Confluence Investment Management

Daily Comment

By Bill O'Grady and Thomas Wash

[Posted: October 13, 2017—9:30 AM EDT] Global equity markets are generally higher this morning. The EuroStoxx 50 is up 0.3% from the last close. In Asia, the MSCI Asia Apex 50 closed down 0.1% from the prior close. Chinese markets were up, with the Shanghai composite up 0.1% and the Shenzhen index up 0.7%. U.S. equity index futures are signaling a higher open. With 28 companies having reported, the S&P 500 Q3 earnings stand at $32.39, lower than the $32.46 forecast for the quarter. The forecast reflects a 3.7% increase from Q3 2016 earnings. Thus far this quarter, 85.7% of the companies reported earnings above forecast, while 7.1% reported earnings below forecast.

Markets are quiet again this morning; we are seeing the dollar weaken a bit and bonds rally on the weaker than forecast CPI data. On the other hand, retail sales were strong, although some of that is coming from hurricane distortion. Here is what we are following this morning:

ECB—less but longer: Reuters[1] is reporting that ECB policymakers have agreed on a plan to begin tapering. According to reports, the bank will extend the stimulus program by nine months but bond buying will be reduced to a range of €25 bn to €40 bn, down from the current €60 bn. The EUR eased modestly on the news. One of the problems is that the ECB is running out of eligible bonds to purchase so it needed to reduce its buying levels. At the same time, if this action is taken, the ECB is signaling its desire to remain accommodative. We view this action as modestly bearish for the EUR.

Tensions rise in Iraq: Iraqi forces are moving into the Kirkuk region, an area claimed by the Kurds. According to reports, Kurdish forces are withdrawing in front of the Iraqi deployment. Kirkuk is a key city in northern Iraq; both Kurds and Arabs see it as theirs (and both have controlled the town during various periods in history). It is also an important oil city. If open fighting develops, we would expect a disruption in oil flows and potentially higher prices.

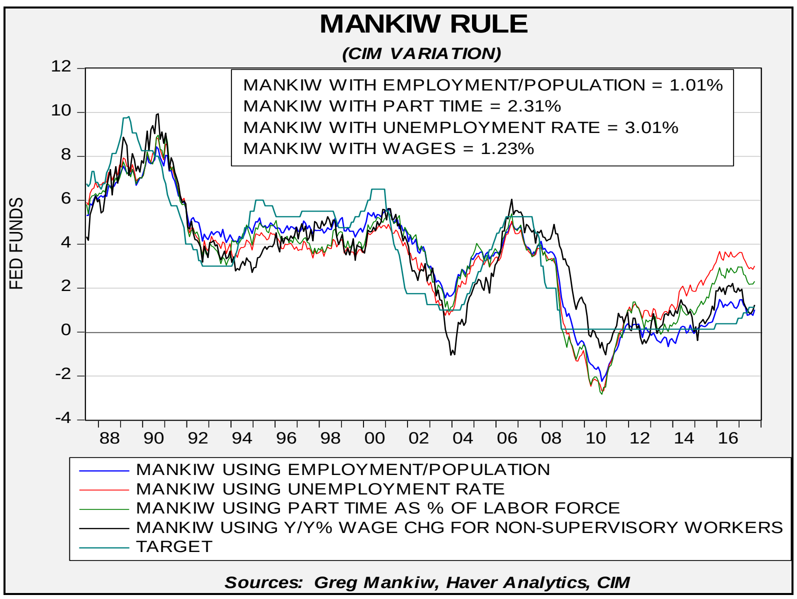
Saudis buying Russian arms: Reuters[2] is reporting that Russia and Saudi Arabia are nearing a deal in which the latter will purchase the S-400 air defense system from Russia. This is a sophisticated air defense system, considered one of the best in the world. In fact, it seems odd the Saudis would need such a sophisticated air defense system because it isn't obvious they face that sort of threat. We suspect this is a gesture of goodwill and a signal of deepening cooperation between Russia and the kingdom. Although the Trump administration has been working to

[1] https://www.reuters.com/article/ecb-policy/update-2-ecb-homes-in-on-9-more-months-of-bond-buying-at-lower-volumes-idUSL8N1MO0YM

[2] http://www.reuters.com/article/us-russia-saudiarabia-missiles/russia-saudi-arabia-close-to-sign-s-400-missile-deal-ifax-cites-putin-aide-idUSKBN1CI0NU?utm_source=Sailthru&utm_medium=email&utm_campaign=New%20Campaign&utm_term=%2ASituation%20Report

improve relations with Saudi Arabia, it's no secret that U.S. geopolitical interest in the region has lessened with the end of the Cold War and the advent of shale oil. We would expect continued cooperation between the two states as Saudi Arabia adjusts policy to emerging U.S. actions.

