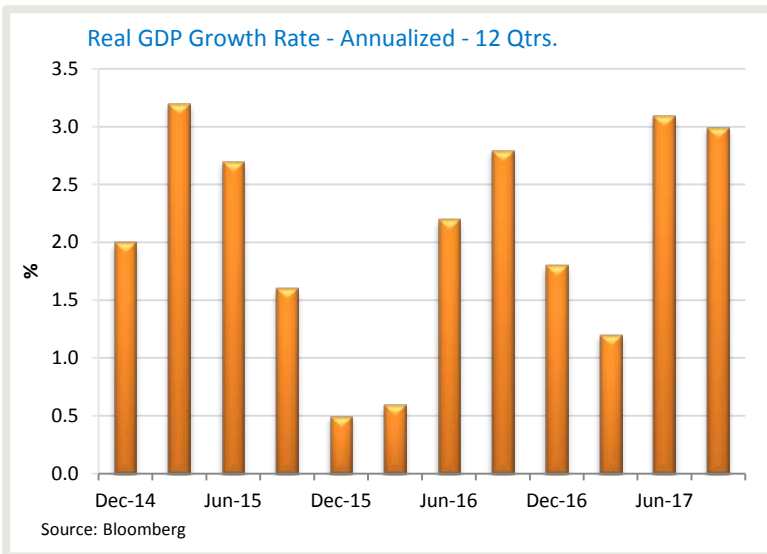
International equity markets were also positive for the month (in local currency terms), with Japan and the other Asian markets outperforming the US, and Europe as a whole slightly underperforming. Japan's snap election during the month handed a large majority to Prime Minister Shinzo Abe's LDP, ensuring continuity in the country's economic plans. Manufacturing and non-manufacturing business sentiment indices both were up in the month as well. Europe's big policy event of the month was the ECB's decision to extend its QE purchases by another nine months, but to modestly reduce the amount purchased each month. Economic data for the Eurozone continued to be positive, as the initial estimate of third-quarter GDP was 0.6%, and unemployment for September fell to an eight-year low of 8.9%. The Japanese TOPIX Index was up 5.4% for the month, bringing its year-to-date gain to 18.6%. The MSCI Europe Index was up 0.47% for the month, but country-to-country returns varied widely. Germany and France showed modest gains around 1.5%, while Spain was essentially flat, and Italy was down 1.4%. The MSCI Emerging Markets Index posted a gain of more than 3.5% for the month, with strength in China offsetting losses in Russia and Latin America.

Domestic fixed income markets largely posted a very modest return in October. A long slate of positive economic news slowly pushed short- and intermediate-term rates higher during the month, while tame inflation readings limited the increase in long-term rates. This continued the yearlong flattening of the yield curve, as the front end of the Treasury curve rose 9-13 basis points, and the long end was up just 2-3 basis points. As has been the case for most of the year, the corporate bond market, both investment grade (+40bps) and high yield (+42bps), posted the strongest returns in the month, as spreads continued to grind tighter, and the higher coupon income offset the rise in interest rates. CMBS, particularly non-Agency CMBS, had a relatively strong month as well, up 39 basis points. The international fixed income markets were down slightly on a local currency basis due to a strong move in the dollar for the month. The Global Aggregate ex USD Index was down 75 basis points in October but was up 70 basis points once the currency impact was hedged out. Emerging markets also were substantially affected by the strength of the dollar, with the Emerging Markets USD Index up 38 basis points and the Local Currency (Government) Index down 1.56% on an unhedged basis.

Nathan Behan, CFA, CAIA
SVP, Investment Research

¹ JPMorgan October Market Review

Economic Data



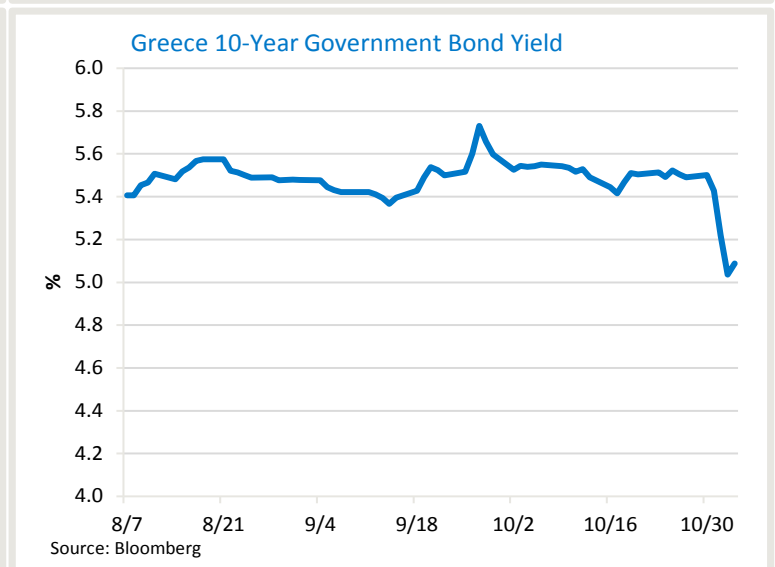
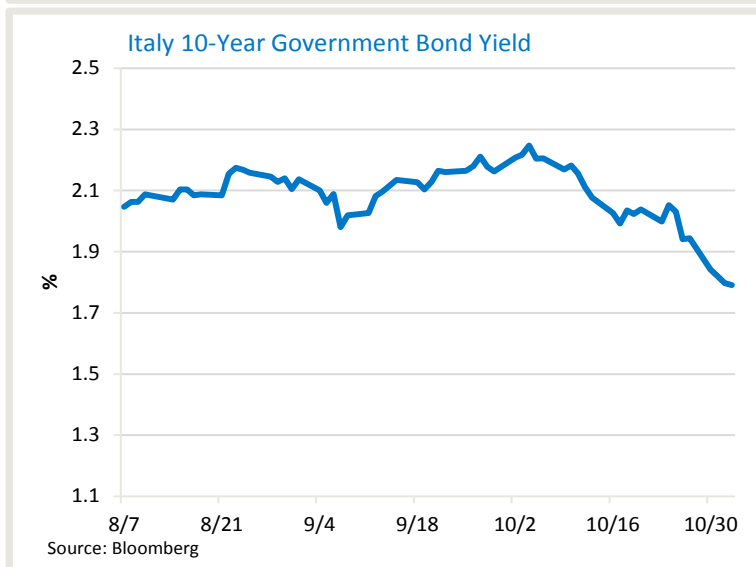
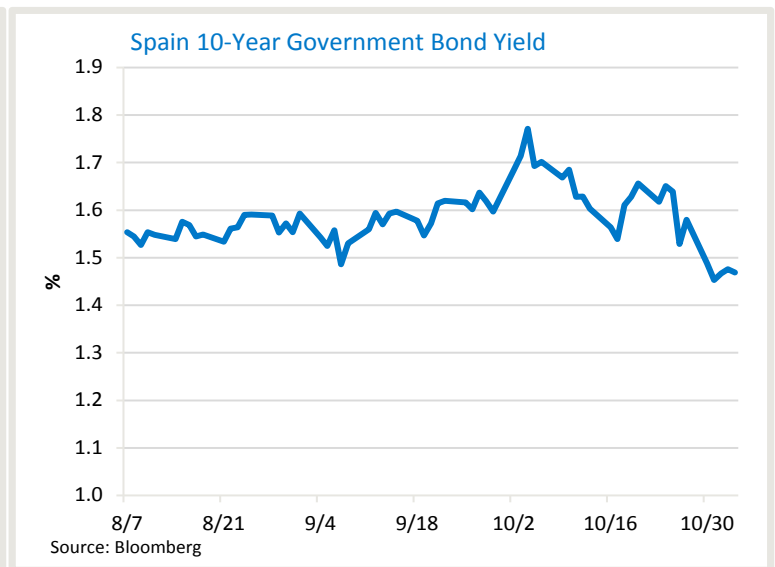
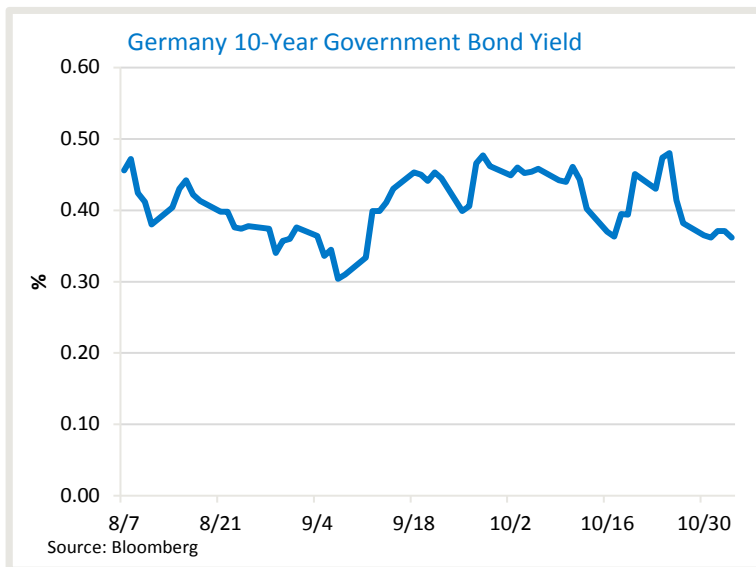
Eurozone

