

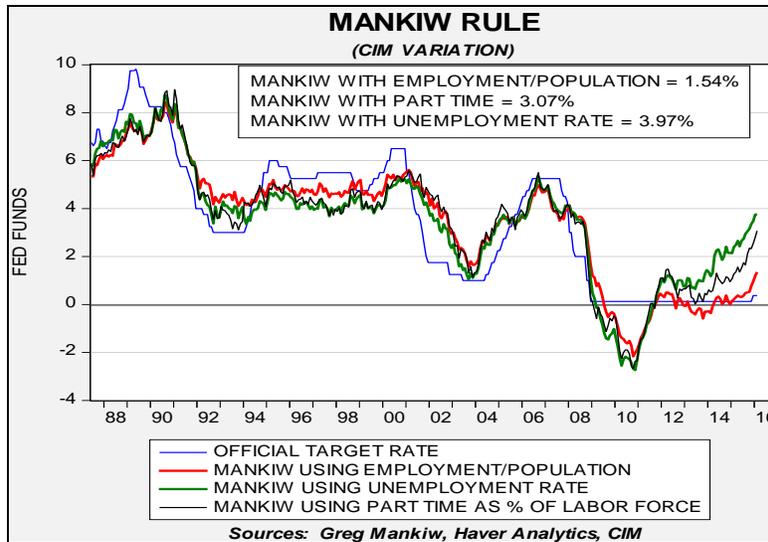
**[Posted: March 16, 2016—9:30 AM EDT]** Global equity markets are mixed this morning. The EuroStoxx 50 is trading lower by 0.3% from the last close. In Asia, the MSCI Asia Apex 50 traded sideways from the prior close. Chinese markets are actually mixed, with the Shanghai composite up 0.2% and the Shenzhen index down 1.0%. U.S. equity futures are signaling a lower opening from the previous close. With 98.6% of the S&P 500 companies having reported, the Q4 adjusted earnings stand at \$29.81, higher than the \$28.95 forecast. Of the 493 companies that have reported, 69.3% beat expectations while 19.5% fell short.

It's FOMC Day! Although no change in rates is expected, we will be paying close attention to the data forecasts and the dots chart forecast of future policy rates. As we note in the Mankiw model discussion below, unless one has concluded that the Phillips Curve is completely irrelevant, the Fed is getting behind the curve and current expectations of steady policy are becoming very difficult to justify. There are two key issues to watch for today:

1. Will Yellen lay the groundwork for a rate hike in June?
2. How many policy dissenters will emerge today?

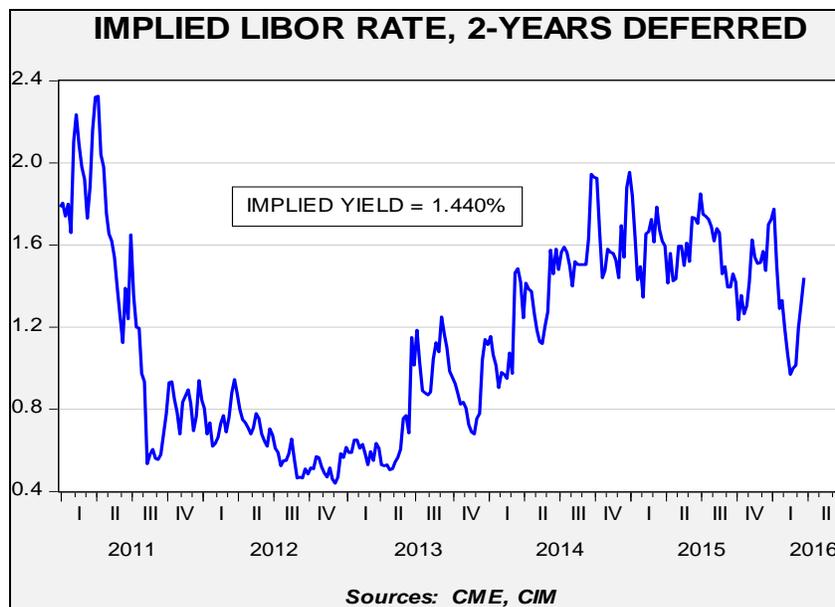
On question #1, we think the inflation data will give a hawkish tone to the press conference and maybe even the data. On the second question, a single dissenter (KC FRB President George) would, interestingly enough, be a good sign as it would suggest she didn't come away from the discussion believing the Fed will certainly lift rates in April or June. If there are no dissents, it probably means that a rate hike is being teed up and George was satisfied to wait in anticipation that rates will rise soon enough.

