

**[Posted: September 9, 2016—9:30 AM EDT]** Global equity markets are lower this morning. The EuroStoxx 50 is trading lower by 0.5% from the last close. In Asia, the MSCI Asia Apex 50 closed lower by 0.7% from the prior close. Chinese markets were also lower, with the Shanghai composite moving down by 0.6% and the Shenzhen index lower by 0.7%. U.S. equity futures are signaling a lower opening from the previous close.

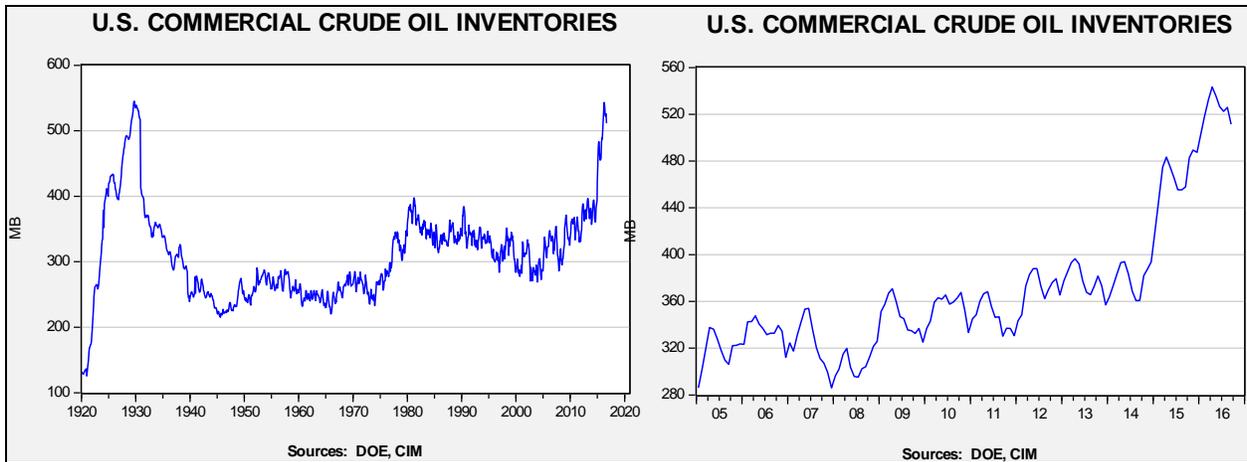
There were two big news items overnight. First, North Korea detonated a nuclear device overnight, its fifth such test. Early reports suggest the blast was in the 20 to 30 kiloton range, not a big bomb (by comparison, the standard American warhead, W-88, is 475 kilotons), but it does appear the North Koreans are mastering the nuclear cycle. We know they are working on moving from devices to warheads, and if they reach that level of development then they will have a capable nuclear deterrent. It also looks like the Kim regime believes such a deterrent is necessary.

Although there was general condemnation of the act, the nation with the greatest influence over the Kim regime, China, is less focused on North Korea and is most upset with South Korea for deploying anti-missile defense systems from the U.S. It is highly likely that North Korea decided to detonate this device because it felt that China would allow it.

The other interesting news item is that the Fed has recommended to Congress that financial holding companies be denied the ability to invest in non-financial companies. This rule was part of the initial Glass-Steagall Act and was clarified further in the 1956 Bank Holding Company Act. But, when deregulation ended these restrictions in the late 1990s, bank holding companies could engage in this activity. In addition, the Fed also recommended that banks no longer be able to directly hold physical commodities. This may affect commodity ETFs that hold physical products instead of futures contracts. This wouldn't mean these products will go away, but that banks couldn't sponsor them.

