Looking for something to read? See our Reading List; these books, separated by category, are ones we find interesting and insightful. We will be adding to the list over time.

[Posted: January 11, 2019—9:30 AM EST] Global equity markets are generally lower this morning. The EuroStoxx 50 is down 0.2% from the last close. In Asia, the MSCI Asia Apex 50 was up 0.7% from the prior close. Chinese markets were higher, with the Shanghai composite up 0.7% and the Shenzhen index up 0.8%. U.S. equity index futures are signaling a lower open.

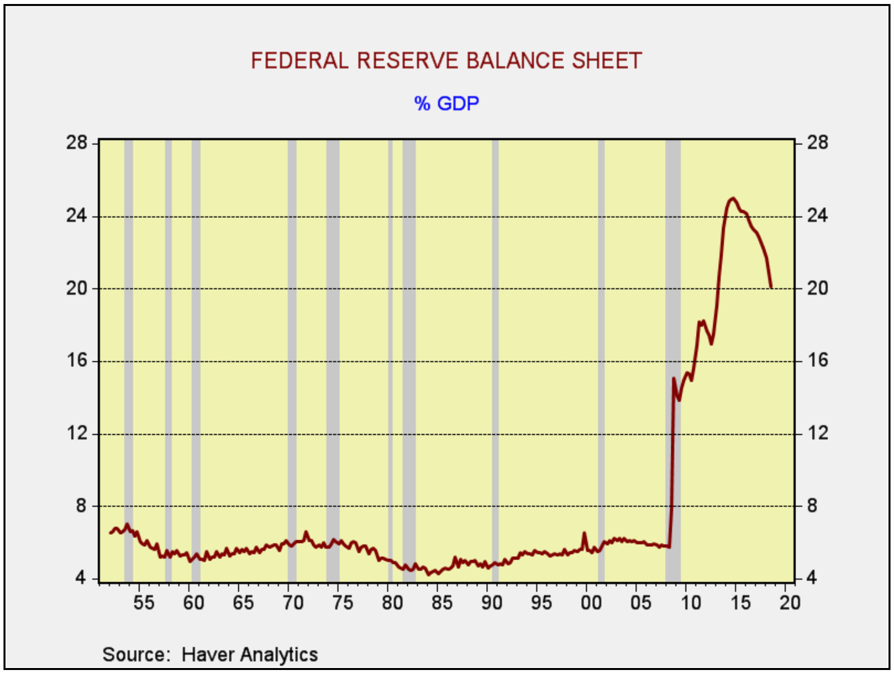
U.S. equity futures are modestly lower this morning in a very quiet market. Yesterday, we started the day lower but moved higher. Although much of the rally was probably due to Chair Powell's "patient" speech, it also points to a different market tone. Last month, rallies were sold. Yesterday, we saw weakness bought. That pattern bears monitoring. Here is what we are watching this morning:

Fed talk: We are seeing consistent messaging from members of the FOMC. Yesterday, Chicago FRB President Evans signaled that the Fed should remain on hold for a while,[1] even though he still indicates that he supports three more hikes. Vice Chair Clarida reiterated the patient language and Bloomberg made Powell's repeat of the word "patience" in his talk yesterday into a meme of sorts. There is also persistent discussion about the balance sheet.[2] As we noted in last week's Asset Allocation Weekly, the primary impact of the balance sheet seems to be psychological. In reality, banks mostly held QE as excess reserves. But, psychology shouldn't be ignored. Making investors and consumers feel better can be positive for the economy.

One of the unknowns is what level of the Fed's balance sheet would be "normal." If we compare the balance sheet to GDP, we are a long way from achieving that goal.

[1] https://www.bondbuyer.com/news/why-evans-thinks-rates-will-eventually-go-above-neutral

[2] https://www.wsj.com/articles/fed-debate-heats-up-over-the-size-and-composition-of-its-bond-holdings-11547202600