With today's inflation data, we can update our versions of the Mankiw rule model. This model attempts to determine the neutral rate for fed funds, which is a rate that is neither accommodative nor stimulative. Mankiw's model is a variation of the Taylor Rule. The latter measures the neutral rate by core CPI and the difference between GDP and potential GDP, which is an estimate of slack in the economy. Potential GDP cannot be directly observed, only estimated. To overcome this problem, Mankiw used the unemployment rate as a proxy for economic slack. We have created three versions of the rule, one that follows the original construction by using the unemployment rate as a measure of slack, a second that uses the employment/population ratio and a third using involuntary part-time workers as a percentage of the total labor force.



Using the unemployment rate, the neutral rate is now up to 3.97%, suggesting the FOMC is well behind the curve. Using the employment/population ratio, the neutral rate is 1.54%, indicating that, even using the most dovish variation, the FOMC needs a rate hike of at least 100 bps to achieve neutral policy. Finally, using involuntary part-time employment, the neutral rate is 3.07%. The rise in the core CPI rate to 2.30% and the improving labor market are lifting all the variations' target rates and support policy tightening. Although we don't expect the FOMC to move today, the rise in core CPI will raise concerns among the hawks on the board that the central bank needs to adjust rates higher.

The inflation data is leading to a rebound in short-term interest rates, which is flattening the yield curve. We note the implied three-month LIBOR rate, two-years deferred, has jumped recently, rising back into the earlier range of interest rates.



This rate, which had declined to 86 bps in February, is up just under 60 bps in five weeks. Simply put, fears of tightening monetary policy, which had recently evaporated, are starting to return. If this continues, a stronger dollar is likely along with weaker commodity prices and overall equities.

The National People's Congress meetings ended today in China. The key points are that the Xi government is planning to expand fiscal stimulation and it will be "front loaded," meaning that most of the spending will occur in the short run. Monetary policy will also remain accommodative. Officials downplayed the need for CNY devaluation and seemed unconcerned about capital flight. The bottom line is that this news is bullish for emerging market stocks and commodities in the short run, but this policy mix will most likely lead to an increase in debt in the long run. We think China has the capacity to expand its debt load for now, but we expect the bad debt problem to increase over time and become a much bigger problem in a few years. So, good news now, bad news later.

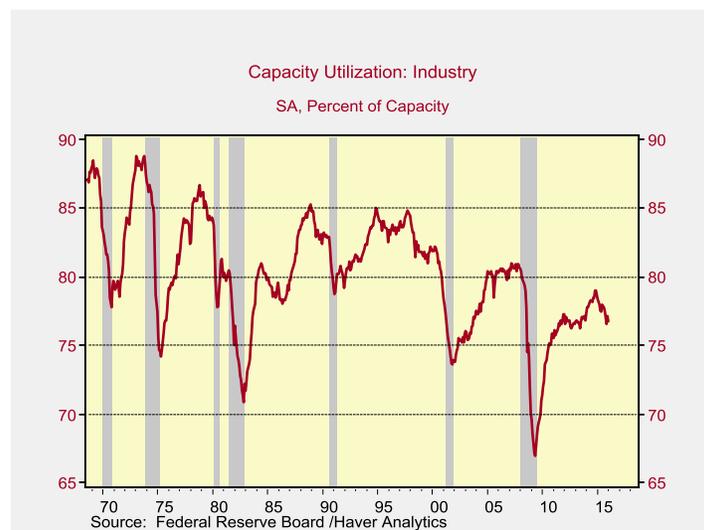
Oil prices are higher this morning, supported by a smaller than expected build in the API data. We get the official data at 10:30 EDT today. In general, the API data tends to be less reliable than the government report, so until we see the DOE data confirm the lower than expected build, the price recovery from this morning could be at risk. However, we note that OPEC producers, along with Russia, will meet next month in a bid to freeze output and support prices. The group has set April 17 as its meeting date. This news may offer price support as the seasonal build season concludes later next month. We have our doubts that Iran will agree to a production freeze and it isn't clear whether this step will be enough to rebalance markets. Nevertheless, we expect that the recent lows will hold and that we are likely creating a price range that should hold for the foreseeable future.