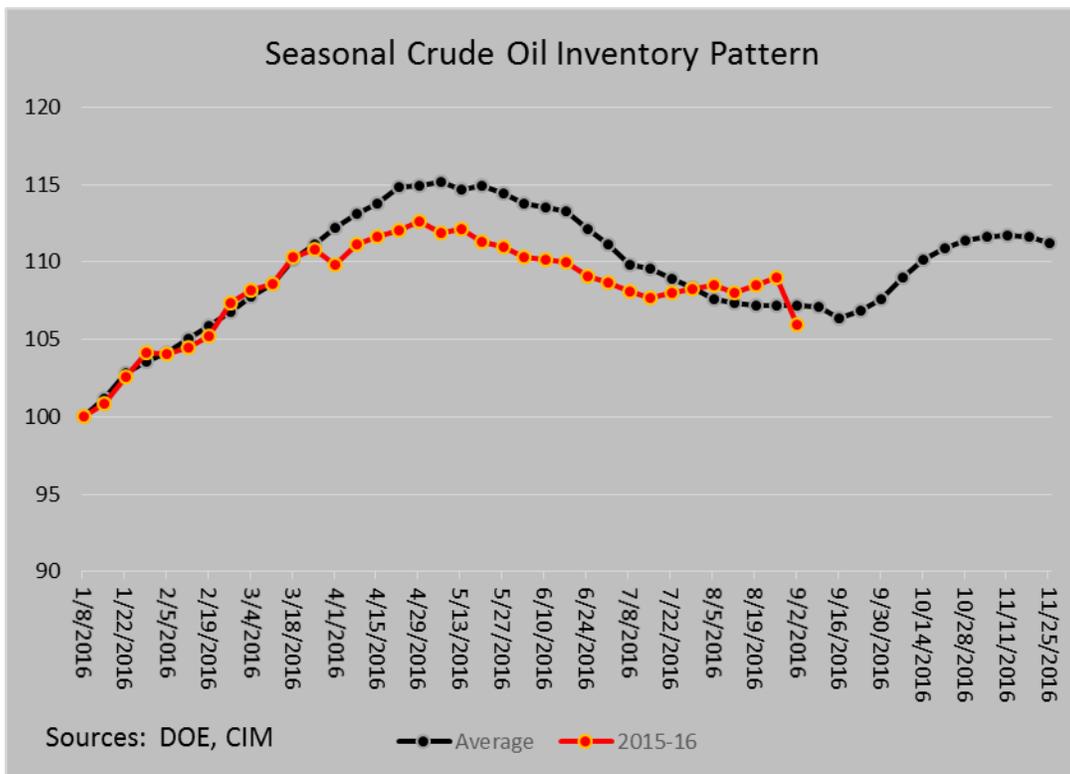
This action represents a further step in re-regulating the financial system. Although these merchant bank activities have become less important since the financial crisis, these new rules will prevent banks from returning to them if they become lucrative again. The action also sends a signal that regulators are steadily returning banks to a more traditional role, which will probably make them less risky but also reduce their profitability.

