

Weekly Market Review

May 11, 2018

Chart of the Week



Weekly Highlights

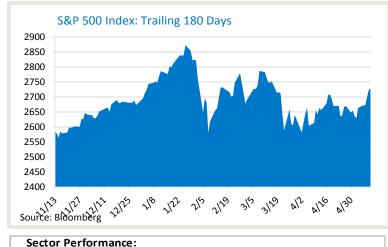
- Crude oil price rose above \$70 per barrel. As the US announced its withdrawal from the Iran nuclear deal, crude oil price continued to rally, ending the week above \$70 per barrel, nearly 20% higher from where it began the year.
- Inflation is still mild. Both April consumer price index (CPI) and Core CPI rose less than expected from March, and Core CPI rose 2.1% year-over-year, also less than expected.
- **Stock market rebounded.** The S&P 500 Index jumped 2.5% for the week, led by stocks in the economically sensitive sectors, such as Financials and Energy.

Talking Points

- Among equities, large caps underperformed small caps; value stocks matched the performance of growth stocks; domestic stocks outperformed international stocks; and developed markets trailed emerging markets.
- Treasury yields little changed. The yield on the 10-year Treasury fluctuated within the narrow range of 2.95% – 3.00%.
- Commodity indices jumped. The West Texas Intermediate crude oil price rose above \$70 per barrel, as the US announced its withdrawal from the Iran nuclear deal.
- **Dollar slid.** The dollar index fell slightly after surging over the past several weeks.
- Among major economic data, April CPI rose 2.5% year over year, matching expectation; Core CPI rose 2.1% year over year, less than expected; May University of Michigan Consumer Sentiment Index was 98.8, unchanged from April.

	Last Price	Change	% Chg.	YTD %
S&P 500	2,727.72	64.30	2.41%	2.0%
Dow Industrials	24,831.17	568.66	2.34%	0.5%
Nasdaq	7,402.88	193.26	2.68%	7.2%
Russell 2000	1,606.79	41.19	2.63%	4.6%
Euro Stoxx Index	392.40	5.37	1.39%	0.8%
Shanghai Composite	3,163.26	72.23	2.34%	-4.4%
Russell Global	2,163.81	34.20	1.61%	0.9%

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



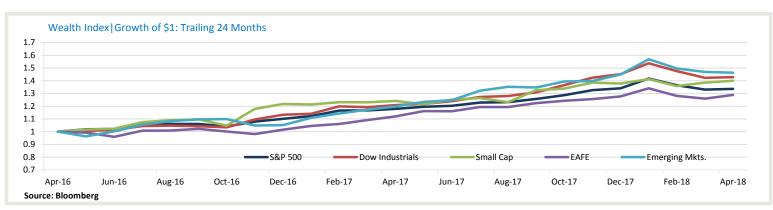
	% Wgt in	Week %	
	S&P 500	Chg.	YTD % Chg
Consumer Discretionary	12.7	0.84%	6.3%
Consumer Staples	6.6	[-0.45%	- <mark>1</mark> 3.6%
Energy	6.3	3.75%	6.0%
Financials	14.6	3.60%	0.9%
Health Care	13.9	2.48%	0.4%
Industrials	9.9	3.39%	1.6%
Information Technology	25.8	3.45%	10.8%
Materials	2.9	1.94%	2.7%
Real Estate	2.7	0.64%	4.6%
Telecom Services	1.8	0.91%	- <mark>1</mark> 1.7%
Utilities	2.8	-2.27%	4.6%

Source: Bloomberg



		One Week	K		YTD	
	Value		Growth	Value		Growth
L	2.60%	2.53%	2.47%	-1.61%	2.34%	5.82%
	1.51%	2.04%	2.69%	-1.18%	1.45%	4.84%
S	2.26%	2.63%	2.97%	2.11%	4.64%	7.00%
	Source: B	loomberg				





The Economy and Markets

A Macro View – Do higher gas and oil prices signal a "nuclear fallout" of slower future growth?

Memorial Day weekend typically marks a high point in gas prices every year—summer is near, and many of us will be hitting the open roads. Over the last few years, we have enjoyed low prices at the pump, which have provided us with more disposable income—but all this may be ending. As gas and oil prices continue to rise, we may be forced to alter how we drive, spend, and live.