### **U.S. Economic Releases**

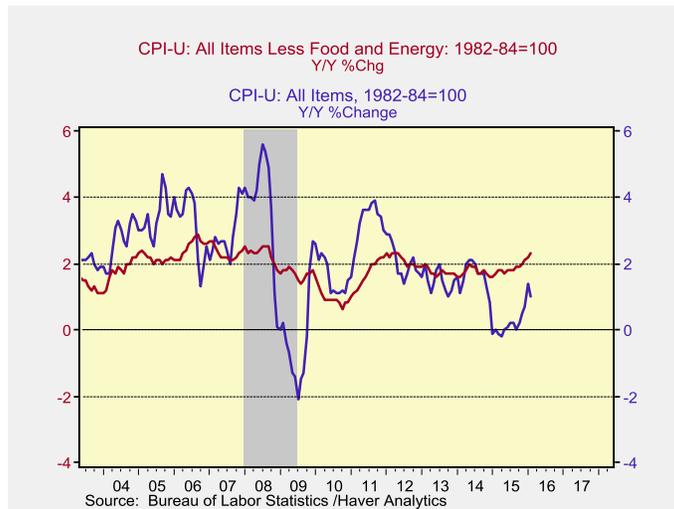
Industrial production fell 0.5% in February, weaker than the 0.3% decline forecast. Most of the weakness came from lower utility production as February temperatures were unusually high. Motor vehicles/parts, materials and consumer goods production were also weak. At the same time, factory production increased for the second consecutive month, rising 0.2%, boosted by demand for business equipment and machinery.



Capacity utilization fell to 76.7% from 77.1% the month before, also weaker than the 76.9% forecast.

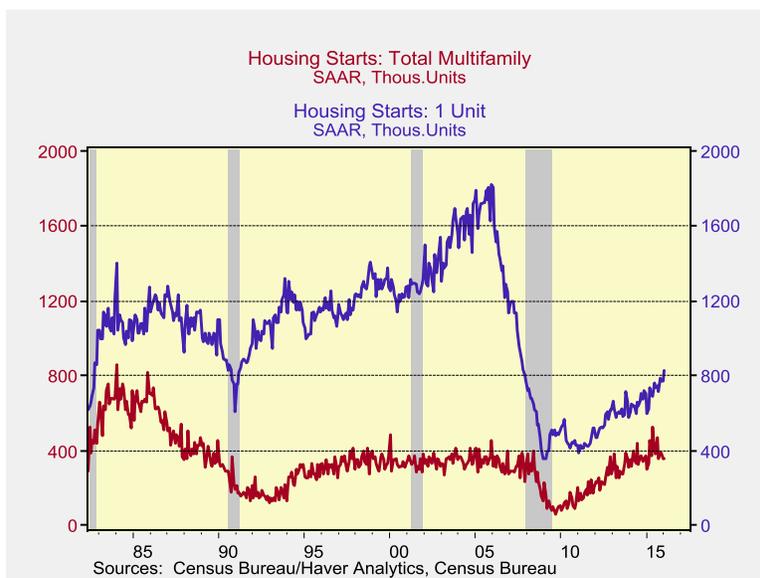


Consumer prices came in on forecast, falling 0.2% from the month before. At the same time, core consumer prices came in higher than forecast, rising 0.3% compared to the 0.2% increase forecast. Energy prices fell 6.0%, but outside of energy-related prices and commodities, in general, consumer price increases were pretty broad-based. The highest price increases were seen in apparel and medical care.