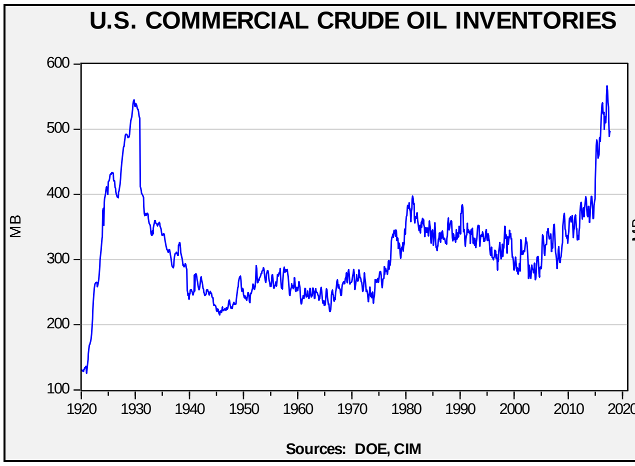
Fed policy: With the release of the CPI data we can update the Mankiw models. The Mankiw rule models attempt to determine the neutral rate for fed funds, which is a rate that is neither accommodative nor stimulative. Mankiw's model is a variation of the Taylor Rule. The latter measures the neutral rate using 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 four 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, a third using involuntary part-time workers as a percentage of the total labor force and a fourth using yearly wage growth for non-supervisory workers.

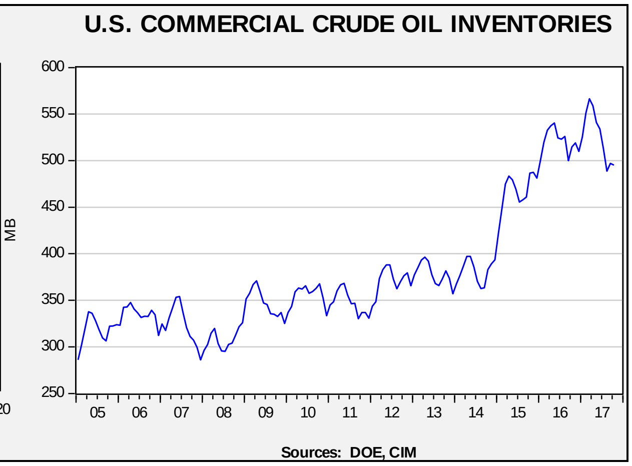


Using the unemployment rate, the neutral rate is now 3.01%. Using the employment/population ratio, the neutral rate is 1.01%. Using involuntary part-time employment, the neutral rate is 2.31%. Using wage growth for non-supervisory workers, the neutral rate is 1.23%. The improved labor market data has lifted each model's neutral rate calculation by 15 bps to 25 bps, putting all but the employment/population ratio variant below the current target.

Although the core rate rose less than forecast, we suspect there is enough support for a December hike to keep the likelihood of a move high. Fed funds futures still put the odds at 78% for an increase.

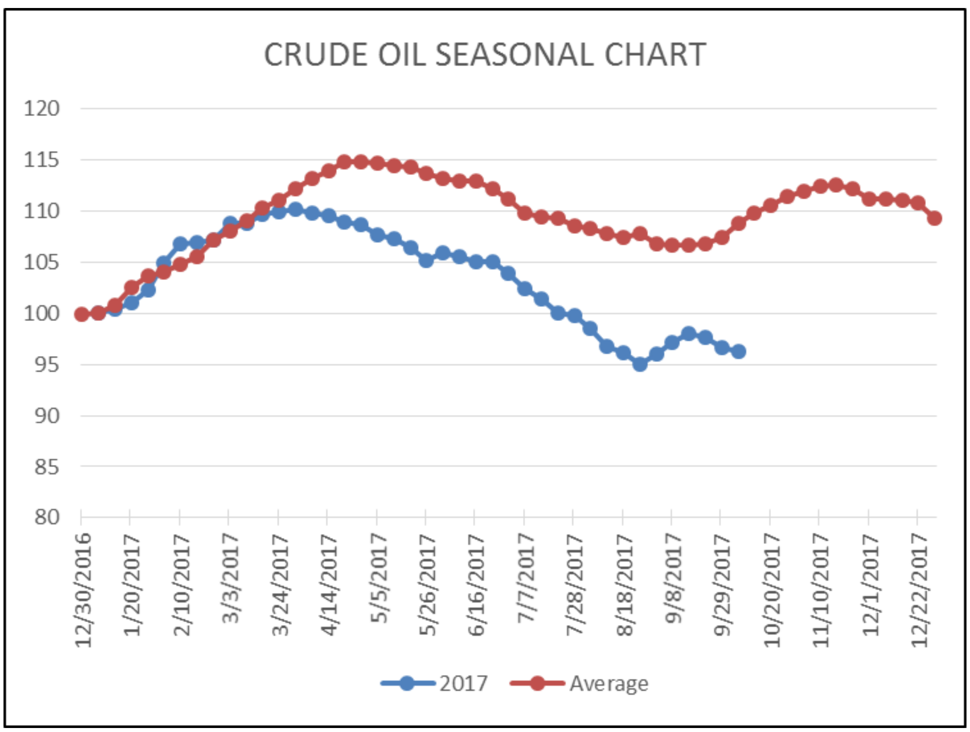
Energy recap: U.S. crude oil inventories fell 2.8 mb compared to market expectations of a 2.0 mb increase.