The recent tax cuts have put more money in our pockets, but higher gas prices facing us this summer will affect our ability to spend that surplus on other goods and services. Although the prices are still nowhere near the peaks we saw in June 2008, when prices averaged \$4.00 per gallon, or in May 2011, when average prices were \$3.90, we might be headed in that direction. In 2017, the average price per gallon of gas across the country was \$2.34 compared with today's average of \$2.82, an increase of more than 20%.¹ Over this same period, West Texas Intermediate Oil (WTI) also increased from an average of \$51 per barrel to nearly \$70 per barrel.²

Geopolitical worries are a significant factor in rising gas and oil prices, as the United States has withdrawn from the Joint Comprehensive Plan of Action (more commonly known as the Iran nuclear deal), and plans on restoring sanctions that target Iran's energy, financial, and industrial sectors. President Trump's decision to pull out of the deal can have far-reaching consequences for the oil market, gas prices, and overall relations in the Middle East. Iran is the third-largest oil producer within the Organization of Petroleum Exporting Countries (OPEC), and the sanctions should cause tighter supply by removing as much as one million barrels of Iranian oil per day.³ Furthermore, oil-rich Venezuela's dramatic cut in production also has impacted prices as the country's oil output recently fell to its lowest levels in almost 30 years. Venezuela is facing an economic crisis that is getting worse, with no cash for maintenance or investment, a debt crisis, and U.S. sanctions that will only continue to place pressure on their output.⁴

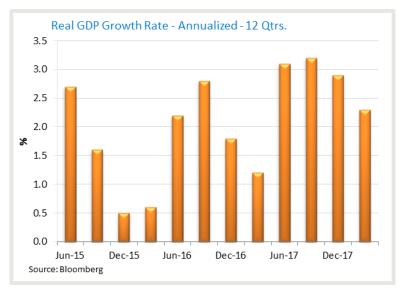
Oil supply also has been driven lower due to an OPEC agreement, established in January 2017, to cut oil production. OPEC's goal in this agreement was to reduce the amount of surplus oil stored around the world, thus increasing the global price of oil. Talks suggest that OPEC may continue with the agreement through 2019, thereby continuing to place pressure on the oil supply and consequently increasing gas prices. OPEC is scheduled to meet on June 20 to decide whether to keep in place the agreement to cut oil production.⁵

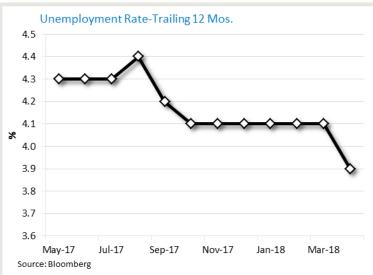
If it were not for the US shale oil industry's increased production, we already would likely be facing gasoline and oil prices that are significantly higher than we see today. However, demand has recently outpaced supply, as solid world-wide economic growth has put even more pressure on gas and oil prices. It remains to be seen if these prices will continue on their current upward trajectory, or whether they will fall back to the lower levels that we have grown accustomed to for the last few years. What we *do* know is that oil price fluctuations have considerable consequences on economic and capital markets activity. In fact, ten of the last eleven post-World War II recessions occurred on the heels of oil price spikes.⁶ Will rising oil prices be the impetus that finally brings the long-running stock market to its knees?

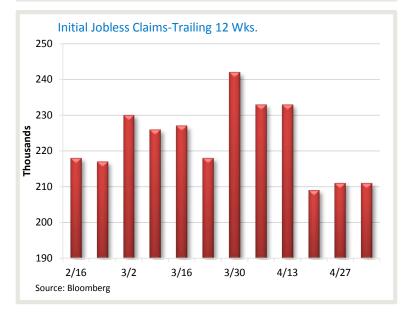
¹ <u>https://www.cnbc.com/2018/05/03/gas-prices-hit-three-year-high-and-are-expected-to-keep-rising.html</u>