SELECTED EUROPEAN SOVEREIGN YIELD PERFORMANCE

	Last	Change	% Chg.	YTD %
Germany 10-Yr. Govt.	0.36	2 bps	NM	NM
Greece 10-Yr. Govt.	5.09	28 bps	NM	NM
Italy 10-Yr. Govt.	1.79	14 bps	NM	NM
Spain 10-Yr. Govt.	1.47	10 bps	NM	NM
Belgium 10-Yr. Govt.	0.60	3 bps	NM	NM

	Last	Change	% Chg.	YTD %
France 10-Yr. Govt.	0.75	4 bps	NM	NM
Ireland 10-Yr. Govt.	0.58	1 bps	NM	NM
Portugal 10-Yr. Govt.	2.05	12 bps	NM	NM
Netherlands 10-Yr. Govt.	0.47	1 bps	NM	NM
U.K. 10-Yr. Govt.	1.26	9 bps	NM	NM

Source: Bloomberg
Basis points (bps)

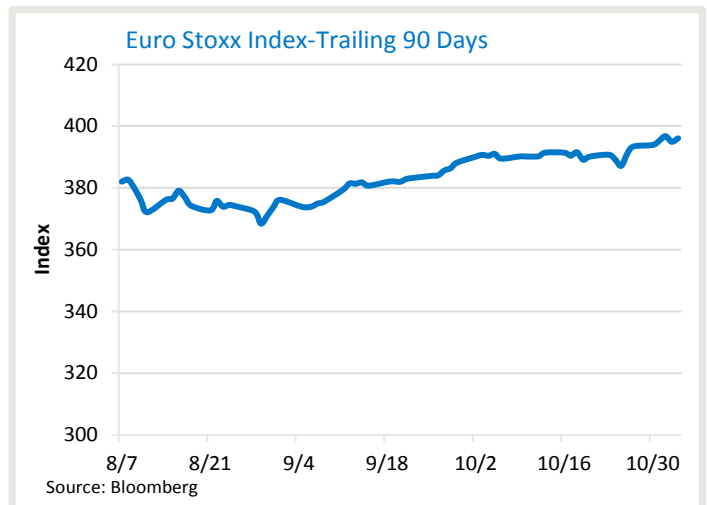
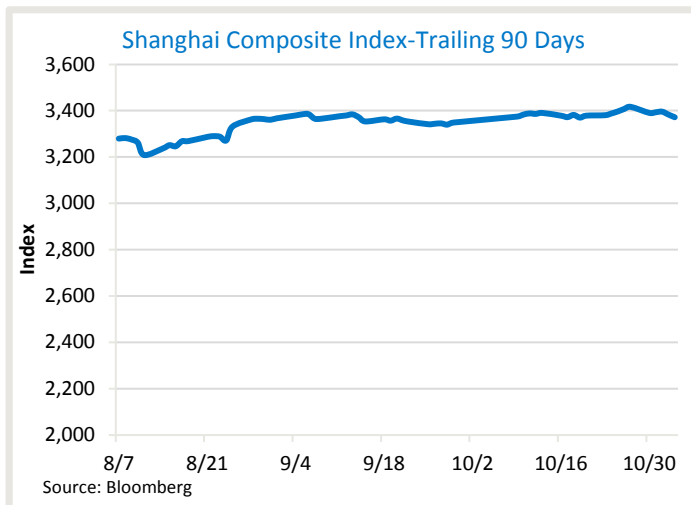
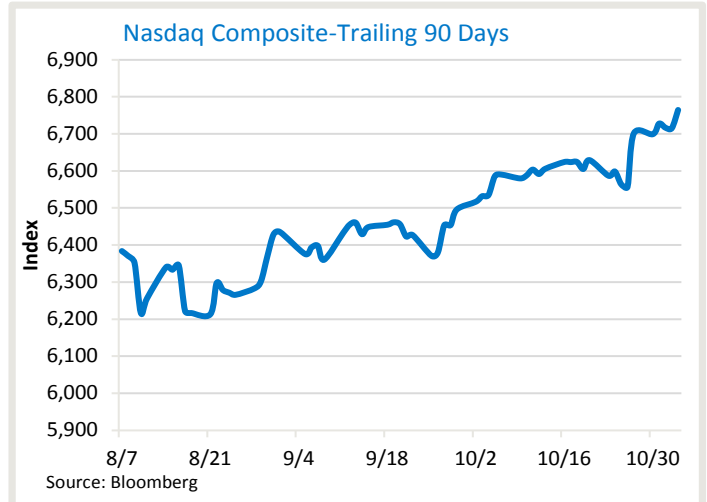
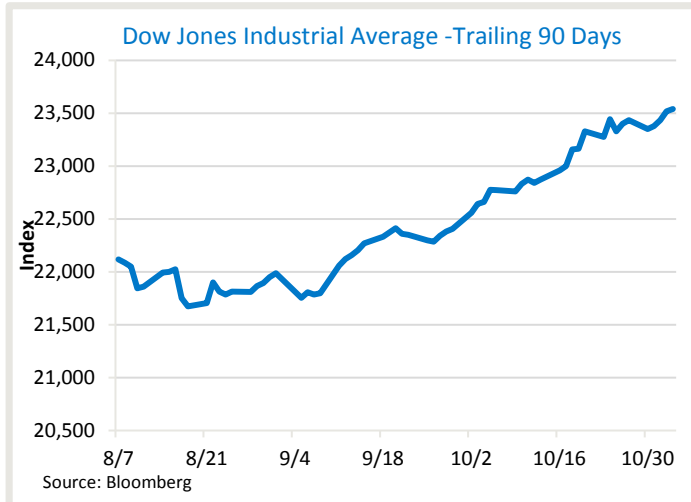


Equities

WORLD MARKET PERFORMANCE

	Last	Change	% Chg.	YTD %		Last	Change	% Chg.	YTD %
S&P 500	2,587.84	6.77	0.26%	15.59%	Swiss Market Index	9,322.05	138.63	1.51%	13.41%
Dow Industrials	23,539.19	105.00	0.45%	19.11%	CAC 40 Index (France)	5,517.97	23.84	0.43%	13.48%
Nasdaq Composite	6,764.43	63.17	0.94%	25.66%	DAX Index (Germany)	13,478.86	261.32	1.98%	17.40%
Russell Global	2,080.57	11.19	0.54%	18.0%	Irish Overall Index	6,984.30	82.97	1.20%	7.17%
Russell Global EM	3,533.87	50.05	1.44%	29.4%	Nikkei 225	22,539.12	799.34	3.68%	17.92%
S&P/TSX (Canada)	16,020.16	66.65	0.42%	4.79%	Hang Seng Index	28,603.61	164.76	0.58%	30.01%
Mexico IPC	48,534.84	-674.74	-1.37%	6.34%	Shanghai Composite	3,371.74	-45.07	-1.32%	8.64%
Brazil Bovespa	73,915.42	-2060.29	-2.71%	22.73%	Kospi Index (S. Korea)	2,557.97	61.34	2.46%	26.23%
Euro Stoxx 600	396.06	2.63	0.67%	9.58%	Taiwan Taiex Index	10,800.77	91.66	0.86%	16.72%
FTSE 100	7,560.35	55.32	0.74%	5.85%	Tel Aviv 25 Index	1,427.62	-10.56	-0.73%	-2.93%
IBEX 35 (Spain)	10,357.80	160.30	1.57%	10.75%	MICEX Index (Russia)	2,081.15	12.39	0.60%	-6.79%