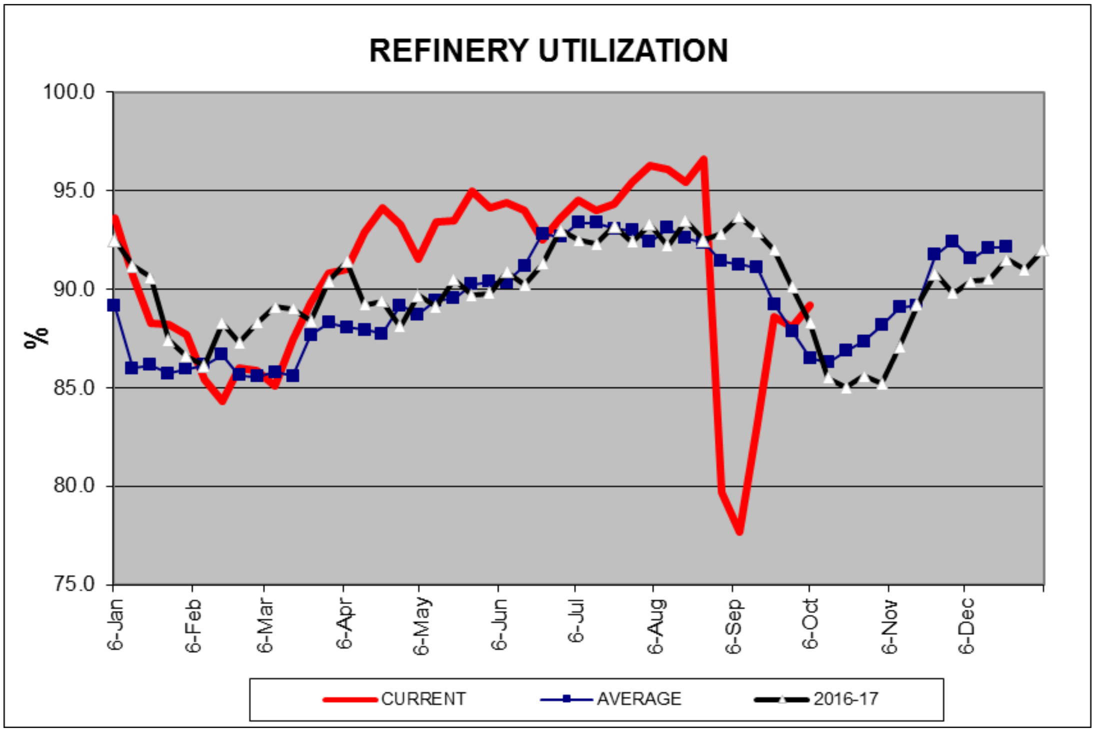


This chart shows current crude oil inventories, both over the long term and the last decade. We have added the estimated level of lease stocks to maintain the consistency of the data. As the chart shows, inventories remain historically high but have declined. The impact of Hurricane Harvey is diminishing as refinery operations recover. We also note the SPR fell by 1.8 mb, meaning the total draw was 4.6 mb.

As the seasonal chart below shows, inventories fell this week. It appears we have started the inventory rebuild period sooner than normal this year due to the hurricanes. However, over the past two weeks, inventories have declined, which is a modest surprise based on the seasonal pattern.