- ² <u>http://www.macrotrends.net/1369/crude-oil-price-history-chart</u>
- ³ <u>http://www.opec.org/opec_web/en/data_graphs/330.htm</u>
- ⁴ http://money.cnn.com/2018/02/12/news/economy/venezuela-oil-production/index.html
- ⁵ <u>https://www.forbes.com/sites/ellenrwald/2018/04/19/oil-prices-are-going-up-and-so-is-your-gasoline-bill/#2f8ce01e5a3f</u>
- ⁶ <u>http://econweb.ucsd.edu/~jhamilton/oil_history.pdf</u>

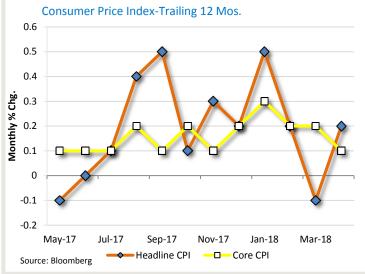
Michael Pajak, CAIA Investment Analyst









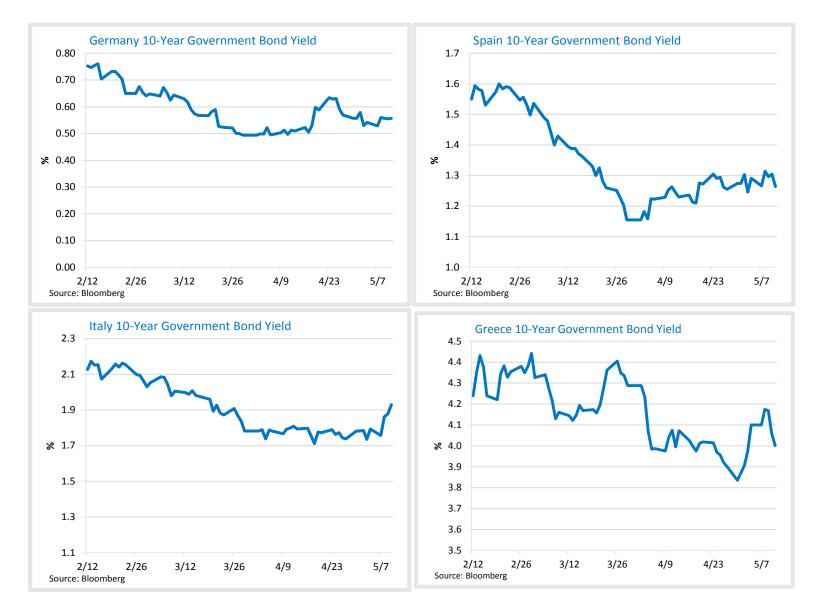




Eurozone

	Last	Change	% Chg.	YTD %		Last	Change	% Chg.	
Germany 10-Yr. Govt.	0.56	-1 bps	NM	NM	France 10-Yr. Govt.	0.78	0 bps	NM	
Greece 10-Yr. Govt.	4.00	8 bps	NM	NM	Ireland 10-Yr. Govt.	0.96	0 bps	NM	
Italy 10-Yr. Govt.	1.87	-7 bps	NM	NM	Portugal 10-Yr. Govt.	1.67	2 bps	NM	
Spain 10-Yr. Govt.	1.26	3 bps	NM	NM	Netherlands 10-Yr. Govt.	0.69	-1 bps	NM	
Belgium 10-Yr. Govt.	0.82	-1 bps	NM	NM	U.K. 10-Yr. Govt.	1.44	-5 bps	NM	
Source: Bloomberg									

Basis points (bps)