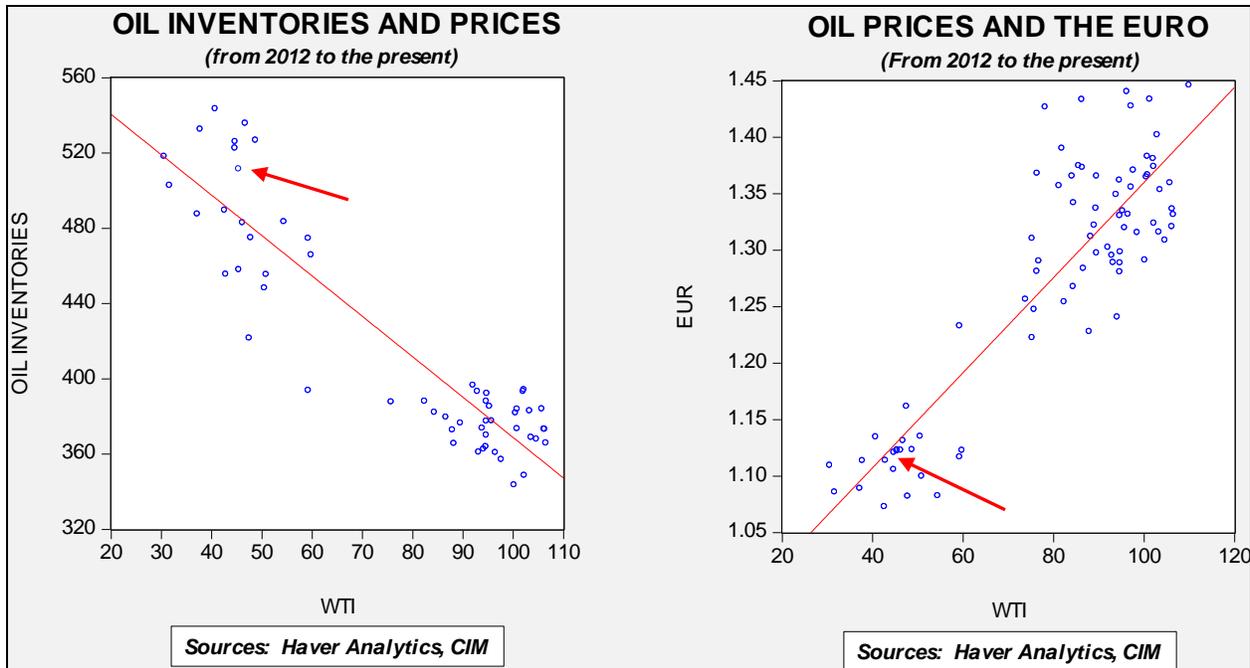
U.S. crude oil inventories plunged 14.5 mb compared to market expectations of a 0.6 mb build.



This chart shows current crude oil inventories, both over the long term and the last decade. The drop this week was huge, but likely temporary. Imports last week fell by 1.8 mbpd due to disruptions caused by tropical storms. Usually, importers furiously rebuild stocks in the weeks following such an event. Thus, over the next two weeks, we would expect much of this 14.5 mb draw to be replaced.

The unexpected drop in storage has put inventories below the normal seasonal trend. Again, we would expect that drop to be reversed in the coming weeks.





Based on inventories alone, oil prices are profoundly overvalued with the fair value price of \$40.87. Meanwhile, the EUR/WTI model generates a fair value of \$49.22. Together (which is a more sound methodology), fair value is \$44.55, meaning that current prices are a bit rich. Although the market has put great hope on an OPEC deal next month, the plan looks to be more like jawboning the market higher. Recent comments from various OPEC members suggest that they would like stable prices, which we could argue they are getting, but none of the major producers seem ready to actually cut production at this point. In fact, there are reports that the cartel wants prices no higher than \$60 per barrel, fearful that prices above that level will spur a rise in shale production in the U.S. For most of the history of oil prices, stability has been the norm, which is common with cartel markets. Thus, we would expect the Saudis to gravitate toward a \$50 price with a range of \$5 per barrel around that point. Using the aforementioned combined model, and assuming a €/€ of 1.1300, a U.S. crude inventory level of 482 mb would put fair value just above \$50 per barrel. Current inventories are 511.4 mb, or about 29 mb above this level.

In fact, the most bullish scenario for oil may have little to do with oil stockpiles and more to do with the dollar. Yesterday, ECB President Draghi offered no new stimulus and the EUR rallied. Assuming no change in U.S. stockpiles, a €/€ of 1.1556 would generate a fair value of \$50. Our calculation of purchasing power parity for the exchange rate is around 1.3000; again, assuming stable inventories, the fair value for oil at that exchange rate is \$73.35 per barrel. ***If the ECB is finished with policy stimulus and the FOMC hits its terminal rate with only a couple of rate hikes, a weaker dollar could develop. This probably won't occur this year, but might be a 2017 event.*** On the other hand, there are some major political concerns in Europe. Brexit still has to be executed, Italy has a key referendum next month, Spain will likely require new elections and Portugal may need a bailout. These worries will likely offset, at least for 2016, any hawkishness from the ECB.