The chart above shows the annual change in headline and core prices. Headline prices are up 1.0% annually, more than the 0.9% forecast, while core prices rose 2.3%, also more than the 2.2% increase expected.

Housing starts were better than forecast in February, rising 5.2% compared to the 4.6% increase forecast. At the same time, permits were weaker than forecast, falling 3.1% compared to the 0.2% decline forecast.



The chart above shows the level of single-family and multi-family starts. Since the end of the recession, multi-family starts have led the recovery. However, this trend has been reversed over the past year, with single-family starts showing consistent improvement. As the labor market heals, we may see this trend continue as household formations pick up.



The chart above shows the same data over the past eight years. Since the end of the recession, builders have not built as many starter homes due to weak household formation. As household formations recover, we should see a larger number of single-family starter homes built.

Mortgage applications fell 3.3% for the most recent reporting week, with purchases up 0.3% and refinancing down 5.6%. Refinancing activity has suffered due to a recent rise in rates, with the 30-year mortgage rate rising 5 bps to 3.94%.

Real average weekly earnings rose 0.6% annually, slowing its pace from 1.1% the week before.

The chart below shows the economic releases scheduled for the rest of the day.

Economic releases				
Fed Speakers and Events				
EST	Speaker or event	District or position		
2:00	FOMC rate decision			
2:30	Yellen speaks at the FOMC press conference	Fed chair		

## 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, with red indicating a concerning development, yellow indicating an emerging trend that we are following closely for possible complications and green indicating 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>								
Australia	LEI	m/m	Feb	-0.2%	0.1%		*	Equity bearish, bond bullish
Japan	Machine tool orders	y/y	Feb	-22.5%	-22.6%		*	Equity bearish, bond bullish
<b>EUROPE</b>								
Eurozone	New car registrations	y/y	Feb	14.3%	6.2%		*	Equity bullish, bond bearish
U.K.	Unemployment rate	m/m	Jan	5.1%	5.1%	5.1%	***	Equity and bond neutral

## 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
<b>3-mo Libor yield (bps)</b>	64	63	1	Up
<b>3-mo T-bill yield (bps)</b>	33	33	0	Neutral
<b>TED spread (bps)</b>	31	31	0	Neutral
<b>U.S. Libor/OIS spread (bps)</b>	41	41	0	Neutral
<b>10-yr T-note (%)</b>	1.96	1.97	-0.01	Narrowing
<b>Euribor/OIS spread (bps)</b>	-23	-23	0	Neutral
<b>EUR/USD 3-mo swap (bps)</b>	24	23	1	Up
<b>Currencies</b>	<b>Direction</b>			
dollar	up			Rising
euro	down			Falling
yen	down			Falling
franc	down			Falling

## 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	Cause/ Trend
<b>Energy markets</b>				
Brent	\$ 39.49	\$ 38.74	1.94%	OPEC producers are planning a meeting for next month
WTI	\$ 37.09	\$ 36.34	2.06%	
Natural gas	\$ 1.86	\$ 1.85	0.32%	
Crack spread	\$ 19.38	\$ 19.58	-1.01%	
12-mo strip crack	\$ 13.99	\$ 14.17	-1.29%	
Ethanol rack	\$ 1.52	\$ 1.52	0.04%	
<b>Metals</b>				
Gold	\$ 1,233.62	\$ 1,232.38	0.10%	Awaiting Fed rate decision and outlook
Silver	\$ 15.29	\$ 15.28	0.09%	
Copper contract	\$ 223.45	\$ 223.35	0.04%	Awaiting Fed rate decision and outlook
<b>Grains</b>				
Corn contract	\$ 366.75	\$ 368.50	-0.47%	
Wheat contract	\$ 474.75	\$ 477.25	-0.52%	Oversupply concerns
Soybeans contract	\$ 887.75	\$ 892.00	-0.48%	Ample supplies
<b>Shipping</b>				
Baltic Dry Freight	396	393	3	
<b>DOE inventory report expectations of weekly change</b>				
	Actual	Expected	Difference	
Crude (mb)		3.2		
Gasoline (mb)		-2.5		
Distillates (mb)		-0.6		
Refinery run rates (%)		0.0%		
Natural gas (bcf)		-7.0		