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



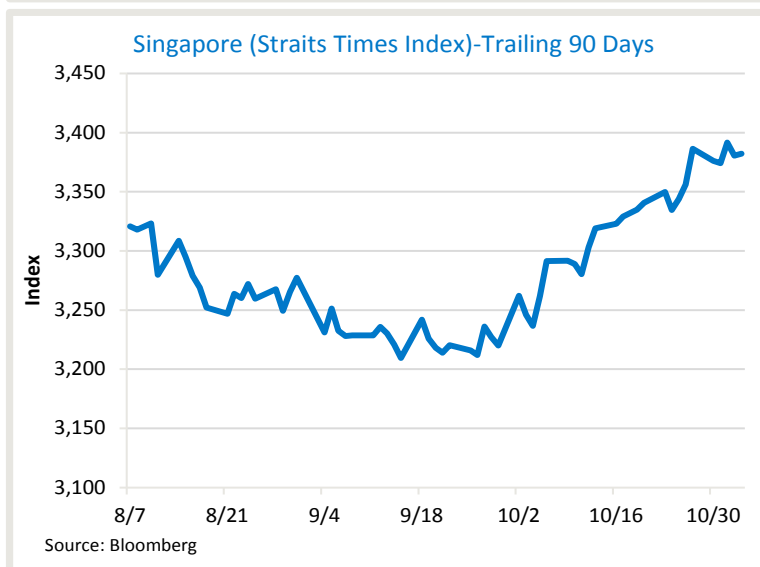
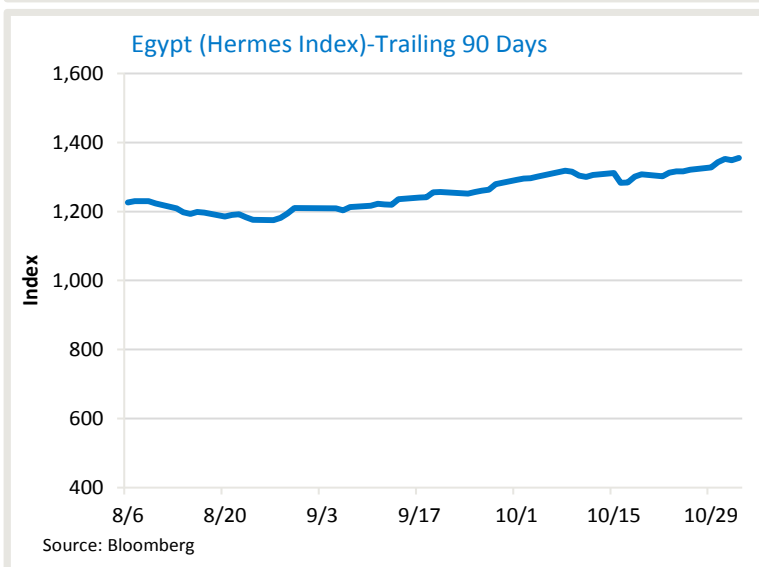
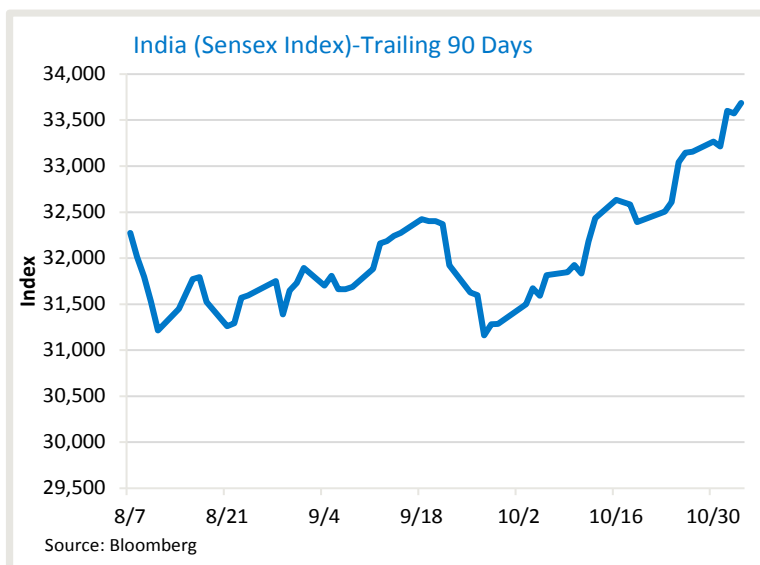
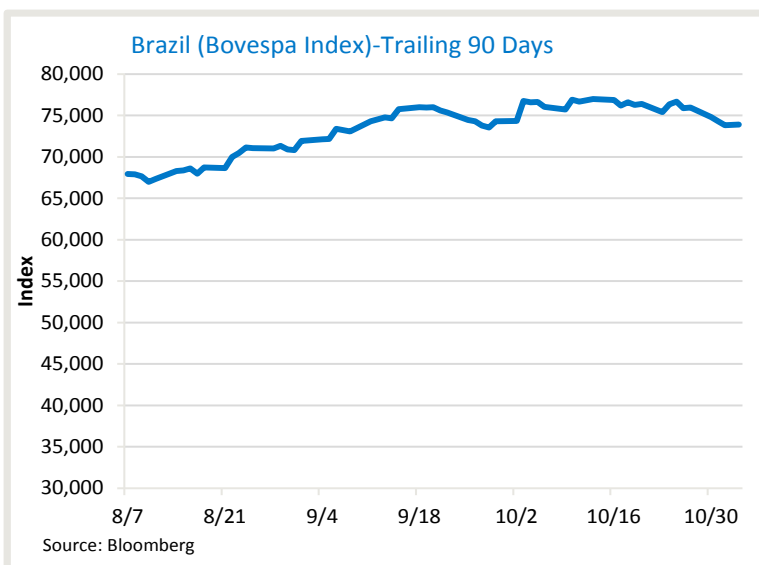
Equities – Emerging and Frontier Markets

EMERGING AND FRONTIER MARKET PERFORMANCE

	Last	Change	% Chg.	YTD %
Mexico IPC	48,534.84	-674.74	-1.4%	6.3%
Brazil (Bovespa Index)	73,915.42	-2060.29	-2.7%	22.7%
MICEX Index (Russia)	2,081.15	12.39	0.6%	-6.8%
Czech Republic (Prague)	1,051.60	-10.68	-1.0%	14.1%
Turkey (Istanbul)	111,292.78	3408.80	3.2%	42.4%
Egypt (Hermes Index)	1,355.01	34.13	2.6%	24.4%
Kenya (Nairobi 20 Index)	3,800.43	152.12	4.2%	19.3%
Saudi Arabia (TASI Index)	6,956.51	45.86	0.7%	-3.5%
Lebanon (Beirut BLOM Index)	1,166.26	5.76	0.5%	-3.8%
Palestine	569.85	-5.22	-0.9%	7.5%

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

	Last	Change	% Chg.	YTD %
Hang Seng Index	28,603.61	164.76	0.6%	30.0%
India (Sensex 30)	33,685.56	528.34	1.6%	26.5%
Malaysia (KLCI Index)	1,740.93	-5.20	-0.3%	6.0%
Singapore (Straits Times Index)	3,382.31	-4.13	-0.1%	17.4%
Thailand (SET Index)	1,701.47	-14.56	-0.8%	10.3%
Indonesia (Jakarta)	6,039.54	64.26	1.1%	14.0%
Pakistan (Karachi KSE 100)	41,064.00	-41.40	-0.1%	-14.1%
Vietnam (Ho Chi Minh)	843.73	3.36	0.4%	26.9%
Sri Lanka (Colombo)	6,621.47	-11.73	-0.2%	6.3%
Cambodia (Laos)	1,043.56	12.48	1.2%	2.9%