## U.S. Economic Releases

There are no releases scheduled before we go to print. The table below shows the releases and Fed speakers scheduled for the rest of the day.

Economic releases							
EDT	Indicator				Expected	Prior	Rating
10:00	Wholesale inventories	m/m	Jul		0.1%	0.0%	*
10:00	Wholesale trade sales	m/m	Jul		0.2%	1.9%	*
Fed speakers or events							
EST	Speaker or event	District or position					
8:15	Rosengren	Boston FRB President					
9:30	Kaplan	Dallas FRB President					
8:15	Kaplan	Dallas FRB President					

## Foreign Economic News

We monitor numerous global economic indicators on a continuous basis. The most significant international news that was released overnight is outlined below. Not all releases are equally significant, thus we have created a star rating to convey to our readers the importance of the various indicators. The rating column below is a three-star scale of importance, with one star being the least important and three stars being the most important. We note that these ratings do change over time as economic circumstances change. Additionally, for ease of reading, we have also color-coded the market impact section, which indicates the effect on the foreign market. Red indicates a concerning development, yellow indicates an emerging trend that we are following closely for possible complications and green indicates neutral conditions. We will add a paragraph below if any development merits further explanation.

Country	Indicator			Current	Prior	Expected	Rating	Market Impact
<b>ASIA-PACIFIC</b>								
China	CPI	y/y	Aug	1.3%	1.8%	1.7%	***	Equity neutral and bond bearish
	PPI	y/y	Aug	-0.8%	-1.7%	-0.9%	**	Equity and bond neutral
Japan	Money stock M3	y/y	Aug	2.8%	2.9%	2.9%	**	Equity and bond neutral
<b>EUROPE</b>								
France	Industrial production	y/y	Jul	-0.1%	-1.1%	1.0%	***	Equity bearish, bond bullish
Germany	Trade balance	m/m	Jul	€19.5 bn	€24.7 bn	€23.7 bn	**	Equity bearish, bond bullish
	Current account balance	m/m	Jul	€18.6 bn	€26.3 bn	€24.5 bn	**	Equity bearish, bond bullish
	Exports	m/m	Jul	-2.6%	0.2%	0.4%	**	Equity bearish, bond bullish
	Imports	m/m	Jul	-0.7%	1.1%	0.5%	**	Equity bearish, bond bullish
U.K.	Trade balance	m/m	Jul	-£4.5 bn	-£5.6 bn	-£4.2 bn	**	Equity and bond neutral
Switzerland	Unemployment rate	m/m	Aug	3.4%	3.3%	3.3%	***	Equity bearish, bond bearish

## Financial Markets

The table below highlights some of the indicators that we follow on a daily basis. Again, the color coding is similar to the foreign news description above. We will add a paragraph below if a certain move merits further explanation.

	Today	Prior	Change	Trend
3-mo Libor yield (bps)	83	84	-1	Up
3-mo T-bill yield (bps)	34	34	0	Neutral
TED spread (bps)	50	50	0	Neutral
U.S. Libor/OIS spread (bps)	45	45	0	Neutral
10-yr T-note (%)	1.64	1.60	0.04	Widening
Euribor/OIS spread (bps)	-30	-30	0	Neutral
EUR/USD 3-mo swap (bps)	28	28	0	Neutral
<b>Currencies</b>	<b>Direction</b>			
dollar	up			Up
euro	down			Neutral
yen	down			Down
pound	up			Down
franc	down			Neutral

## Commodity Markets

The commodity section below shows some of the commodity prices and their change from the prior trading day, with commentary on the cause of the change highlighted in the last column.