## Weather

The 6-10 and 8-14 day forecasts are calling for warmer than normal temperatures for the majority of the country. Precipitation is forecast for the northern regions.

## Weekly Asset Allocation Commentary

*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.*

March 11, 2016

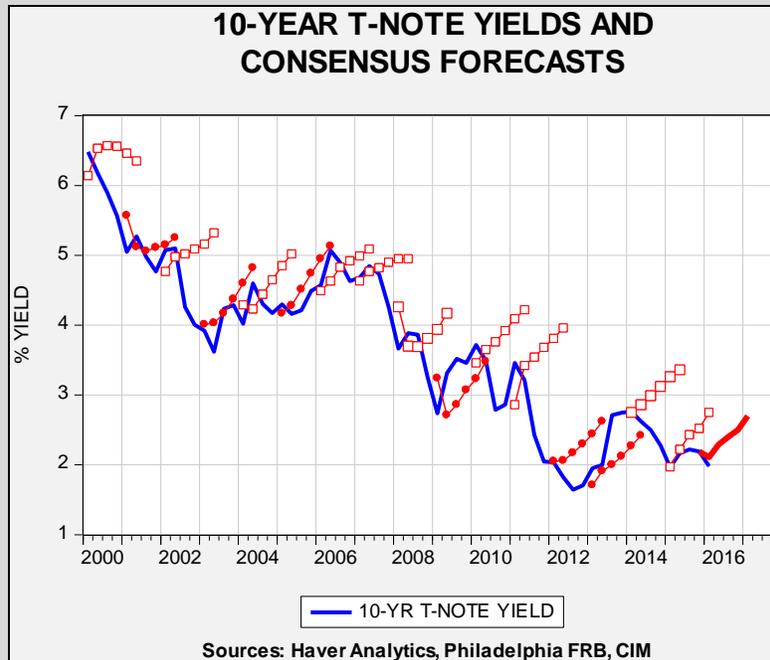
One of the most surprising markets since the turn of the century has been long duration Treasuries. After a long bull market in bonds that ran from the early 1980s into the late 1990s, the general belief was that valuations were unattractive and it was difficult to see how further gains were possible.



This chart shows the long-term Treasury yield composite. It peaked in Q3 1981 and has steadily declined since then. Long duration yields are mostly a function of the rate of fed funds and inflation expectations. By 2000, it was generally felt that inflation wouldn't fall much further since policy rates were already rather low. However, long duration rates continued to decline after 2000. Inflation remained contained and foreign inflows, prompted by current account recycling in the emerging market economies,<sup>1</sup> kept buying strong for bonds. Since the end of the 2008 financial crisis, economic growth has remained lackluster and monetary policy has been historically accommodative. With no signs of inflation on the horizon, long-dated bonds have seen low yields persist.

Despite these conditions, the consensus forecast for yields has mostly been calling for a bear market in bonds.

<sup>1</sup> Emerging economies have historically run current account surpluses due to export-led growth. A dollar-denominated current account surplus usually gets reinvested in dollar-denominated low-risk assets, such as Treasuries and other bonds, which supports the demand for these instruments.