TED ELIRODEANI SOVEREIGNI VIELD DEREORMANICE CELE

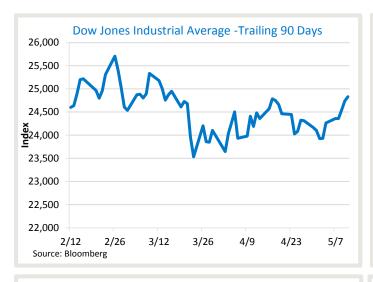
Equities

WORLD MARKET PERFORMANCE

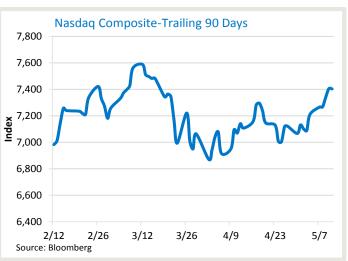
	Last	Change	% Chg.	YTD %
S&P 500	2,727.72	64.30	2.41%	2.02%
Dow Industrials	24,831.17	568.66	2.34%	0.45%
Nasdaq Composite	7,402.88	193.26	2.68%	7.24%
Russell Global	2,163.81	34.20	1.61%	0.9%
Russell Global EM	3,629.92	50.22	1.40%	-0.4%
S&P/TSX (Canada)	15,983.32	253.92	1.61%	-1.39%
Mexico IPC	46,728.92	-263.25	-0.56%	-5.32%
Brazil Bovespa	85,220.23	2102.20	2.53%	11.54%
Euro Stoxx 600	392.40	5.37	1.39%	0.83%
FTSE 100	7,724.55	157.41	2.08%	0.48%
IBEX 35 (Spain)	10,271.40	167.30	1.66%	2.27%

	Last	Change	% Chg.	YTD %
Swiss Market Index	8,993.51	89.68	1.01%	-4.14%
CAC 40 Index (France)	5,541.94	25.89	0.47%	4.32%
DAX Index (Germany)	13,001.24	181.64	1.42%	0.65%
Irish Overall Index	6,961.59	97.00	1.41%	-1.09%
Nikkei 225	22,758.48	285.70	1.27%	-0.03%
Hang Seng Index	31,122.06	1195.56	3.99%	4.02%
Shanghai Composite	3,163.26	72.23	2.34%	-4.35%
Kospi Index (S. Korea)	2,477.71	-9.54	-0.38%	0.41%
Taiwan Taiex Index	10,858.98	329.61	3.13%	2.03%
Tel Aviv 25 Index	1,472.19	3.28	0.22%	-2.49%
MOEX Index (Russia)	2,345.26	55.79	2.44%	11.16%

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









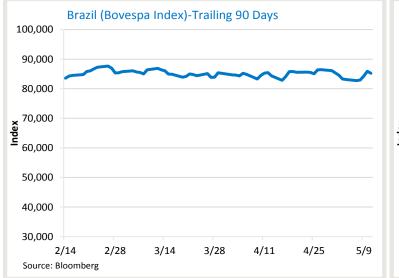
Equities – Emerging and Frontier Markets

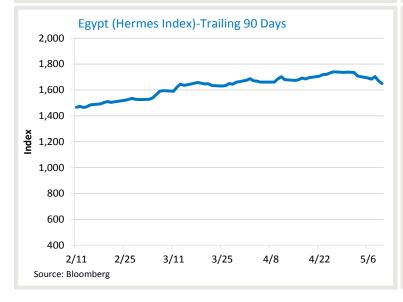
EMERGING AND FRONTIER MARKET PERFORMANCE

	Last	Change	% Chg.	YTD %
Mexico IPC	46,728.92	-263.25	-0.6%	-5.3%
Brazil (Bovespa Index)	85,220.23	2102.20	2.5%	11.5%
MOEX Index (Russia)	2,345.26	55.79	2.4%	11.2%
Czech Republic (Prague)	1,107.12	9.94	0.9%	2.7%
Turkey (Istanbul)	101,852.48	-746.70	-0.7%	-11.7%
Egypt (Hermes Index)	1,649.67	-58.60	-3.4%	14.8%
Kenya (Nairobi 20 Index)	3,602.33	-97.45	-2.6%	-3.0%
Saudi Arabia (TASI Index)	7,914.27	-193.20	-2.4%	9.5%
Lebanon (Beirut BLOM Index)	1,133.20	1.86	0.2%	-1.3%
Palestine	544.69	-1.26	-0.2%	-5.2%