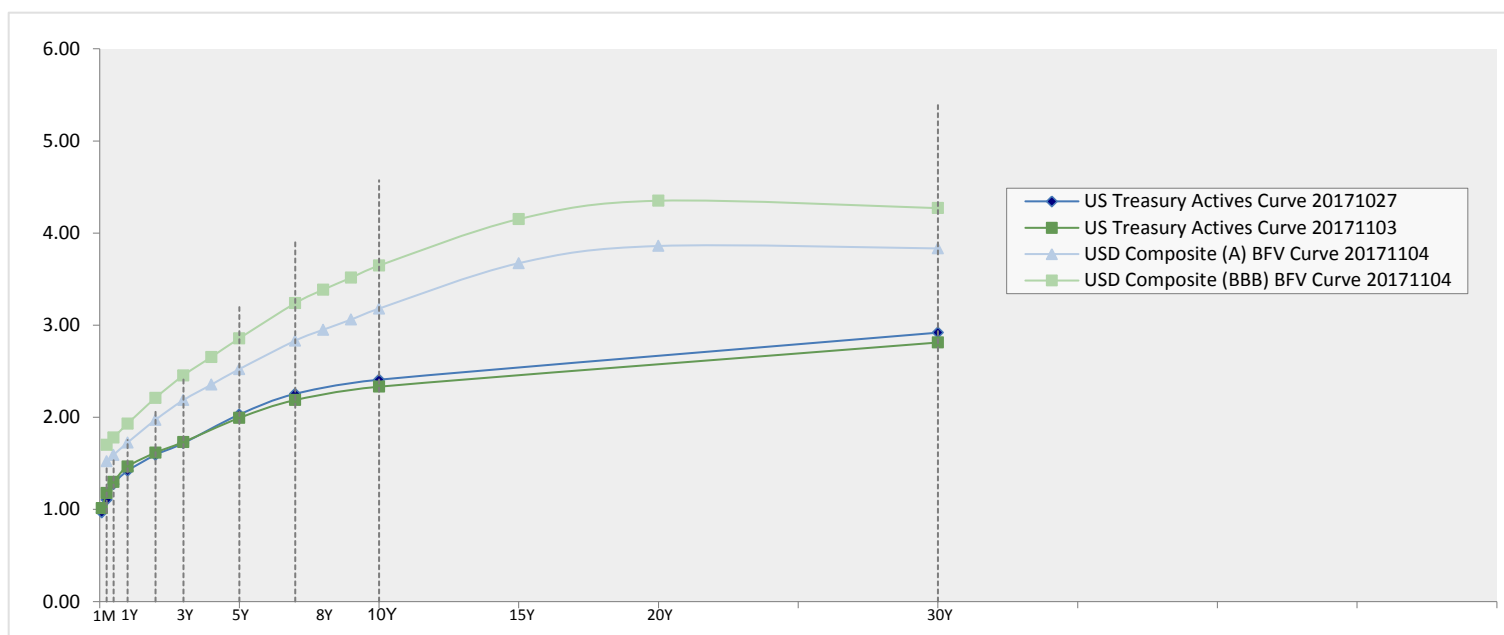


Interest Rates

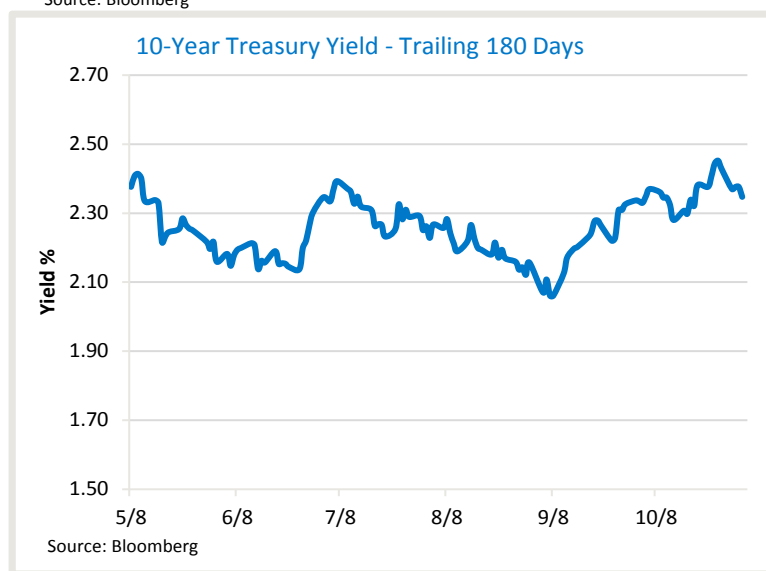
SELECTED INTEREST RATES

	Last	Change	% Chg.	YTD %		Last	Change	% Chg.	YTD %
2-Yr. U.S. Treasury	1.61%	0 bps	NM	NM	Prime Rate	4.25%	0.00	NM	NM
5-Yr. U.S. Treasury	2.01%	-4 bps	NM	NM	Fed Funds Rate	1.25%	0.00	NM	NM
10-Yr. U.S. Treasury	2.34%	-9 bps	NM	NM	Discount Rate	1.75%	0.00	NM	NM
30-Yr. U.S. Treasury	2.82%	-11 bps	NM	NM	LIBOR (3 Mo.)	1.39%	1 bps	NM	NM
German 10-Yr. Govt.	0.36%	2 bps	NM	NM	Bond Buyer 40 Muni	3.49%	-3 bps	NM	NM
France 10-Yr.	0.75%	4 bps	NM	NM	Bond Buyer 40 G.O.	3.67%	NA	NM	NM
Italy 10-Yr.	1.79%	14 bps	NM	NM	Bond Buyer 40 Rev.	4.04%	NA	NM	NM
Fed 5-Yr Fwd BE Inf.	1.79%	-1 bps	NM	NM					

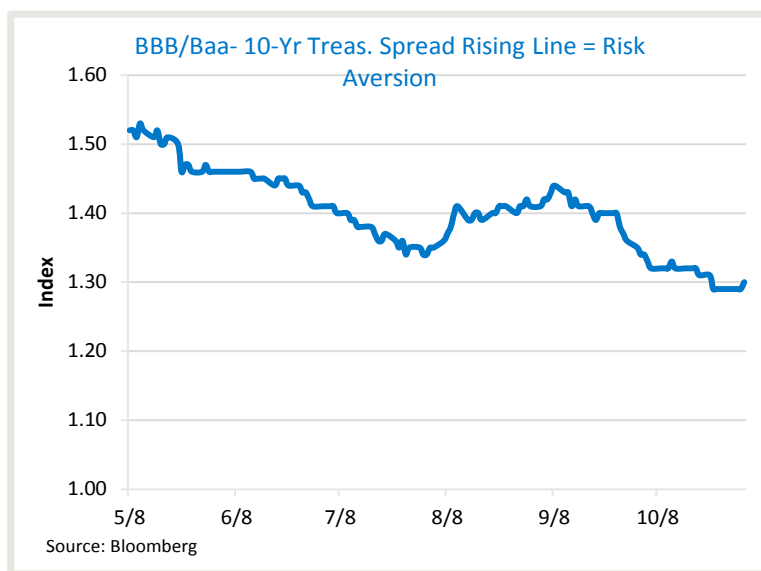
Source: Bloomberg



Source: Bloomberg



Source: Bloomberg



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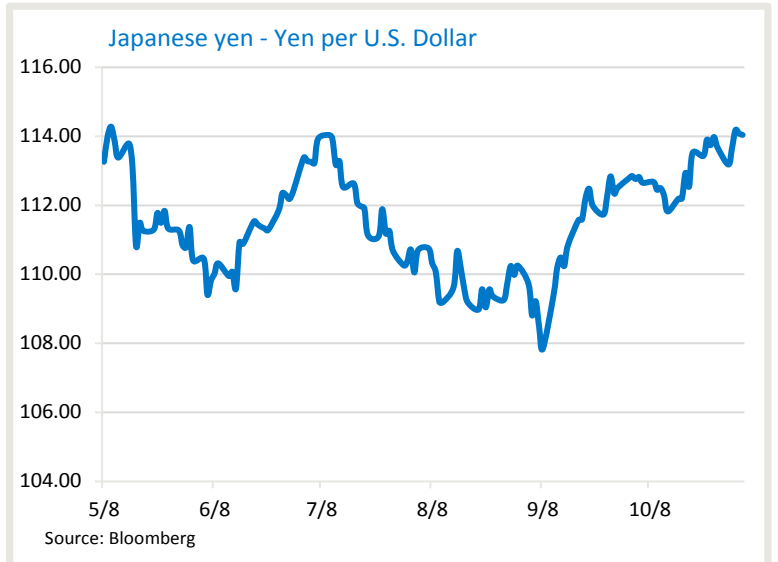
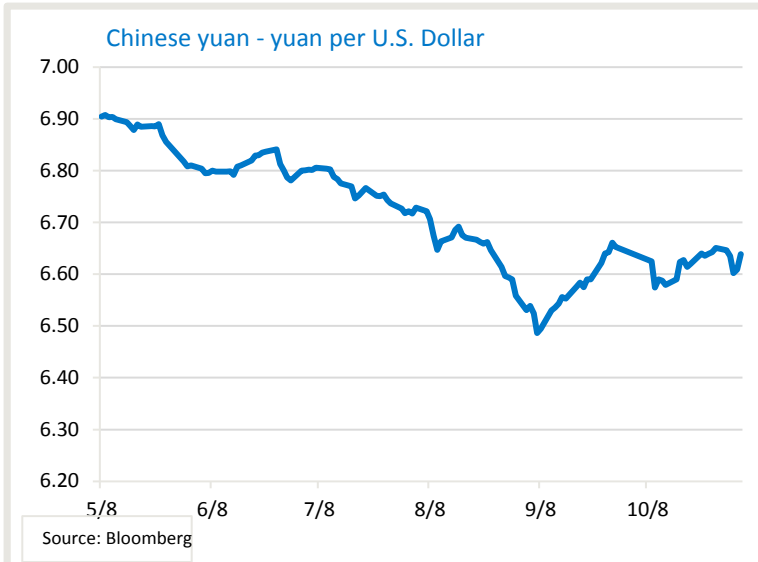
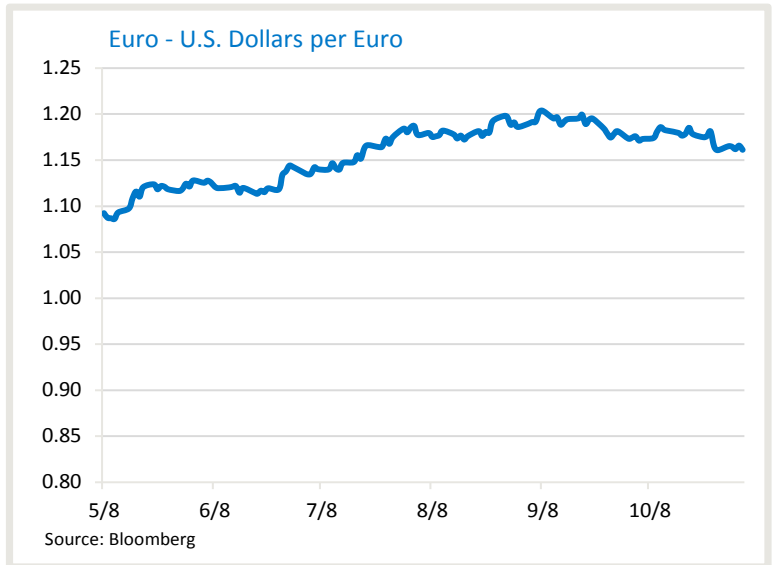
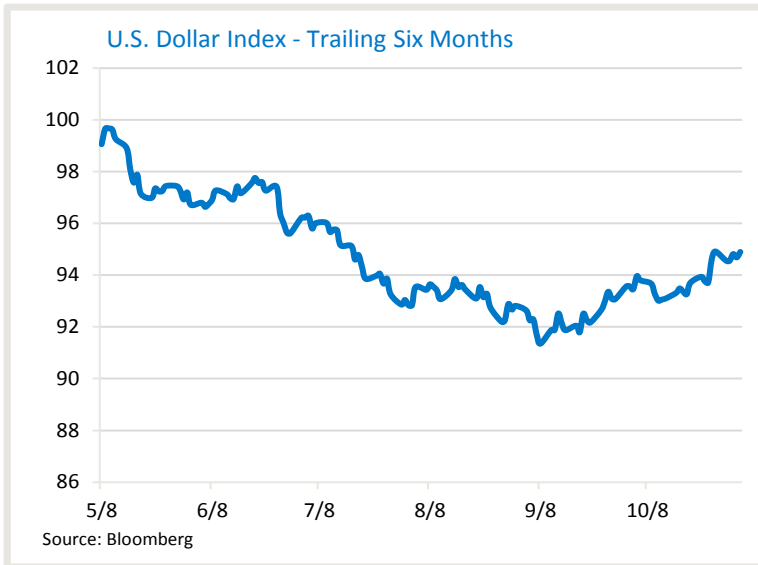
Currencies