This chart shows the 10-year T-note yield along with the consensus forecast for that yield over the next six quarters from the Philadelphia Federal Reserve Bank’s Professional Forecasters’ survey, starting in the year 2000. Each forecast line is for the first quarter of the given year. The ones that “missed” are shown as open blocks, while the ones that looked mostly “right” are solid circles. There have been 16 forecasts; we judge that 10 have been wrong. Actually, what is remarkable isn’t that the forecasts have mostly missed, but that all the misses have been in the same direction, in forecasting much higher rates.

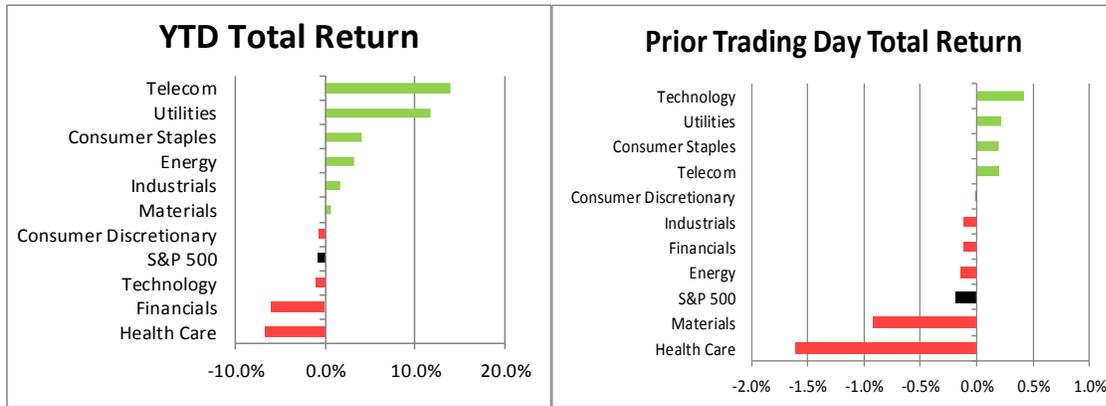
The persistent bias in expecting higher yields raises serious questions about the mindset and methodology of the forecasters. About the only way one can argue for higher yields is to expect that either inflation is going to rise or monetary policy is going to tighten significantly. We don’t expect either to occur. Low inflation has global roots. The world is awash in excess capacity and technology is exposing more industries to foreign competition. In addition, excess capacity and technology are weighing on U.S. economic growth and keeping wage growth in check, which should discourage the Federal Reserve from raising rates too quickly. Despite evidence to the contrary, forecasters seem to be unable to capture these conditions in their models.

Despite persistently bearish consensus forecasts, we remain favorable toward longer duration assets. We suspect the professional forecasters surveyed are assuming an economy that no longer exists. Long-term rates may rise dramatically at some point. If, for example, trade policy becomes protectionist, we could have a rebound in inflation that would prompt higher long-term rates. If the FOMC lifts policy rates rapidly we could also see a similar result. However, our duration bias remains in place until such policy changes actually emerge.

*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.*

**Data Section**

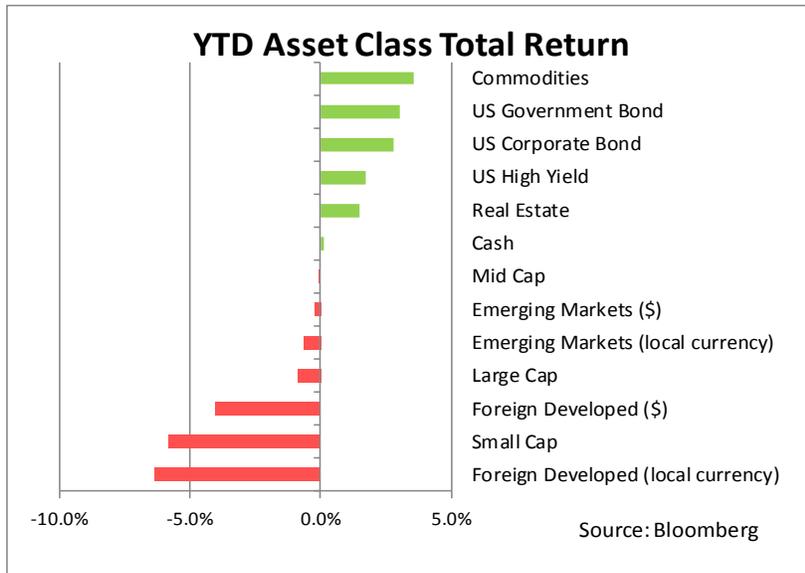
**U.S. Equity Markets – (as of 3/15/2016 close)**