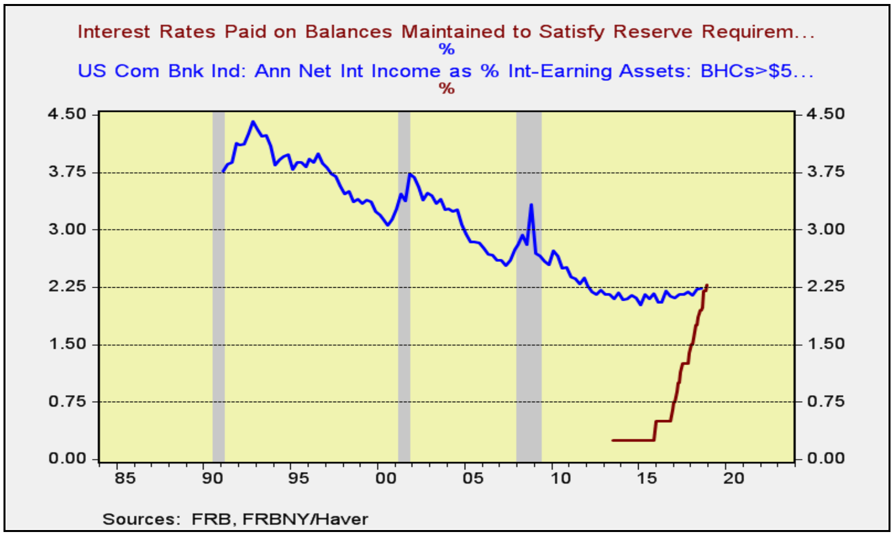


Before the financial crisis, the balance sheet represented about 5.5% of GDP. It ballooned to nearly 25% of GDP in 2014 but has been falling rapidly since. The end of QE and the rise of GDP has contributed to the decline and actual reduction is accelerating the process.

We note that the balance sheet ranged between 15% and 23% of GDP during the Great Depression and the war years. This is because the Fed simply expanded the balance sheet to absorb government spending, which accelerated during the war years. After the war, the Fed mostly kept the balance sheet steady and allowed the overall growth of the economy to reduce its relative size.

Although that same procedure could work again, the Fed does seem to want to return to "normal order," where fed funds are mostly determined by reserve levels. Currently, due to the level of excess reserves in the system, monetary policy is managed by the interest rate on reserves (IROR). The Fed pays banks 2.28% on their reserves; without that rate, the Fed would not be able to conduct interest rate policy because there are so many reserves in the system that rates would remain at zero all the time.[3] Although the rate paid on reserves ranges between the upper and lower bounds of the fed funds range (currently 2.25% to 2.50%), the rate is getting high enough that it may actually be tight.

[3] Of course, one other policy tool that could be employed would be to increase required reserve levels dramatically. Although that would allow for normal open market operations, banks would cry foul. In addition, in the aggregate, the system is flush with reserves but that doesn't mean the distribution is equal. Thus, this move could lead to a severe reserve shortage in some banks and make managing fed funds difficult as well.



The blue line shows bank net income as a percentage of interest-earning assets (or, net interest margin) on bank holding companies with assets in excess of $500 bn. The IROR rate is now in the neighborhood of the net interest margin (NIM) and begs the question—why should a bank risk lending when it can simply hold idle reserves and earn about the same net margin? Now, it should be noted that smaller banks have higher margins[4]; banks with assets between $50 bn to $500 bn have NIM of 3.03% and banks with assets less than $50 bn have NIM of 3.81%. Therefore, there still may be an incentive for them to lend instead of holding reserves.

The Fed should probably consider returning to the post-WWII plan, which is to simply hold the balance sheet steady and allow the natural growth of the economy to reduce its importance. Over time, the reliance on IROR would likely become less important.

Brexit: There are rumors that the May government is going to ask the EU for an extension of the Article 50 deadline.[5] The rumors have been denied but the report boosted the GBP overnight.

Trade talks: Chinese Vice Premier Liu is scheduled to visit the U.S. later this month,[6] as long as the current shutdown doesn't make the trip moot. Liu is a very important official in the Xi government and the visit signals that China is trying to bring a deal to fruition. In related news, China may guide its GDP to around 6.0% compared to last year's 6.5%.[7]

Shutdown issues: We are starting to hear that economists are downgrading their Q1 GDP forecasts due to the shutdown. JP Morgan (JPM, 100.39) announced today it is lowering its growth projection to 2.0% from 2.5% due to the expected decline in government spending. Of

[4] It sort of begs the question—why should a bank drive to get large when it simply reduces NIM? It also suggests the benefit of scale in banking probably doesn't exist; in fact, there may be decreasing returns to scale.
[5] https://www.standard.co.uk/news/politics/brexit-to-be-delayed-beyond-march-29-cabinet-ministers-reveal-a4036326.html
[6] https://www.wsj.com/articles/xi-jinpings-top-economic-aide-to-visit-u-s-for-trade-talks-this-month-11547177759
[7] https://www.reuters.com/article/us-china-economy-targets-exclusive/exclusive-china-to-set-lower-gdp-growth-target-of-6-6-5-percent-in-2019-sources-idUSKCN1P50CJ