SELECTED CURRENCY PERFORMANCE

	Last	Change	% Chg.	YTD %
Dollar Index	94.90	-0.019	-0.02%	-7.15%
Euro	1.16	0.000	0.03%	10.41%
Japanese Yen	114.05	0.370	-0.32%	2.56%
British Pound	1.31	-0.006	-0.43%	5.93%
Canadian Dollar	1.28	-0.005	0.37%	5.33%

	Last	Change	% Chg.	YTD %
Chinese Yuan	6.64	-0.012	0.17%	4.61%
Swiss Franc	1.00	0.002	-0.23%	1.86%
New Zealand Dollar	0.69	0.003	0.44%	-0.38%
Brazilian Real	3.31	0.079	-2.37%	-1.93%
Mexican Peso	19.19	0.052	-0.27%	8.04%

Source: Bloomberg

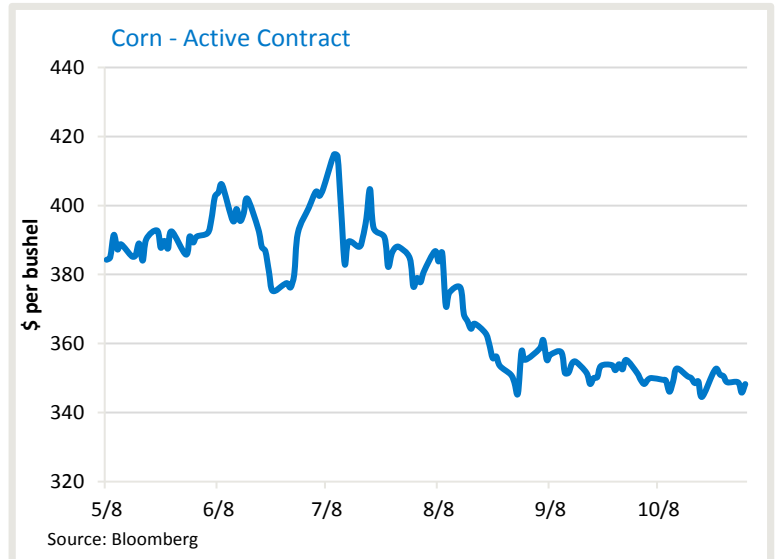
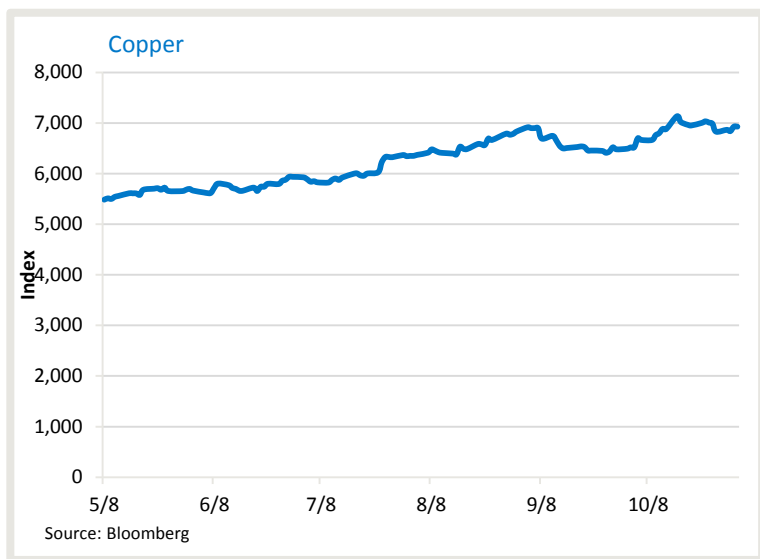
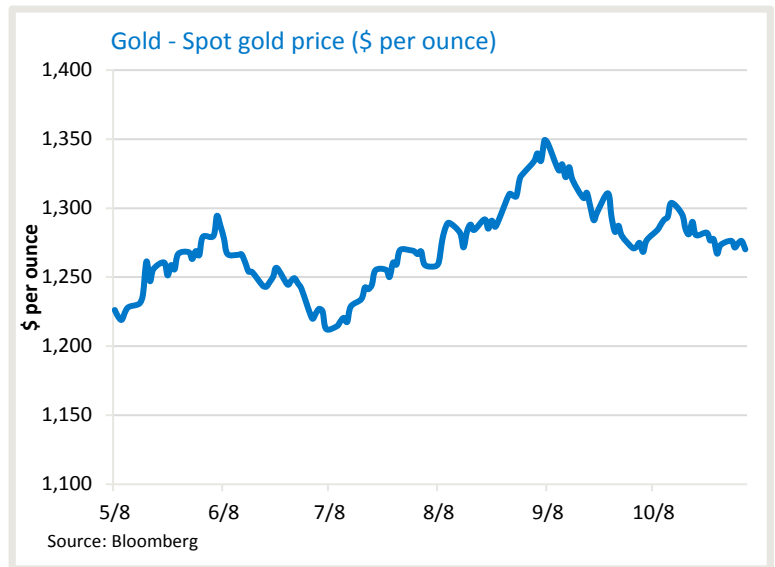
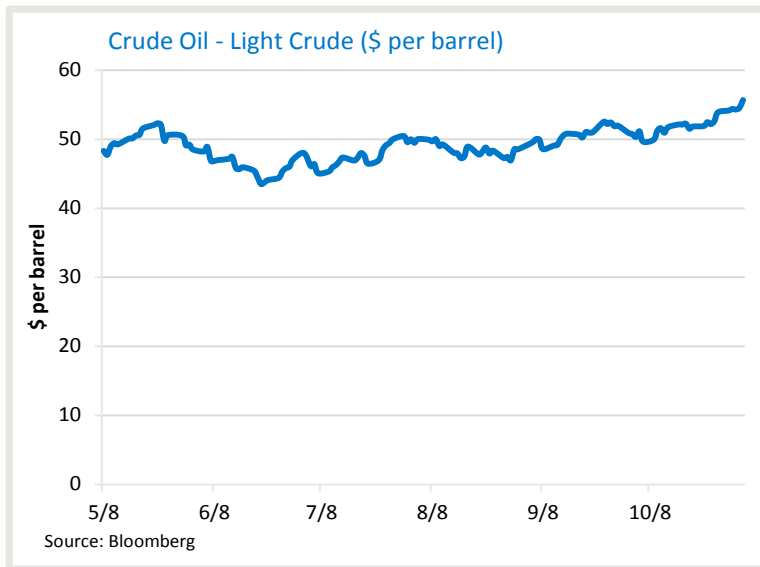