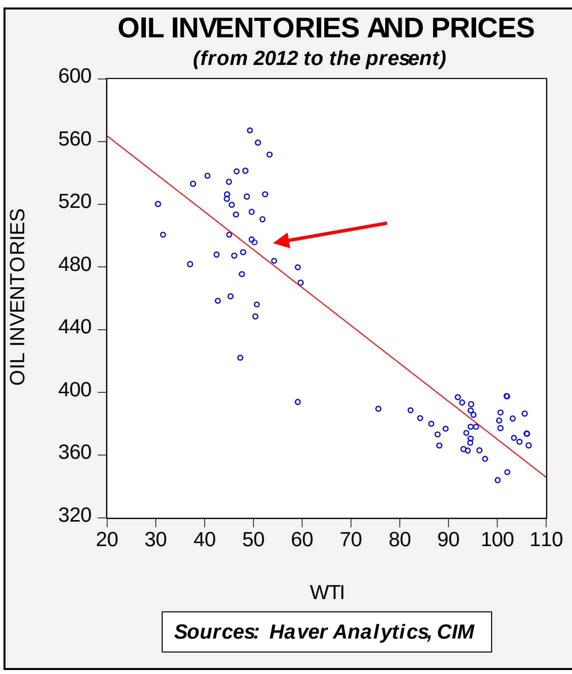


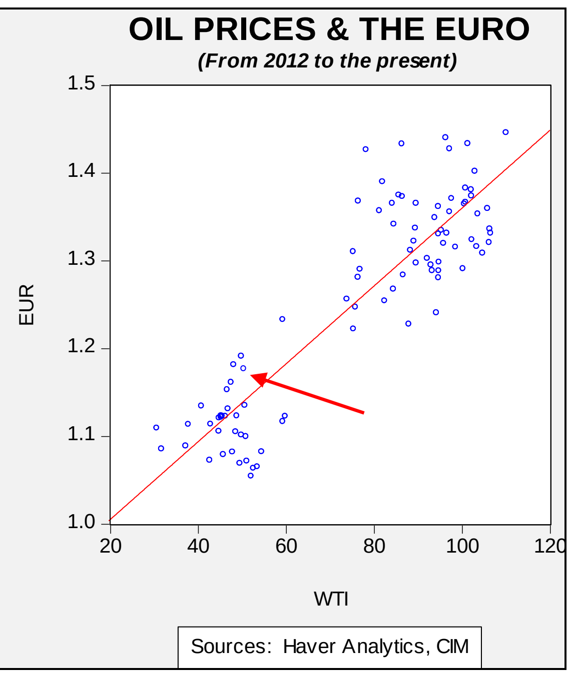
(Source: DOE, CIM)



(Source: DOE, CIM)

Refinery operations unexpectedly rose last week, which is a divergence from seasonal norms. Strong product demand and attractive refining margins are supporting strong utilization. The seasonal trough usually occurs next week; this week's activity suggests that the maintenance season may be concluding early, which is bullish for oil prices.

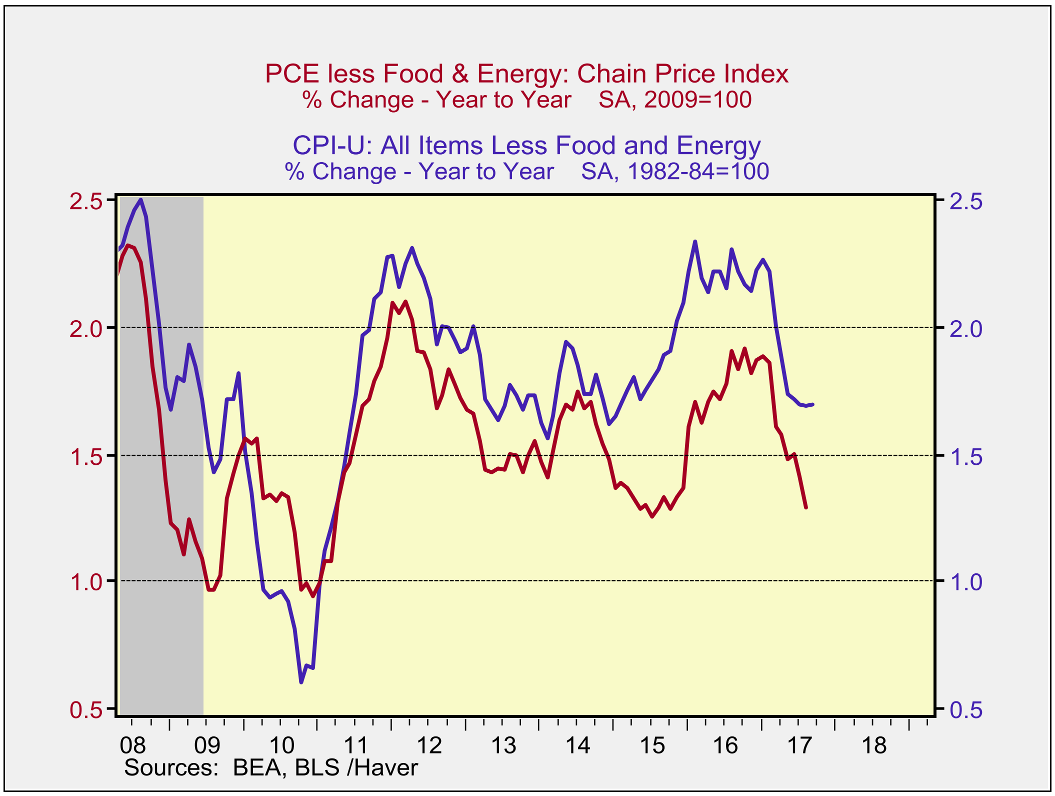




Based on inventories alone, oil prices are undervalued with the fair value price of $52.79. Meanwhile, the EUR/WTI model generates a fair value of $63.15. Together (which is a more sound methodology), fair value is $59.27, meaning that current prices are well below fair value. For the past few months, the oil market has not fully accounted for dollar weakness. If the oil market begins to recognize the dollar's weakness, a broader rally in oil is possible.