	Price	Prior	Change	Explanation
<b>Energy Markets</b>				
Brent	\$49.18	\$49.99	-1.62%	The large inventory decline is likely an anomaly caused by tropical activity that disrupted offshore production and imports
WTI	\$46.93	\$47.62	-1.45%	
Natural Gas	\$2.81	\$2.81	0.00%	
Crack Spread	\$12.32	\$12.79	-3.68%	
12-mo strip crack	\$13.29	\$13.51	-1.65%	
Ethanol rack	\$1.61	\$1.60	0.14%	
<b>Metals</b>				
Gold	\$1,336.42	\$1,338.30	-0.14%	Higher dollar
Silver	\$19.50	\$19.62	-0.59%	
Copper contract	\$209.10	\$210.00	-0.43%	Chinese copper imports decline
<b>Grains</b>				
Corn contract	\$ 336.50	\$ 338.50	-0.59%	
Wheat contract	\$ 403.25	\$ 406.00	-0.68%	
Soybeans contract	\$ 976.25	\$ 976.75	-0.05%	
<b>Shipping</b>				
Baltic Dry Freight	792	773	19	
<b>DOE inventory report</b>				
	Actual	Expected	Difference	
Crude (mb)	-14.5	0.6	-15.1	
Gasoline (mb)	-4.2	-0.7	-3.5	
Distillates (mb)	3.4	1.2	2.2	
Refinery run rates (%)	0.9%	-0.3%	1.2%	
Natural gas (bcf)	36.0	43.0	-7.0	

## Weather

The 6-10 and 8-14 day forecasts are calling for warmer conditions for the eastern half of the country and the West Coast. Precipitation is forecast for the eastern two-thirds of the country. A small low pressure area has formed off the coast of Cuba. This development has a low chance of

becoming a cyclone over the next two days. Two more small low pressure areas are located off the coast of the Leeward Islands and in the mid-Atlantic. Both have low chances of becoming cyclones.