Commodities

SELECTED COMMODITY MARKET PERFORMANCE

	Last	Change	% Chg.	YTD %		Last	Change	% Chg.	YTD %
Bloomberg Comm. Idx.	86.88	1.01	1.18%	-0.73%	Platinum Spot	\$921.68	\$3.85	0.42%	1.94%
Crude Oil	\$55.70	\$1.77	3.28%	-2.44%	Corn	348.25	-0.50	-0.14%	-8.36%
Natural Gas	\$2.99	\$0.03	0.91%	-19.23%	Wheat	425.75	-1.50	-0.35%	-8.44%
Gasoline (\$/Gal.)	\$2.52	\$0.05	2.03%	7.75%	Soybeans	986.75	0.25	0.03%	-0.63%
Heating Oil	188.67	1.89	1.01%	4.90%	Sugar	14.38	-0.25	-1.71%	-22.60%
Gold Spot	\$1,270.29	-\$3.24	-0.25%	10.69%	Orange Juice	156.60	2.75	1.79%	-15.94%
Silver Spot	\$16.85	-\$0.03	-0.19%	5.69%	Aluminum	2,173.50	5.50	0.25%	28.38%
					Copper	6,929.00	99.00	1.45%	25.17%

Source: Bloomberg; % change is based on price.

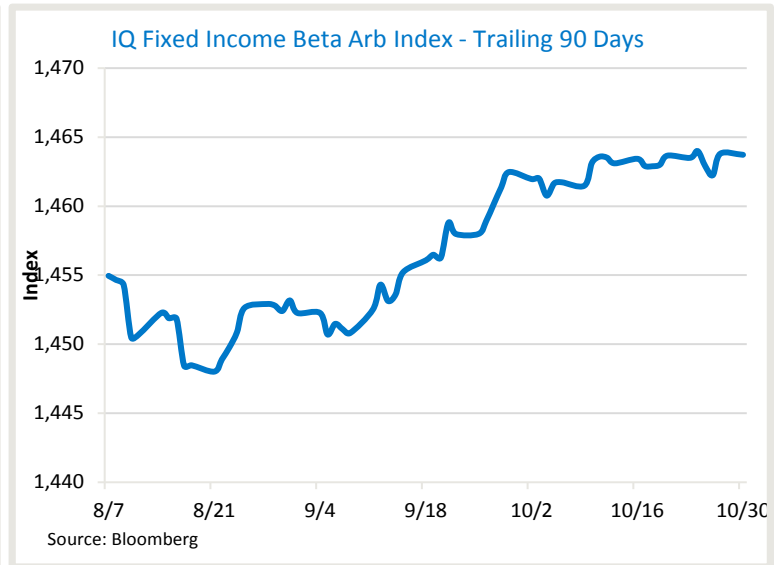
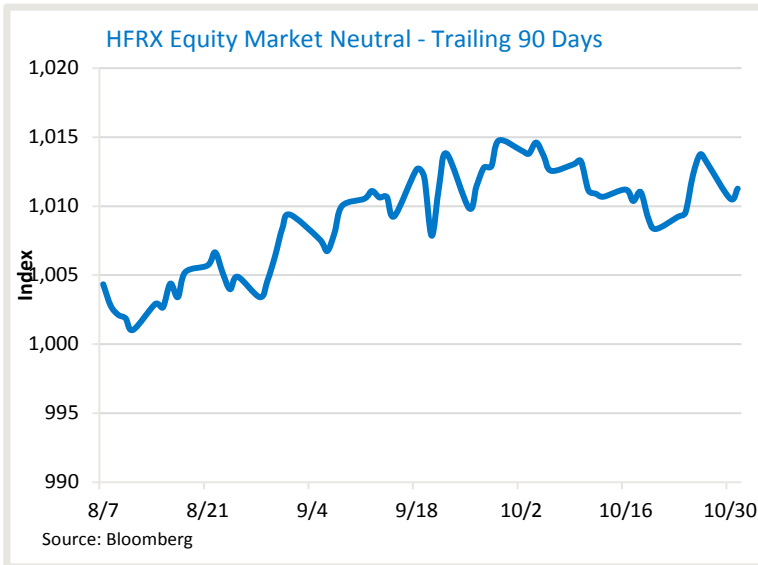
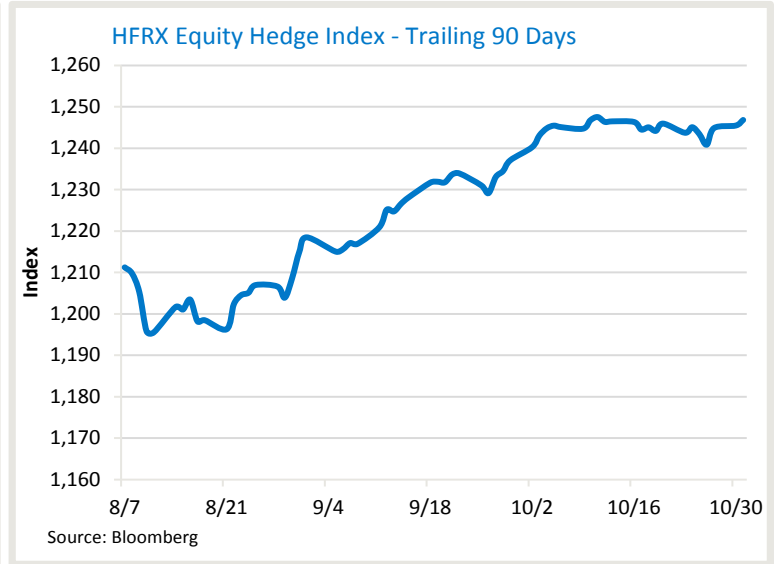
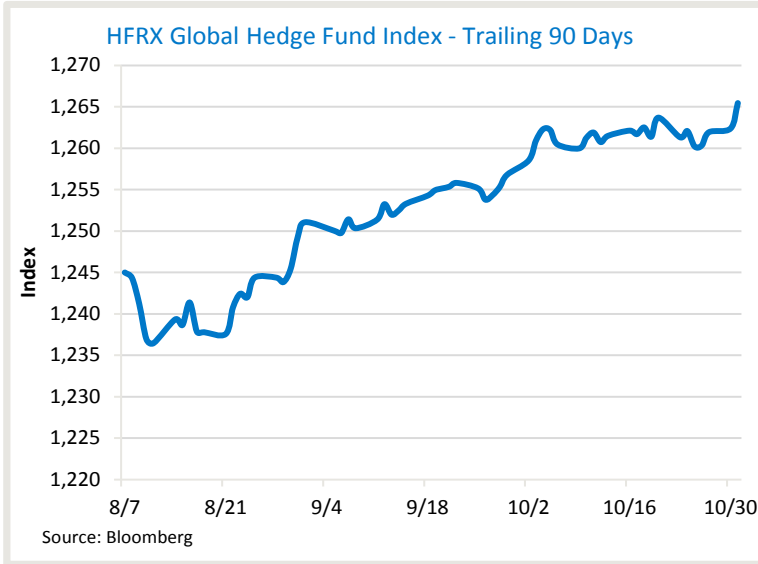