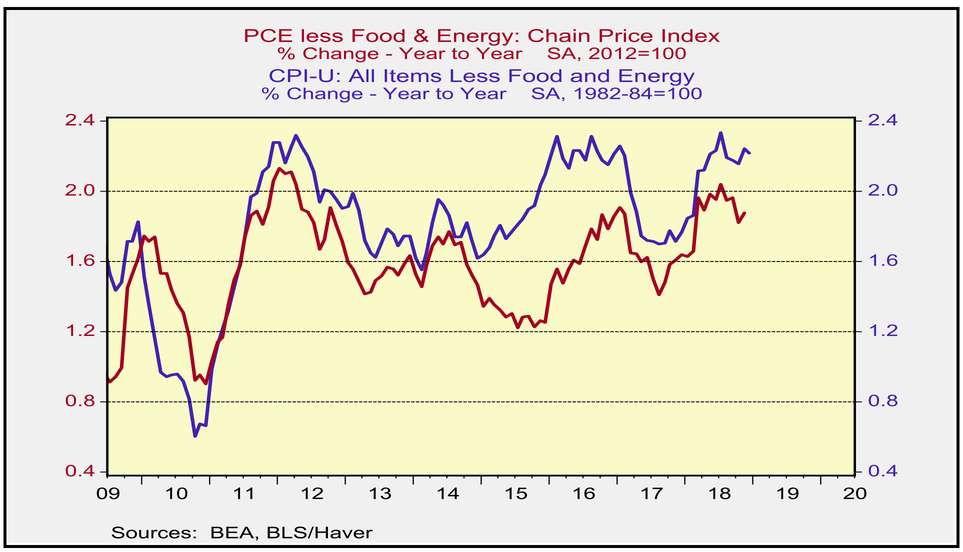
course, that likely means Q2 estimates will be revised higher if the shutdown ends at some point. But, it also supports the Fed pause because Q1 economic data will be weaker than it would have been otherwise. Adding to this problem has been a persistent seasonal adjustment issue with Q1 GDP data; we could see a rather dramatic drop in Q1 reports, which, assuming the government reopens, would be reported in Q2. This adds to the case that if we are going to see any further rate increases they probably won't happen until H2.

Iran oil exports: Reuters[8] is reporting that Iran is struggling to sell its crude oil despite waivers; according to reports, although eight nations were granted waivers, the U.S. did not make clear what level of sales would be permitted. Thus, Iranian oil exports were around 0.9 mbpd in December and will likely remain at that level this month. Prior to sanctions, Iran usually exported around 2.5 mbpd.

Syrian confusion: First, the president surprised his advisors and the Pentagon by ordering a rapid withdrawal of U.S. troops from Syria. Second, National Security Director Bolton, supported by SOS Pompeo, confirmed the withdrawal but added conditions that essentially won't be met for years (security for the Kurds, for example), which suggested the president's staff had thwarted his plans. However, reports today suggest the president has prevailed after all. The Pentagon announced it is putting logistical plans in place to withdraw the troops as the president ordered.[9] It is still unclear when exactly the troops will depart, but, as a military official noted, "We take our orders from the president, not John Bolton."