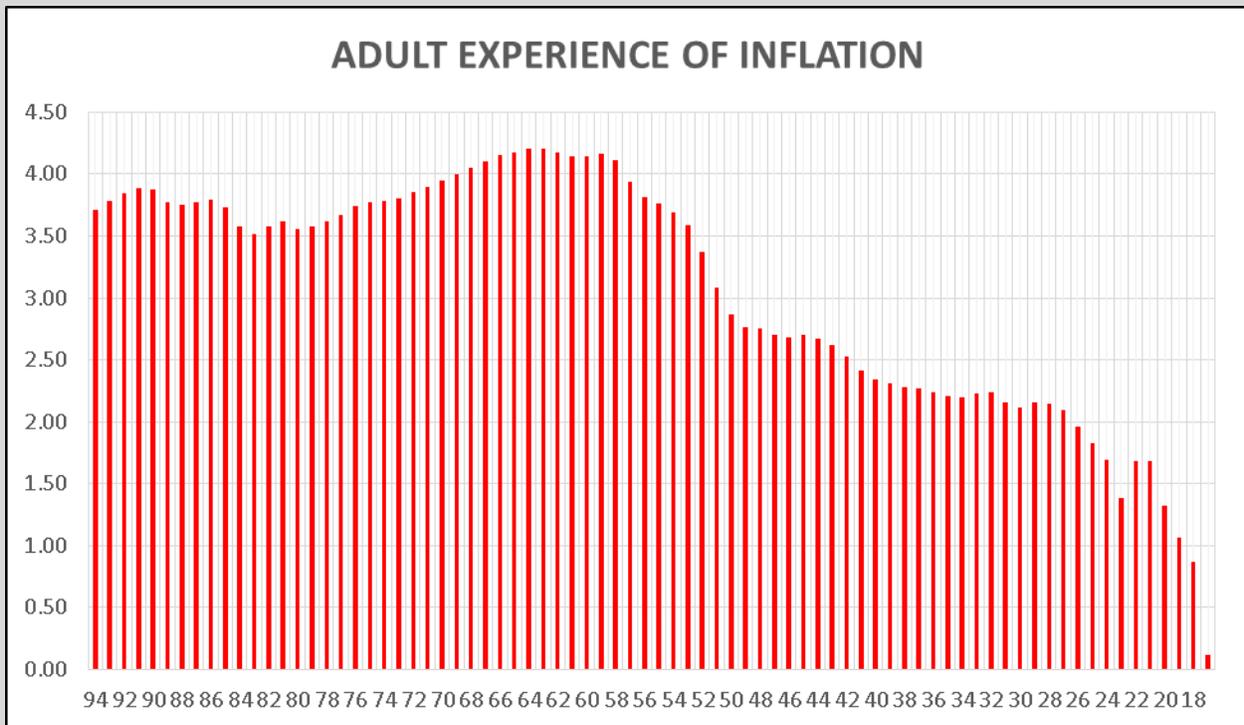
## Asset Allocation Weekly Comment

*Confluence Investment Management offers various asset allocation products which are managed using “top down,” or macro, analysis. We report asset allocation thoughts on a weekly basis, updating this section every Friday.*

September 9, 2016

Milton Friedman postulated that inflation expectations are established through a lifetime of experience. To some extent, the issue of inflation expectations is similar to other market gauges in our lives, such as the level of financial markets, interest rates and home prices. What we have experienced is considered as “normal” in our lives. Behavioral economists call this anchoring; it’s where we believe levels “should be” based on our experience.

To get a feeling for this, we calculated the adult experience of inflation, looking at ages 16 to 94.



(Sources: Haver Analytics, CIM)

We have presented the “lifetime” experience of inflation on several occasions in the past. However, on this chart, we omit the data related to the first 16 years of an individual’s life on the assumption that children are less aware of inflation than adults. The difference is interesting. Essentially, Americans with the highest experience of inflation are in their late 50s and early 60s. By age 50, which is 34 years of inflation experience, the average inflation experience falls below 3%. And, by age 26, the average falls under 2%.

It makes sense that current policymakers are concerned about inflation. Vice Chairman Stanley Fischer is 73, while the youngest member of the FOMC, Neil Kashkari, is 43.<sup>1</sup> The allocation of hawks and doves doesn't seem to follow an age pattern. In fact, the most important factor to determine policy stance is permanent voting members versus rotating voter members. The NY FRB president and the five governors, all permanent voting members, are moderates to doves. All the hawks are other regional FRB presidents who are rotating voters. But, the fact that the "dots" chart mostly shows high future rate levels does suggest that nearly all the FOMC members expect some degree of normalization. This is consistent with the adult inflation experience for the ages of the members.

The other factor this chart highlights is the expectations of investors. Older investors are likely more concerned about inflation because they have experienced it. As time wears on, the odds of inflation-inducing policy become lower because fears of it should decline. However, we would not expect this to become an issue for at least another decade. Thus, fears of rising long-term rates and duration risk are probably overestimated, for now.

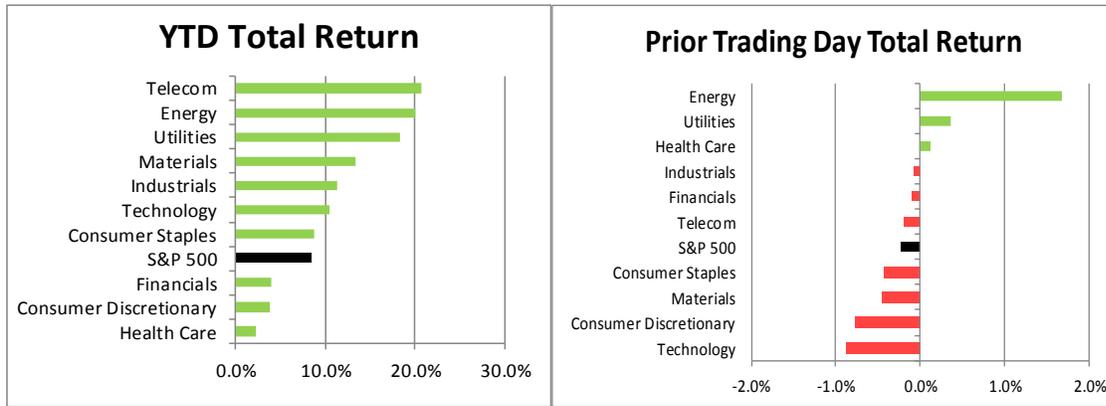
*Past performance is no guarantee of future results. Information provided in this report is for educational and illustrative purposes only and should not be construed as individualized investment advice or a recommendation. The investment or strategy discussed may not be suitable for all investors. Investors must make their own decisions based on their specific investment objectives and financial circumstances. Opinions expressed are current as of the date shown and are subject to change.*