Alternative Investments

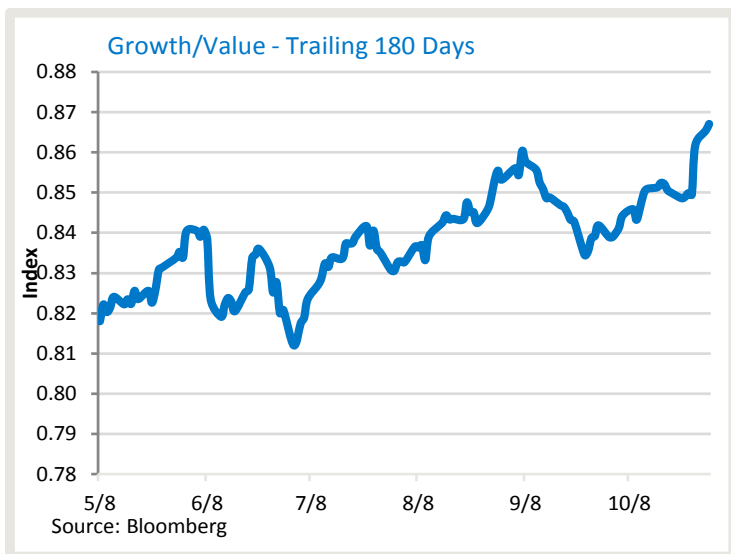
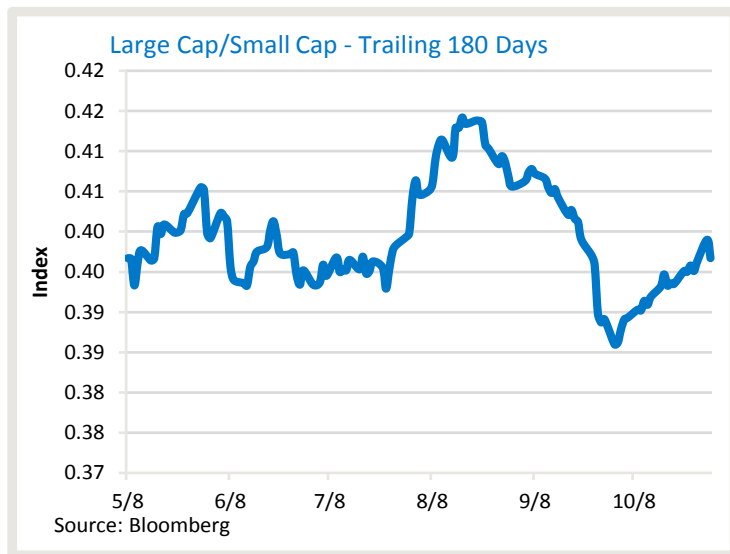
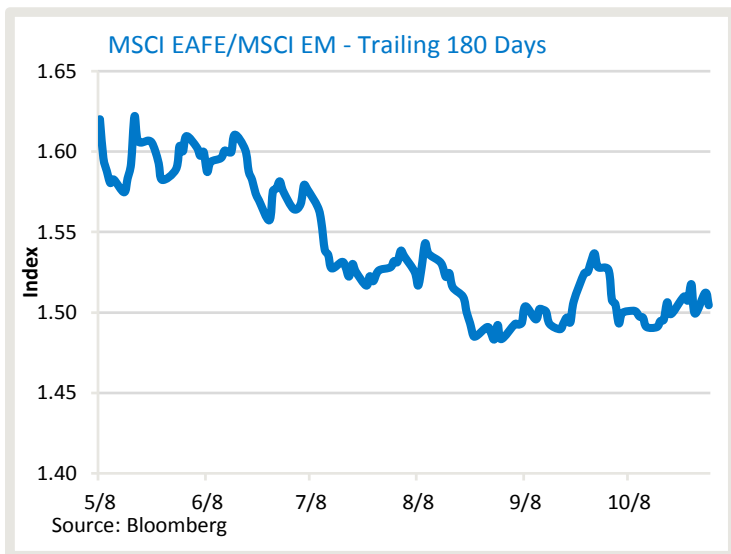
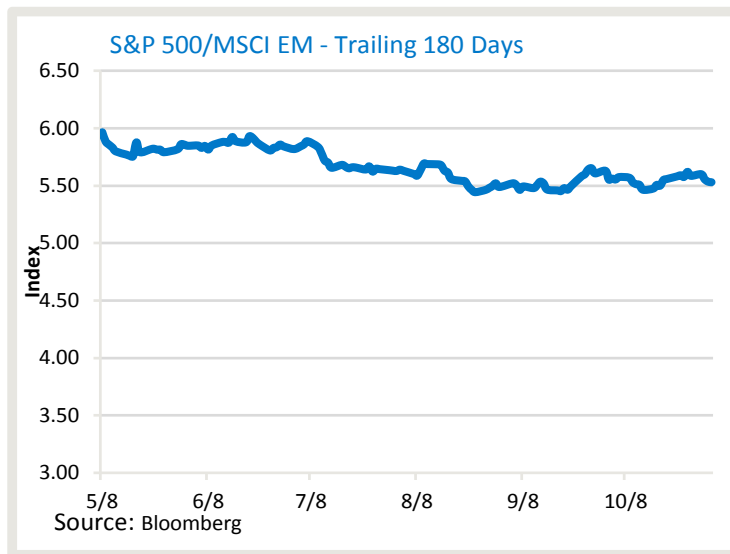
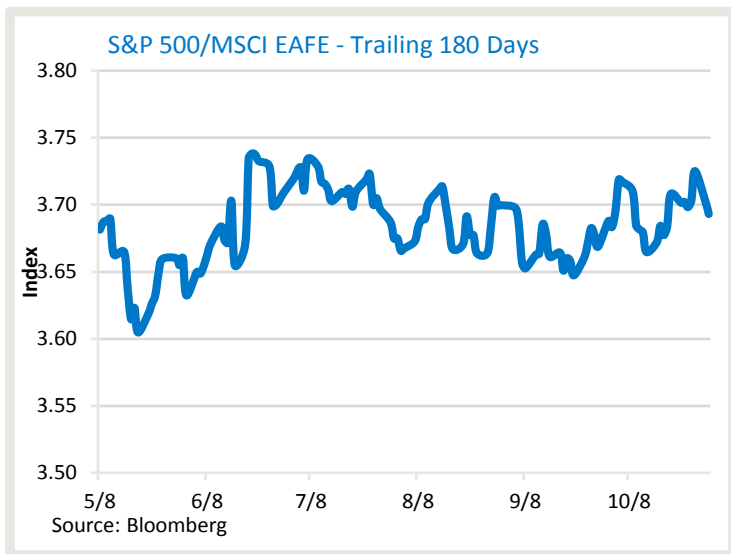
SELECTED ALTERNATIVE INVESTMENT INDEX PERFORMANCE

	Last	Change	% Chg.	YTD %		Last	Change	% Chg.	YTD %
HFRX Global Hedge Fund Index	1267.94	6.00	0.48%	5.36%	HFRX Distressed Index	1093.33	4.04	0.37%	1.89%
HFRX Equity Market Neutral	1014.48	1.44	0.14%	2.75%	HFRX Merger Arbitrage Index	1845.58	2.37	0.13%	1.82%
HFRX Equity Hedge Index	1248.93	4.05	0.33%	8.09%	HFRX Convertible Arbitrage Index	789.09	1.51	0.19%	6.26%
HFRX Event-Driven Index	1666.42	8.71	0.53%	6.52%	HFRX Macro CTA Index	1161.70	8.78	0.76%	2.32%
HFRX Absolute Return Index	1067.53	2.28	0.21%	3.80%	IQ Fixed Income Beta Arb Index	1464.07	0.27	0.02%	3.11%