(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 3/15/2016 close)**



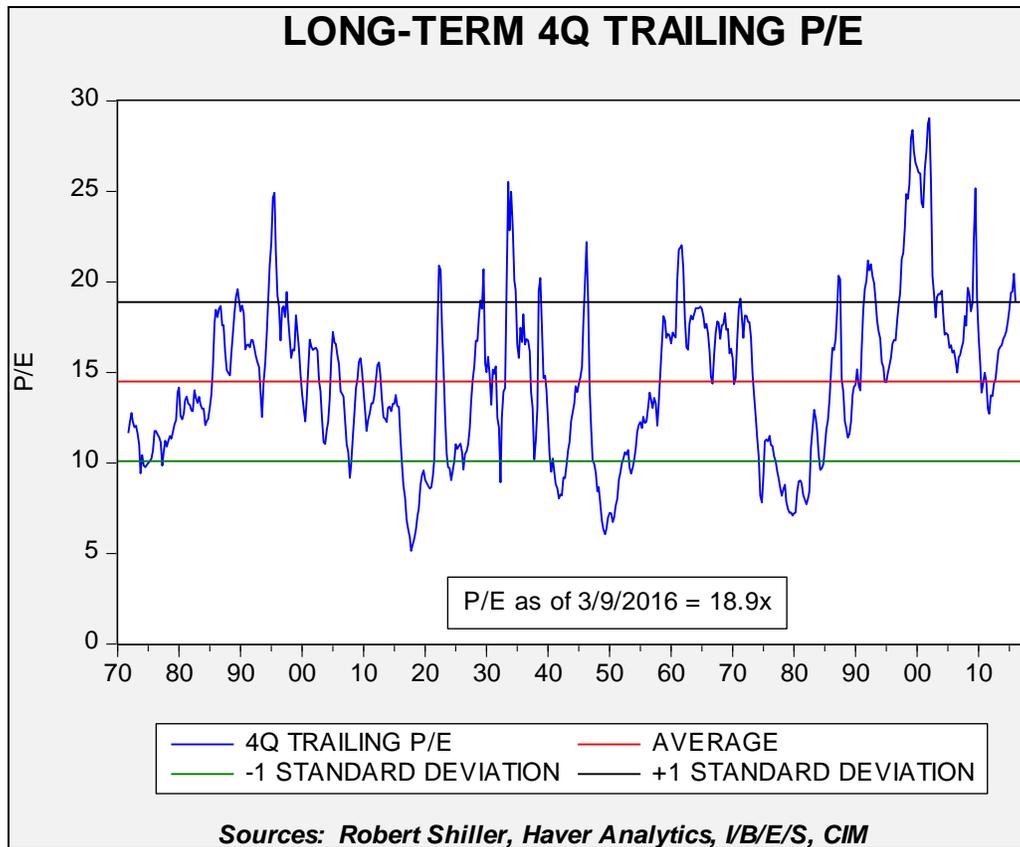
This chart shows the year-to-date returns for various asset classes, updated daily. The asset classes are ranked by total return (including dividends), with green indicating positive and red indicating negative returns from the beginning of the year, as of prior close.

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

March 10, 2016



Based on our methodology,<sup>2</sup> the current P/E is 18.9x, up 0.1x from last week. Continued declines in earnings expectations and a stronger equity market are keeping the P/E elevated.

*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 (Q2 and Q3) and two estimates (Q4 and Q1). 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.