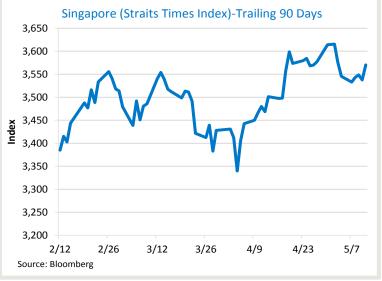
	Last	Change	% Chg.	YTD %
Hang Seng Index	31,122.06	1195.56	4.0%	4.0%
India (Sensex 30)	35,535.79	620.41	1.8%	4.3%
Malaysia (KLCI Index)	1,846.51	4.68	0.3%	2.8%
Singapore (Straits Times Index)	3,570.17	24.79	0.7%	4.9%
Thailand (SET Index)	1,765.93	-13.94	-0.8%	0.7%
Indonesia (Jakarta)	5,956.83	98.10	1.7%	-6.3%
Pakistan (Karachi KSE 100)	43,594.79	-942.12	-2.1%	7.7%
Vietnam (Ho Chi Minh)	1,044.85	18.05	1.8%	6.2%
Sri Lanka (Colombo)	6,478.87	-45.01	-0.7%	1.7%
Cambodia (Laos)	926.18	26.96	3.0%	-7.2%

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





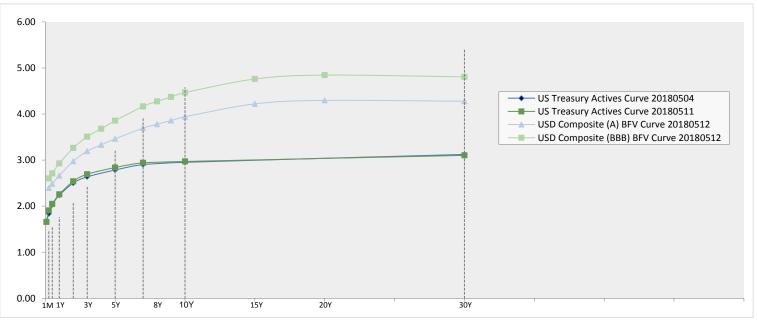




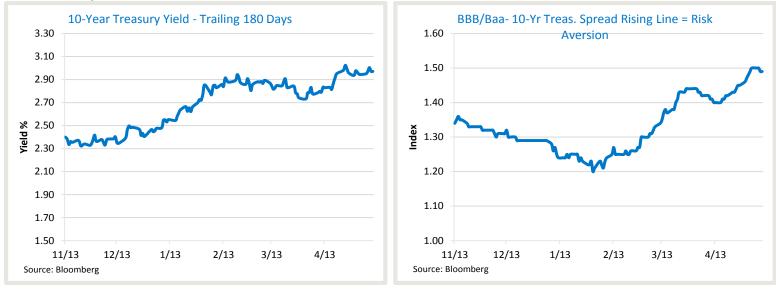
Interest Rates

SELECTED INTEREST RATES										
	Last	Change	% Chg.	YTD %		Last	Change	% Chg.	YTD %	
2-Yr. U.S. Treasury	2.54%	-1 bps	NM	NM	Prime Rate	4.75%	0.00	NM	NM	
5-Yr. U.S. Treasury	2.84%	6 bps	NM	NM	Fed Funds Rate	1.75%	0.00	NM	NM	
10-Yr. U.S. Treasury	2.97%	3 bps	NM	NM	Discount Rate	2.25%	0.00	NM	NM	
30-Yr. U.S. Treasury	3.11%	0 bps	NM	NM	LIBOR (3 Mo.)	2.36%	-1 bps	NM	NM	
German 10-Yr. Govt.	0.56%	-1 bps	NM	NM	Bond Buyer 40 Muni	3.77%	-2 bps	NM	NM	
France 10-Yr.	0.78%	0 bps	NM	NM	Bond Buyer 40 G.O.	3.88%	NA	NM	NM	
Italy 10-Yr.	1.87%	-7 bps	NM	NM	Bond Buyer 40 Rev.	4.37%	NA	NM	NM	
Fed 5-Yr Fwd BE Inf.	2.17%	-1 bps	NM	NM						
Source: Bloomberg										