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<sup>1</sup> The current age breakdown for FOMC voting and alternate members is as follows: ages 40-44: 1 member, ages 45-49: 0 members, ages 50-54: 3 members, ages 55-59: 5 members, ages 60-64: 4 members, ages 65-69: 0 members, ages 70-74: 2 members.

**Data Section**

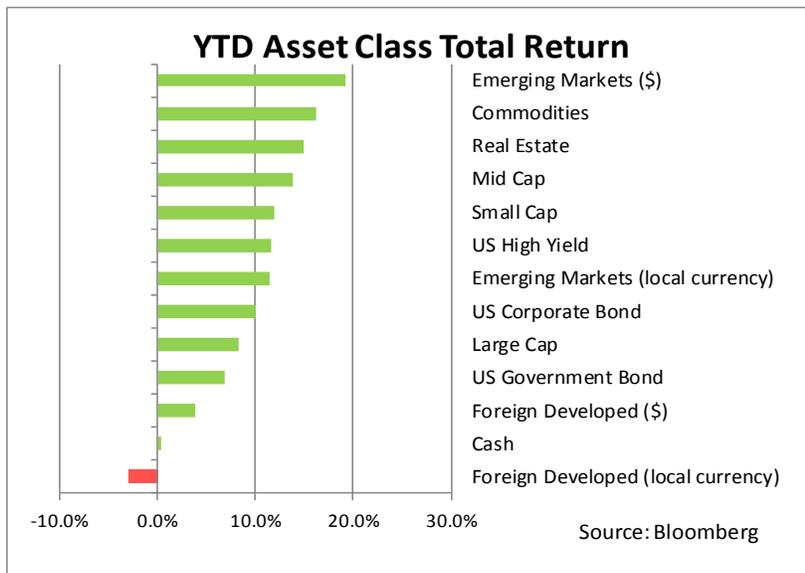
**U.S. Equity Markets – (as of 9/8/2016 close)**



(Source: Bloomberg)

These S&P 500 and sector return charts are designed to provide the reader with an easy overview of the year-to-date and prior trading day total return. The sectors are ranked by total return, with green indicating positive and red indicating negative return, along with the overall S&P 500 in black.