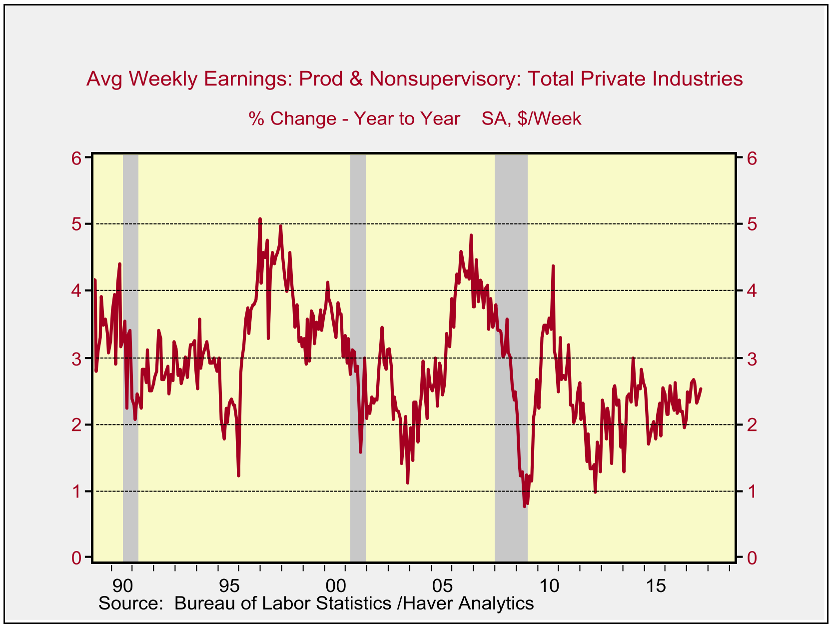
U.S. Economic Releases

CPI came in below expectations, rising 0.5% from the prior month compared to the forecast of 0.6%. Core CPI also came in below expectations, rising 0.1% from the prior month compared to the forecast of 0.2%



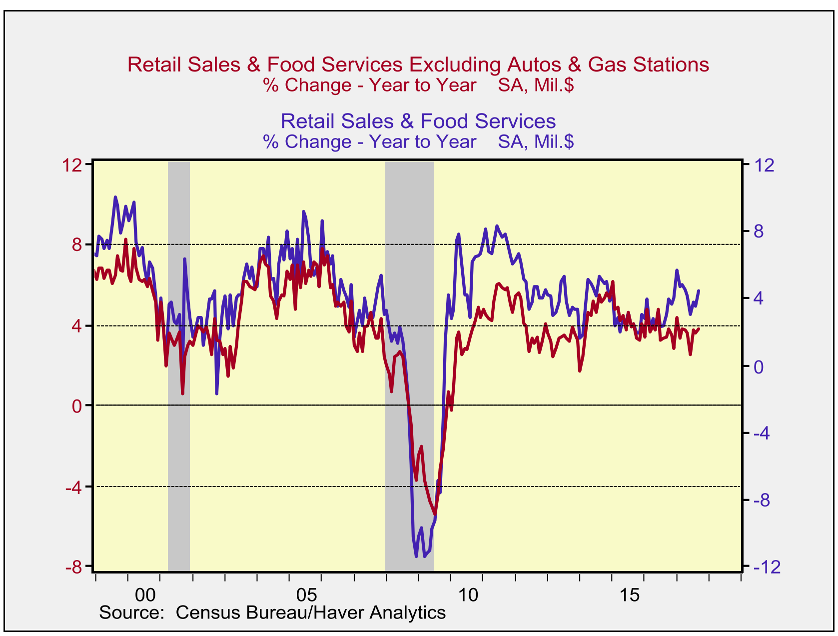
The chart above shows the year-over-year change in core CPI and core PCE. Core CPI rose 1.7% from the prior year. It is worth noting that even though CPI is the most commonly used inflation gauge, the Fed's preferred measure is the PCE.

Real average weekly earnings rose by 0.6% from the prior year. The prior month's gain was revised upward from 0.9% to 1.0%. Real average hourly earnings rose by 0.7% from the prior year. The prior month's gain was revised upward from 0.6% to 0.7%.



The chart above shows the year-over-year change in real average weekly earnings for production and non-supervisory workers, which rose 2.5% from the prior year.

Retail sales advance came in below expectations, rising 1.6% from the prior month compared to the forecast gain of 1.7%; the prior month's loss was revised downward from 0.2% to 0.1%. Retails sales ex-auto came in above expectations, rising 1.0% from the prior month compared to the forecast gain of 0.9%; the prior month's gain was revised upward from 0.2% to 0.5%. Retail sales ex-auto and gas came in above expectations, rising 0.5% from the prior month compared to the forecast gain of 0.4%. The retails sales control group came in line with expectations, rising 0.4% from the prior month; the prior month's loss was revised downward from 0.2% to 0.0%.



The chart above shows the year-over-year change in retail sales and core retail sales. The rebound in retail sales could be related to the recovery efforts from the hurricanes that hit Texas and Florida.

The table below shows the economic releases and Fed speakers scheduled for the rest of the day.