Source: Bloomberg



Source: Bloomberg



Currencies

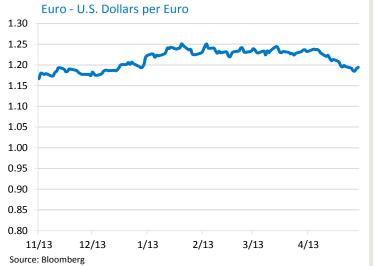
	Last	Change	% Chg.	YTD %				
Dollar Index	92.55	-0.031	-0.03%	0.45%				
Euro	1.19	-0.002	-0.14%	-0.52%				
Japanese Yen	109.31	0.190	-0.17%	3.09%				
British Pound	1.35	0.001	0.10%	0.23%				
Canadian Dollar	1.28	-0.006	0.43%	-1.72%				
Source: Bloomberg								

SELECTED CURRENCY PERFORMANCE

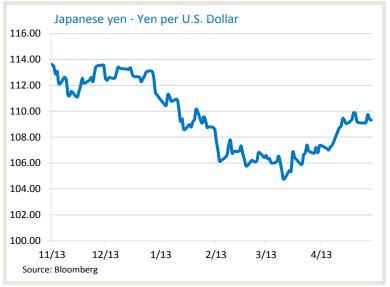
	Last	Change	% Chg.	YTD %
Chinese Yuan	6.33	-0.029	0.45%	2.73%
Swiss Franc	1.00	0.001	-0.07%	-2.64%
New Zealand Dollar	0.70	-0.005	-0.76%	-1.85%
Brazilian Real	3.60	0.072	-1.99%	-8.12%
Mexican Peso	19.42	0.151	-0.78%	1.22%

Source: Bloomberg









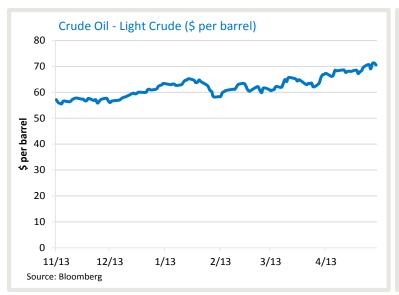
Commodities

SELECTED COMMODITY MARKET PERFORMANCE

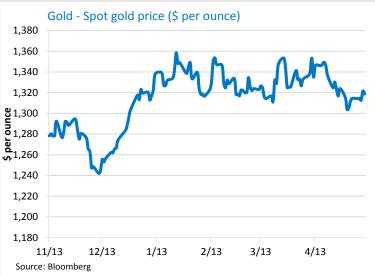
	Last	Change	% Chg.	YTD %
Bloomberg Comm. Idx.	90.04	0.05	0.05%	2.12%
Crude Oil	\$70.57	\$0.85	1.22%	17.50%
Natural Gas	\$2.81	\$0.10	3.84%	1.51%
Gasoline (\$/Gal.)	\$2.86	\$0.04	1.56%	14.92%
Heating Oil	222.00	6.70	3.11%	12.27%
Gold Spot	\$1,318.99	\$4.20	0.32%	1.22%
Silver Spot	\$16.67	\$0.14	0.82%	-1.60%

	Last	Change	% Chg.	YTD %
Platinum Spot	\$923.50	\$11.66	1.28%	-0.52%
Corn	396.50	-9.75	-2.40%	7.96%
Wheat	498.75	-27.50	-5.23%	10.04%
Soybeans	1,003.25	-33.50	-3.23%	2.03%
Sugar	11.22	-0.29	-2.52%	-25.40%
Orange Juice	169.35	7.45	4.60%	21.27%
Aluminum	2,335.00	-15.00	-0.64%	2.95%
Copper	6,917.00	91.00	1.33%	-4.55%

Source: Bloomberg; % change is based on price.