**Asset Class Performance – (as of 9/8/2016 close)**



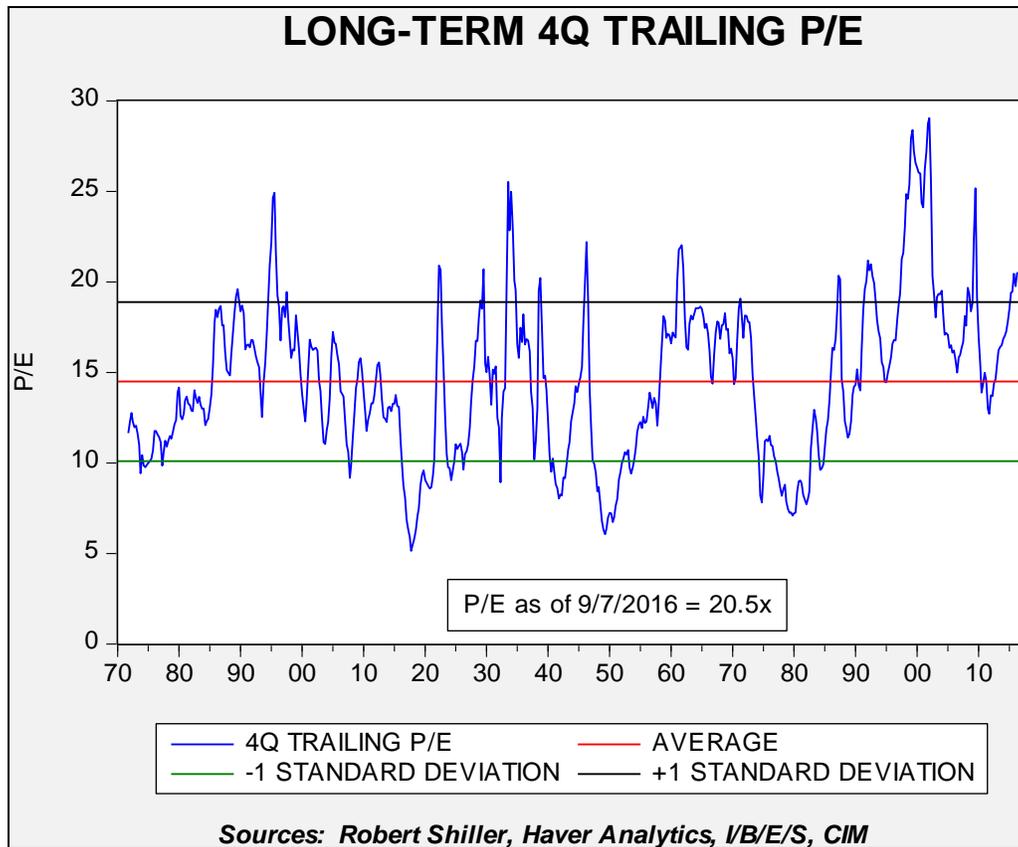
This chart shows the year-to-date returns for various asset classes, updated daily. The asset classes are ranked by total return (including dividends), with green indicating positive and red indicating negative returns from the beginning of the year, as of prior close.

Asset classes are defined as follows: Large Cap (S&P 500 Index), Mid Cap (S&P 400 Index), Small Cap (Russell 2000 Index), Foreign Developed (MSCI EAFE (USD

and local currency) Index), Real Estate (FTSE NAREIT Index), Emerging Markets (MSCI Emerging Markets (USD and local currency) Index), Cash (iShares Short Treasury Bond ETF), U.S. Corporate Bond (iShares iBoxx \$ Investment Grade Corporate Bond ETF), U.S. Government Bond (iShares 7-10 Year Treasury Bond ETF), U.S. High Yield (iShares iBoxx \$ High Yield Corporate Bond ETF), Commodities (Dow Jones-UBS Commodity Index).

## P/E Update

September 8, 2016



Based on our methodology,<sup>2</sup> the current P/E is 20.5x, down 0.5x from last week. A rise in Q2 S&P earnings led to the improvement in the P/E.

*This report was prepared by Bill O'Grady and Kaisa Stucke of Confluence Investment Management LLC and reflects the current opinion of the authors. It is based upon sources and data believed to be accurate and reliable. Opinions and forward looking statements expressed are subject to change. This is not a solicitation or an offer to buy or sell any security.*

<sup>2</sup> The above chart offers a running snapshot of the S&P 500 P/E in a long-term historical context. We are using a specific measurement process, similar to *Value Line*, which combines earnings estimates and actual data. We use an adjusted operating earnings number going back to 1870 (we adjust as-reported earnings to operating earnings through a regression process until 1988), and actual operating earnings after 1988. For the current and last quarter, we use the I/B/E/S estimates which are updated regularly throughout the quarter; currently, the four-quarter earnings sum includes two actual (Q4 and Q1) and two estimate (Q2 and Q3). We take the S&P average for the quarter and divide by the rolling four-quarter sum of earnings to calculate the P/E. This methodology isn't perfect (it will tend to inflate the P/E on a trailing basis and deflate it on a forward basis), but it will also smooth the data and avoid P/E volatility caused by unusual market activity (through the average price process). Why this process? Given the constraints of the long-term data series, this is the best way to create a very long-term dataset for P/E ratios.