Economic Releases						
EDT	Indicator			Expected	Prior	Rating
10:00	U. of Michigan Sentiment	m/m	oct	95.0	95.1	**
10:00	U. of Michigan Current Conditions	m/m	oct	111.6	111.7	**
10:00	U. of Michigan Expectations	m/m	oct	85.3	84.4	**
10:00	U. of Michigan 1 yr Inflation	m/m	oct		2.7%	**
10:00	U. of Michigan 5-10 Yr Inflation	m/m	oct		2.5%	**
10:00	Business Inventories	m/m	aug	0.7%	0.2%	**
Fed speakers or events						
EST	Speaker or event	District or position				
10:25	Charles Evans Speaks on Economy and Monetary Policy	President of the Federal Reserve Bank of Chicago				
11:30	Robert Kaplan speaks in Boston	President of the Federal Reserve Bank of Dallas				

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
ASIA-PACIFIC								
Japan	Japan buying foreign bonds	y/y	oct	0.089 tn	-1.014 tn		**	Equity and bond neutral
	Japan buying foreign stocks	y/y	oct	0.372 tn	0.471 tn		**	Equity and bond neutral
	Foreign buying Japan bonds	y/y	oct	0.100 tn	0.391 tn		**	Equity and bond neutral
	Foreign buying Japan stocks	m/m	oct	1.235 tn	0.953 tn		**	Equity and bond neutral
	Money Stock M2	m/m	sep	4.1%	4.0%	4.0%	**	Equity and bond neutral
	Money Stock M3	m/m	sep	3.4%	3.4%	3.4%	**	Equity and bond neutral
India	CPI	m/m	sep	3.3%	3.4%	3.5%	**	Equity bearish, bond bullish
	Industrial Production	m/m	aug	4.3%	1.2%	2.6%	**	Equity bullish, bond bearish
New Zealand	BusinessNZ Manufacturing PMI	m/m	sep	57.5	57.9		**	Equity and bond neutral
EUROPE								
Germany	CPI	y/y	sep	1.8%	1.8%	1.8%	***	Equity and bond neutral
Italy	CPI	y/y	sep	1.3%	1.3%	1.3%	***	Equity and bond neutral
	General Government Debt	m/m	aug	2.279 tn	2.300 tn		**	Equity and bond neutral
Switzerland	Producer & Import Prices	y/y	sep	0.8%	0.6%	0.6%	**	Equity bullish, bond bearish
Russia	Trade Balance	m/m	aug	6.6 bn	4.0 bn	5.0 bn	**	Equity bullish, bond bearish
	Exports	m/m	aug	29.0 bn	24.7 bn	27.3 bn	**	Equity bullish, bond bearish
	Imports	m/m	aug	22.4 bn	20.8 bn	22.0 bn	**	Equity and bond neutral
	Budget Balance YTF	m/m	aug	-300.6 bn	-403.6 bn	-450.0 bn	**	Equity and bond neutral
AMERICAS								
Canada	New Housing Price Index	y/y	aug	3.8%	3.8%		**	Equity and bond neutral
	Teranet/ National Bank HPI	y/y	aug	11.4%	13.1%		**	Equity and bond neutral
Mexico	Industrial Production	m/m	aug	-0.5%	-1.6%	-0.8%	**	Equity and bond neutral
	Manufacturing Production	y/y	aug	3.3%	2.2%	3.0%	**	Equity bullish, 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)	136	136	0	Up
3-mo T-bill yield (bps)	105	106	-1	Neutral
TED spread (bps)	31	30	1	Neutral
U.S. Libor/OIS spread (bps)	123	123	0	Up
10-yr T-note (%)	2.33	2.32	0.01	Neutral
Euribor/OIS spread (bps)	-33	-33	0	Down
EUR/USD 3-mo swap (bps)	41	41	0	Up
Currencies	**Direction**			
dollar	up			Down
euro	down			Up
yen	up			Neutral
pound	up			Neutral
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
Energy Markets				
Brent	$57.40	$56.25	2.04%	Bullish IEA Report
WTI	$51.58	$50.60	1.94%	
Natural Gas	$3.03	$2.99	1.41%	
Crack Spread	$18.93	$18.45	2.63%	
12-mo strip crack	$19.49	$19.15	1.81%	
Ethanol rack	$1.58	$1.58	0.01%	
Metals				
Gold	$1,292.38	$1,293.72	-0.10%	Stronger Dollar
Silver	$17.20	$17.25	-0.26%	
Copper contract	$313.00	$312.00	0.32%	
Grains				
Corn contract	$ 349.00	$ 349.00	0.00%	
Wheat contract	$ 431.25	$ 430.50	0.17%	
Soybeans contract	$ 995.50	$ 992.00	0.35%	
Shipping				
Baltic Dry Freight	1458	1433	25	
DOE inventory report				
	Actual	**Expected**	**Difference**	
Crude (mb)	-2.7	-0.8		
Gasoline (mb)	2.5	0.0		
Distillates (mb)	-1.5	-2.0		
Refinery run rates (%)	1.10%	-0.50%		
Natural gas (bcf)		84.0		

Weather

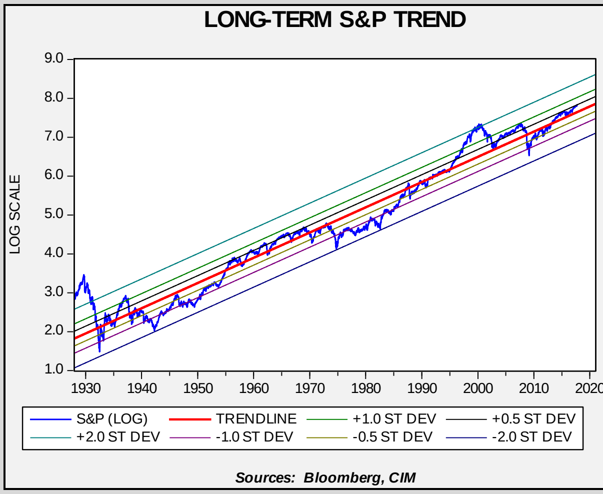
The 6-10 and 8-14 day forecasts show warmer to normal temps for most of the country. Precipitation is expected for the eastern region of the country. There are no tropical cyclones or disturbances approaching the Gulf of Mexico at this time.