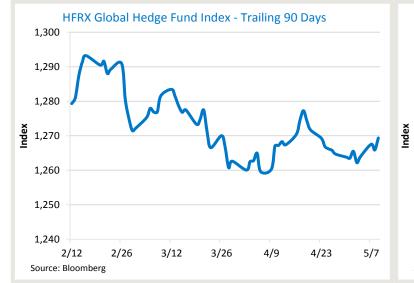


Alternative Investments

		SELECT	ED ALTERN	IATIVETN	VESTMENT INDEX PERFORMANCE				
	Last	Change	% Chg.	YTD %		Last	Change	% Chg.	YTD %
HFRX Global Hedge Fund Index	1270.07	6.11	0.48%	-0.43%	HFRX Distressed Index	1055.20	0.80	0.08%	-4.65%
HFRX Equity Market Neutral	1016.48	2.46	0.24%	1.20%	HFRX Merger Arbitrage Index	1818.60	5.56	0.31%	-1.86%
HFRX Equity Hedge Index	1286.62	7.78	0.61%	1.25%	HFRX Convertible Arbitrage Index	802.34	3.88	0.49%	0.77%
HFRX Event-Driven Index	1588.72	-6.65	-0.42%	-4.62%	HFRX Macro CTA Index	1162.68	19.83	1.74%	-0.10%
HFRX Absolute Return Index	1069.99	2.94	0.28%	0.63%	IQ Fixed Income Beta Arb Index	1482.06	3.27	0.22%	0.79%

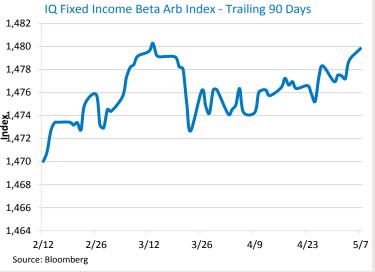
INIVESTMENT INDEV DEDEODMA

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

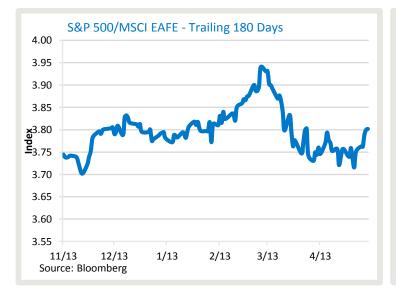


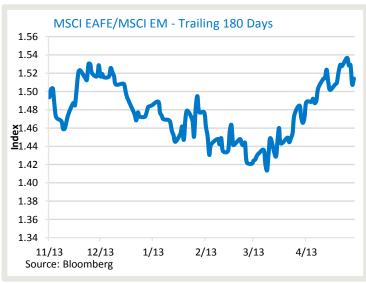




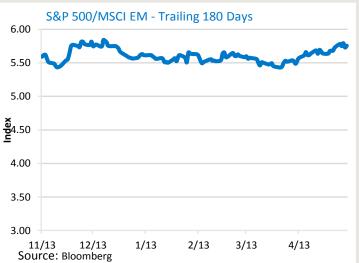


Portfolio Construction











Portfolio Construction (continued)



			2/22	3/1	3/8	3/15	3/22	3/29	4/5	4/12	4/19	4/26	5/3	5/10
Domestic Equity	Domestic	Large Cap (R200)	-0.96%	-0.89%	2.19%	0.29%	-4.06%	-0.22%	0.89%	0.19%	1.10%	-1.02%	-1.38%	3.69%
	Small Cap (R2000)	-0.47%	-1.48%	4.28%	0.30%	-2.08%	-0.94%	0.88%	0.93%	1.06%	-1.01%	-0.73%	3.70%	
Equity	Int'l.	MSCI EAFE	-0.04%	-1.72%	0.71%	0.54%	-1.56%	-0.68%	0.60%	1.15%	1.32%	-1.35%	-0.47%	0.84%
Equity	Equity	MSCI Em. Mkts.	-0.14%	-0.72%	0.25%	1.76%	-1.60%	-2.29%	-0 24%	0.89%	0.62%	-3.36%	-0.57%	1.64%
		BarCap Agg. (AGG)	-0.22%	0.25%	0.06%	0.18%	-0.14%	0.60%	-0 54%	0.09%	-0.45%	-0.41%	-0.06%	0.02%
Fixed Income	income	High Yield (JNK)	-0.25%	-0.44%	0.22%	0.14%	-0.58%	0.39%	-0 14%	0.95%	-0.14%	-0.55%	-0.56%	0.39%
Comm	nodities	Bloomberg Commodity Index	0.49%	-0.52%	0.70%	0.31%	-0.25%	0.42%	-0 34%	2.20%	0.98%	-0.63%	0.30%	0.98%
Alter	natives	Hedge Funds (HFRX Global)	-0.27%	-1.28%	0.43%	0.01%	-0.46%	-0.65%	0.18%	0.27%	0.46%	-0.66%	-0.29%	0.63%
Asset Allocation		60/40*	-0.44%	-0.64%	1.20%	0.34%	-1.82%	-0.15%	0.24%	0.45%	0.50%	-0.95%	-0.63%	1.71%
		48/32/20 (w/Alts.)**	-0.40%	-0.77%	1.04%	0.27%	-1.55%	-0.25%	0.22%	0.41%	0.49%	-0.89%	-0.56%	1.49%