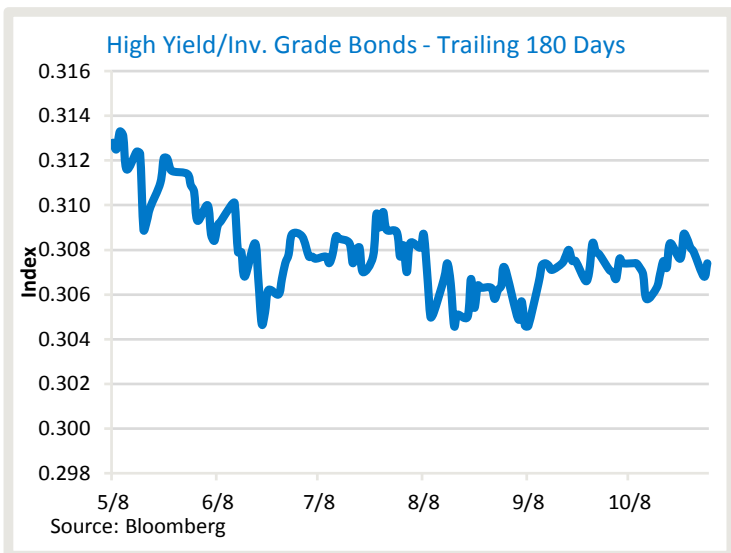
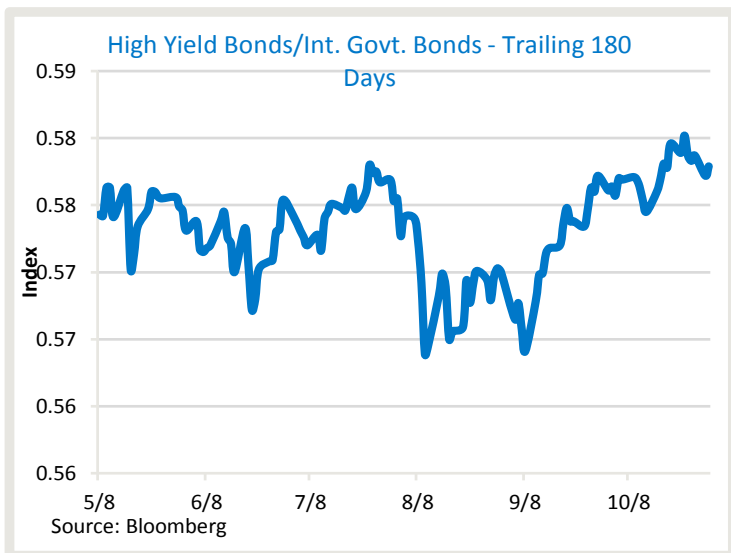
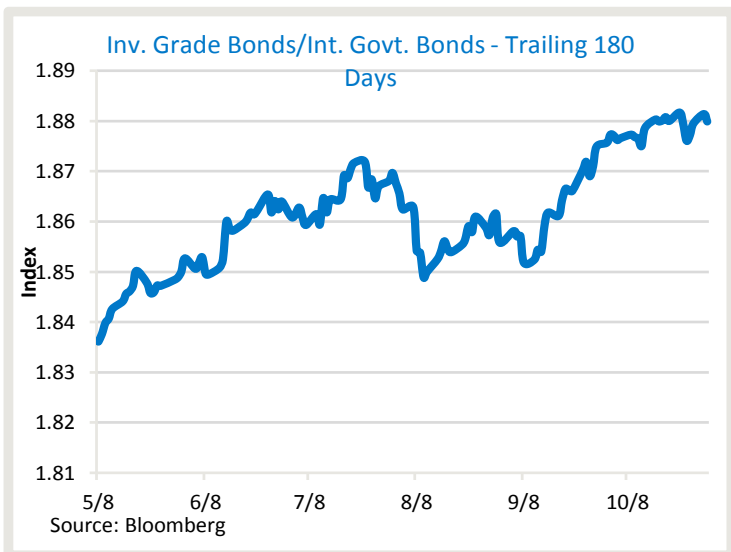
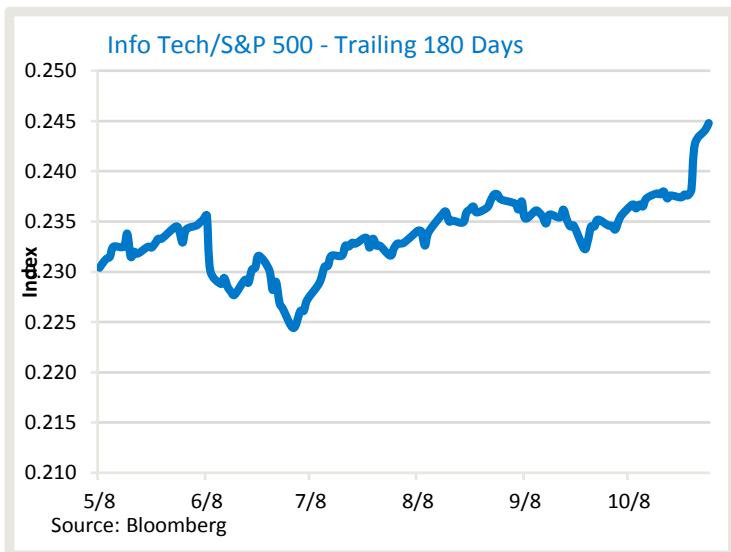
Source: Bloomberg; Index % change is based on price.



Portfolio Construction



Portfolio Construction (continued)



WEEKLY ASSET CLASS PERFORMANCE (Prior 12 weeks ending Thursday)

			8/17	8/24	8/31	9/7	9/14	9/21	9/28	10/5	10/12	10/19	10/26	11/2
Equity	Domestic Equity	Large Cap (R200)	-0.30%	0.35%	1.41%	-0.30%	1.22%	0.26%	0.22%	1.69%	-0.06%	0.47%	-0.08%	0.96%
		Small Cap (R2000)	-0.99%	1.10%	2.29%	-0.47%	1.88%	1.34%	3.09%	1.57%	-0.46%	-0.21%	-0.31%	-0.06%
	Int'l. Equity	MSCI EAFE	-0.05%	0.35%	0.59%	0.94%	0.52%	0.52%	-0.30%	0.52%	1.11%	0.52%	-0.69%	1.09%
		MSCI Em. Mkts.	0.67%	1.80%	0.49%	0.22%	0.90%	0.75%	-3.23%	2.83%	1.71%	-0.42%	-0.78%	1.73%
Fixed Income	BarCap Agg. (AGG)	0.35%	0.52%	-1.20%	12.35%	-4.80%	0.81%	-5.32%	2.39%	8.49%	-8.59%	-0.67%	2.36%	
	High Yield (JNK)	0.27%	0.73%	0.57%	-0.59%	0.32%	-0.03%	0.38%	-0.16%	-0.19%	0.35%	-0.40%	-0.32%	
Commodities	Bloomberg Commodity Index	-1.03%	1.01%	1.37%	1.19%	-0.66%	-0.37%	-0.17%	-0.06%	0.64%	0.31%	0.61%	0.90%	
Alternatives	Hedge Funds (HFRX Global)	0.07%	0.34%	0.59%	0.17%	0.09%	0.23%	0.00%	0.55%	-0.11%	0.05%	-0.08%	0.60%	
Asset Allocation	60/40*	-0.03%	0.47%	0.37%	4.31%	-0.99%	0.61%	-1.67%	1.71%	3.15%	-2.81%	-0.45%	1.34%	
	48/32/20 (w/Alts.)**	-0.01%	0.44%	0.41%	3.48%	-0.77%	0.53%	-1.34%	1.48%	2.50%	-2.24%	-0.38%	1.20%	

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	0.95	1.15	1.11	1.05	1.19	1.15	1.14	1.17	1.04	1.09	1.25	1.11	1.38	1.47
Large Cap Growth	1.06	1.00	1.21	1.17	1.11	1.26	1.22	1.20	1.24	1.10	1.15	1.32	1.17	1.45	1.55
Large Cap Value	0.87	0.83	1.00	0.96	0.91	1.04	1.00	0.99	1.02	0.91	0.95	1.09	0.96	1.20	1.28
Mid Cap Core	0.90	0.86	1.04	1.00	0.95	1.08	1.04	1.03	1.06	0.94	0.98	1.13	1.00	1.24	1.33
Mid Cap Growth	0.95	0.90	1.09	1.05	1.00	1.14	1.10	1.09	1.12	0.99	1.03	1.19	1.06	1.31	1.40
Mid Cap Value	0.84	0.79	0.96	0.93	0.88	1.00	0.97	0.96	0.98	0.87	0.91	1.05	0.93	1.15	1.23
Small Cap Core	0.87	0.82	1.00	0.96	0.91	1.04	1.00	0.99	1.02	0.90	0.94	1.08	0.96	1.20	1.27
Small Cap Growth	0.88	0.83	1.01	0.97	0.92	1.05	1.01	1.00	1.03	0.91	0.95	1.09	0.97	1.21	1.29
Small Cap Value	0.85	0.81	0.98	0.94	0.90	1.02	0.98	0.97	1.00	0.89	0.93	1.06	0.94	1.17	1.25
Int'l. Developed	0.96	0.91	1.10	1.06	1.01	1.15	1.11	1.10	1.13	1.00	1.04	1.20	1.06	1.32	1.41
Emerging Markets	0.92	0.87	1.06	1.02	0.97	1.10	1.06	1.05	1.08	0.96	1.00	1.15	1.02	1.27	1.35
REITs	0.80	0.76	0.92	0.89	0.84	0.96	0.92	0.91	0.94	0.83	0.87	1.00	0.89	1.10	1.18
Commodities	0.90	0.86	1.04	1.00	0.95	1.08	1.04	1.03	1.06	0.94	0.98	1.13	1.00	1.24	1.32
Int. Bond	0.73	0.69	0.83	0.80	0.76	0.87	0.84	0.83	0.85	0.76	0.79	0.91	0.80	1.00	1.07
High Yield	0.68	0.65	0.78	0.75	0.72	0.81	0.78	0.78	0.80	0.71	0.74	0.85	0.75	0.94	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.

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, 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 **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 **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 **ISM Manufacturing Index** is based on surveys of more than 300 manufacturing firms by the Institute of Supply Management and monitors employment, production, inventories, new orders and supplier deliveries. 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 **S&P Composite 1500 Index** combines three leading indices, the S&P 500, the S&P MidCap 400, and the S&P SmallCap 600 to cover approximately 90% of the U.S. market capitalization. It is designed for investors seeking to replicate the performance of the U.S. equity market or benchmark against a representative universe of tradable stocks. The **Industrial Production Index** is an economic indicator that measures real output for all facilities located in the United States manufacturing, mining, and electric, and gas utilities (excluding those in U.S. territories). The **Dow Jones U.S. Select 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.

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