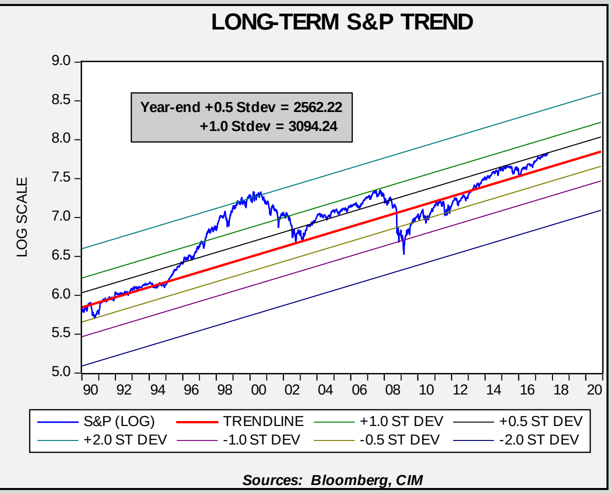
Asset Allocation Weekly Comment

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.

October 13, 2017

With the S&P making new highs almost daily, it is probably a good time to look at long-term trends to build some parameters.





This is a simple trend chart of the S&P 500 Index. We have log-transformed the weekly Friday closes of the index data and regressed it against a time trend. The chart on the left shows the index from 1929 while the chart on the right shows the index from 1990 (same regression trend lines for both charts).

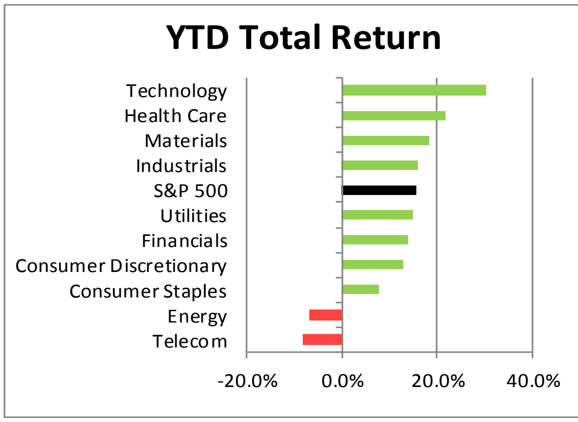
Equities clearly trend higher over time. The yearly trend shows an average return for the S&P 500 Index of just over 6%. However, as the charts show, there is a fair degree of variation over time. The trend data shows that two standard errors above the trend is a dangerous area. One standard error above the trend is a concern. We are currently just below one-half standard error above the trend. That level by itself isn't a big worry. In the 1950s into the early 1970s, we saw the index vacillate between the trend and one standard error above trend. These are not inconsequential market moves; in the current context, the trend line for the S&P 500 Index is 2090.26, meaning a pullback from current levels to the trend line would be a decline of about 17.6%.

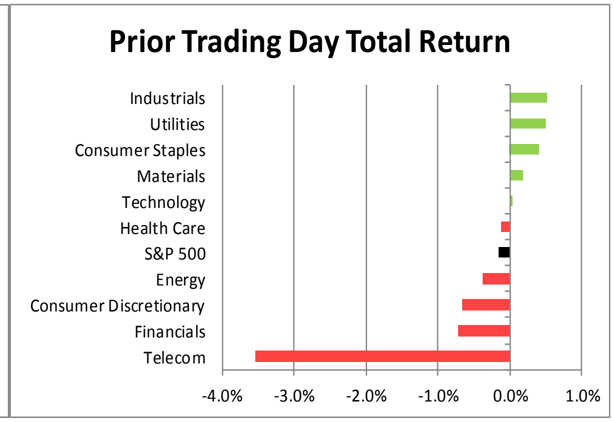
Simply put, barring a recession or geopolitical event, equities are not seriously extended on a trend basis. We also note that the last two bear markets dropped a full two standard errors from peak to trough. The bear market that began in 2000 fell from two standard errors above the trend to the trend line (the bold red line on the chart), and the 2008 bear market ran from one standard error above the trend to one standard error below. Thus, a recession-triggered bear market would be a significant market event.

So, what does this tell us? Although there is a rather elevated sense of concern among investors, overall, the path of least resistance is to grind higher. Equities are not cheap but alternatives are even more expensive. The other insight this research offers is that a "melt-up" would take us well above 3000. If investors were to become "irrationally exuberant" we would expect a move to this level. At this point, there appears to be enough caution to prevent that from occurring. However, if a dovish Fed chair is nominated or a major tax cut appears likely to pass, a rise to these levels might be triggered. A recession is a clear worry; falling to one standard error below the trend line, which would be a drop of lesser magnitude than normal, would be to 1454.81 by year's end. Obviously, because the trend line moves higher over time, the longer it takes to have a correction, the higher the expected bottom. For now, equities, based on this analysis, are not at levels that would usually signal a major bear market. At the same time, this doesn't mean that there are no risks. It just means that, in terms of trend, we are not at extremes.