WEEKLY ASSET CLASS PERFORMANCE (Prior 12 weeks ending Thursday)

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	•	Int'l. Developed	Emerging Markets	REITs	Comm.	Int. Bond	High Yield
Large Cap Core	1.00	0.97	1.05	1.00	0.97	1.02	0.94	0.95	0.94	1.06	1.15	0.92	0.91	1.33	1.16
Large Cap Growth	1.03	1.00	1.09	1.03	1.01	1.05	0.97	0.98	0.97	1.09	1.18	0.95	0.94	1.37	1.20
Large Cap Value	0.95	0.92	1.00	0.94	0.92	0.97	0.89	0.90	0.89	1.00	1.09	0.88	0.86	1.26	1.10
Mid Cap Core	1.01	0.97	1.06	1.00	0.98	1.03	0.95	0.95	0.94	1.06	1.15	0.93	0.92	1.33	1.17
Mid Cap Growth	1.03	0.99	1.08	1.02	1.00	1.05	0.97	0.97	0.97	1.08	1.18	0.95	0.93	1.36	1.19
Mid Cap Value	0.98	0.95	1.03	0.97	0.95	1.00	0.92	0.93	0.92	1.03	1.12	0.91	0.89	1.30	1.14
Small Cap Core	1.06	1.03	1.12	1.06	1.03	1.08	1.00	1.01	1.00	1.12	1.22	0.98	0.97	1.41	1.23
Small Cap Growth	1.05	1.02	1.11	1.05	1.03	1.08	0.99	1.00	0.99	1.11	1.21	0.97	0.96	1.40	1.22
Small Cap Value	1.06	1.03	1.12	1.06	1.04	1.09	1.00	1.01	1.00	1.12	1.22	0.98	0.97	1.41	1.23
Int'l. Developed	0.95	0.92	1.00	0.94	0.92	0.97	0.89	0.90	0.89	1.00	1.09	0.88	0.86	1.26	1.10
Emerging Markets	0.87	0.85	0.92	0.87	0.85	0.89	0.82	0.83	0.82	0.92	1.00	0.81	0.79	1.16	1.01
REITS	1.08	1.05	1.14	1.08	1.05	1.10	1.02	1.03	1.02	1.14	1.24	1.00	0.98	1.43	1.25
Commodities	1.10	1.06	1.16	1.09	1.07	1.12	1.03	1.04	1.03	1.16	1.26	1.02	1.00	1.46	1.27
Int. Bond	0.75	0.73	0.79	0.75	0.73	0.77	0.71	0.72	0.71	0.80	0.86	0.70	0.69	1.00	0.87
High Yield	0.86	0.84	0.91	0.86	0.84	0.88	0.81	0.82	0.81	0.91	0.99	0.80	0.78	1.14	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. An overnight indexed swap (OIS) is an interest rate swap where the periodic floating payment is generally based on a return calculated from a daily compound interest investment. The LIBOR-OIS spread is the difference between LIBOR and the OIS rates. The spread between the two rates is considered to be a measure of health of the banking system.

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 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 CoreLogic Case-Shiller 20-City Composite Home Price NSA Index seeks to measures the value of residential real estate in 20 major U.S. metropolitan areas: Atlanta, Boston, Charlotte, Chicago, Cleveland, Dallas, Denver, Detroit, Las Vegas, Los Angeles, Miami, Minneapolis, New York, Phoenix, Portland, San Diego, San Francisco, Seattle, Tampa and Washington, D.C. 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 U.S. Dollar Index (USDX, DXY, DX) is an index (or measure) of the value of the United States dollar relative to a basket of foreign currencies

FOR ONE-ON-ONE USE WITH A CLIENT'S FINANCIAL ADVISOR ONLY.

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# 1310619 © 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 <u>www.envestnet.com</u>.