Data Section

U.S. Equity Markets – (as of 10/12/2017 close)

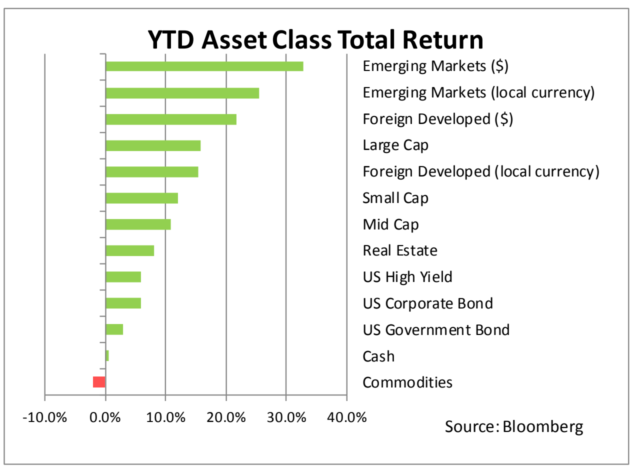




(Source: Bloomberg)

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. Sectors are ranked by total return; green indicating positive and red indicating negative return, along with the overall S&P 500 in black.

Asset Class Performance – (as of 10/12/2017 close)

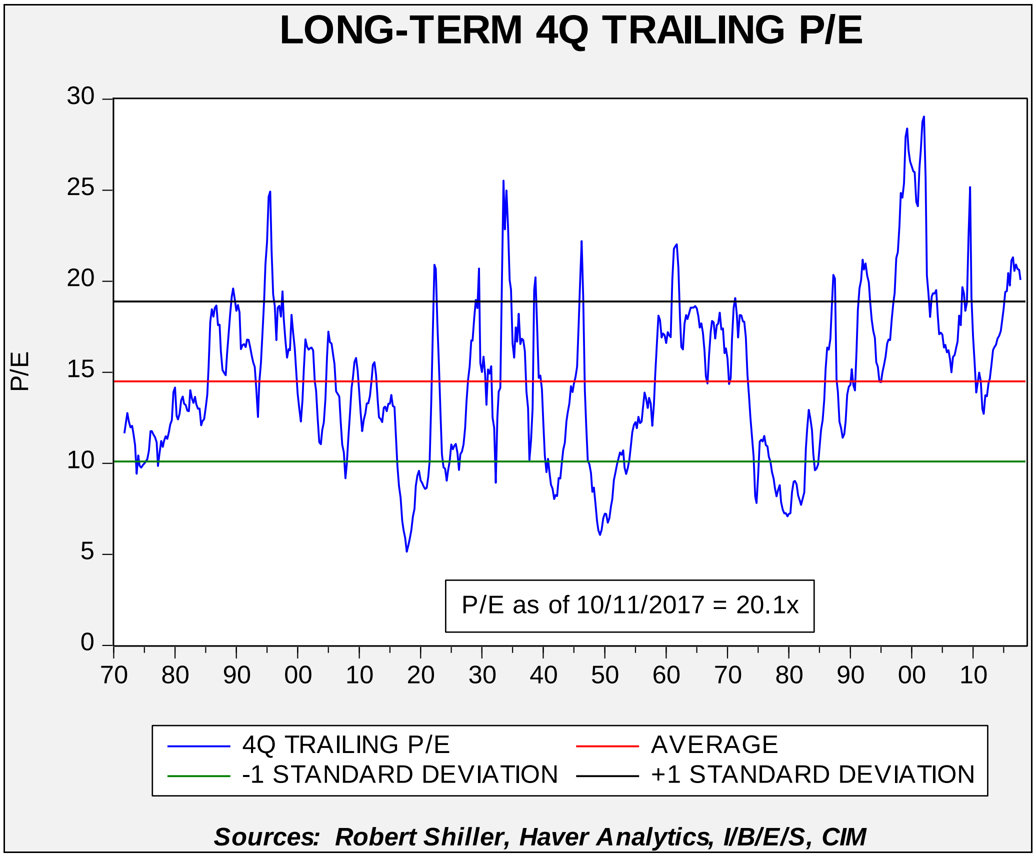


This chart shows the year-to-date returns for various asset classes, updated daily. The asset classes are ranked by total return (including dividends), with green indicating positive and red indicating negative returns from the beginning of the year, as of prior close.

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 (Bloomberg total return Commodity Index).

P/E Update

October 12, 2017



Based on our methodology,[3] the current P/E is 20.1x, up 0.2x from last week. The rise in the P/E is due to a reduction in Q3 earnings expectations (which fluctuate during the quarter) and rising levels of the S&P 500 index.

[3] 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 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 quarters (Q1 and Q2) and two estimates (Q3 and Q4). 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.