U.S. Economic Releases

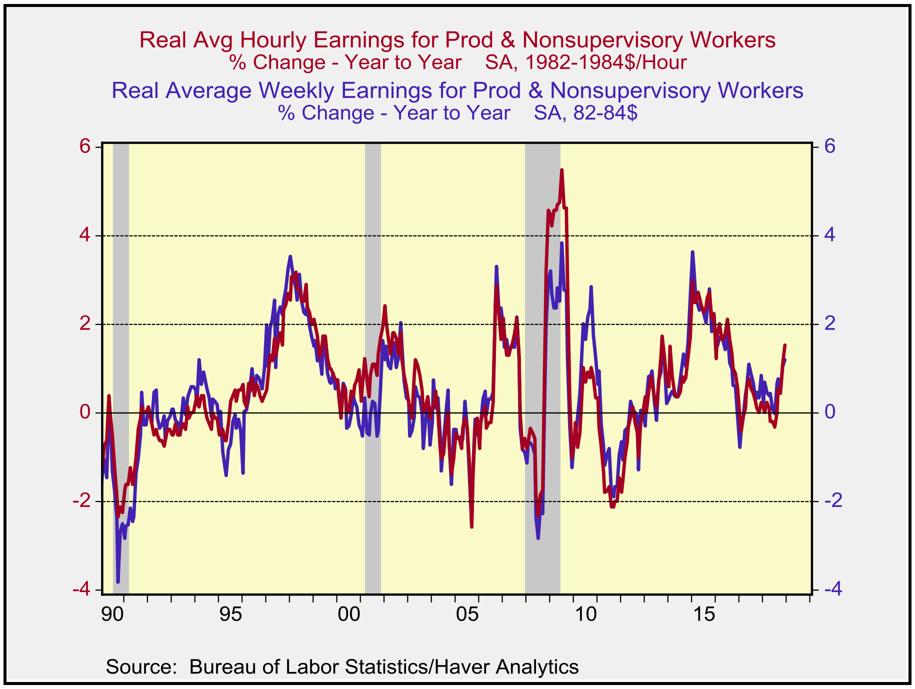
CPI came in line with expectations, falling 0.1% from the prior month. Core CPI also came in line with expectations, rising 0.2% from the prior month.



[8] https://af.reuters.com/article/commoditiesNews/idAFL8N1Z9370
[9] https://www.wsj.com/articles/u-s-military-prepares-for-syria-pullout-amid-uncertainty-11547156824

The chart above shows the year-over-year change in core CPI and core PCE. Core CPI rose 2.2% from the prior year. Although core CPI is currently above the Fed's 2.0% target, core PCE, the Fed's preferred inflation statistic, still lags but only slightly.

Real average weekly earnings rose by 1.2% from the prior year, while real average hourly earnings rose 1.1% from the prior year.



The chart above shows real average hourly and weekly earnings for production and nonsupervisory workers. Real weekly and hourly earnings rose by 1.5% and 1.2%, respectively.

There are economic releases or Fed events scheduled for the rest of the day.

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	Household Spending	y/y	nov	-0.6%	-0.3%	-0.1%	***	Equity and bond bearish
	BoP Current Account Balance	m/m	nov	¥0.757 tn	¥0.566 tn	¥1.309 tn	**	Equity bearish, bond bullish
	Trade Balance BoP Basis	m/m	nov	¥1.439 tn	¥1.211 tn	¥1.124 tn	**	Equity and bond neutral
	Bank Lending Incl Trusts	m/m	dec	2.4%	2.1%	2.1%	***	Equity bullish, bond bearish
	Bank Lending Ex-Trusts	m/m	dec	2.5%	2.2%		**	Equity bullish, bond bearish
	Eco Watchers Survey Current Situation	m/m	dec	48.0	51.0	50.7	**	Equity and bond bearish
	Eco Watchers Survey Outlook	m/m	dec	48.5	52.2	51.4	**	Equity and bond bearish
India	Industrial Production	m/m	nov	0.5%	8.1%	3.6%	***	Equity bearish, bond bullish
Australia	Retail Sales	m/m	nov	0.4%	0.3%	0.3%	**	Equity bullish, bond bearish
New Zealand	Building Permits	m/m	dec	-2.0%	1.5%		**	Equity and bond bearish
EUROPE								
France	Bank of France Industry Sentiment	m/m	dec	103	101	100	***	Equity bullish, bond bearish
Italy	Industrial Production	y/y	nov	-2.6%	1.0%	0.4%	**	Equity and bond bearish
	Retail Sales	y/y	nov	1.6%	1.5%		**	Equity and bond neutral
U.K.	Trade Balance	m/m	nov	-2.904 bn	-3.300 bn	-2.800 bn	***	Equity bearish, bond bullish
	Industrial Production	y/y	nov	-1.5%	-0.8%	-0.7%	**	Equity and bond bearish
	Manufacturing Production	y/y	nov	-1.1%	-1.0%	-0.7%	***	Equity and bond bearish
	Construction Output	y/y	nov	3.0%	3.8%	2.6%	***	Equity bullish, bond bearish
	GDP	m/m	nov	0.2%	0.1%	0.1%	***	Equity bullish, bond bearish
Russia	CPI	y/y	dec	4.3%	4.2%		***	Equity bearish, bond bullish
	CPI Core	y/y	dec	3.7%	3.4%	3.7%	***	Equity and bond neutral
AMERICAS								
Mexico	Consumer Confidence Index	m/m	dec	108.6	100.9	101.8	***	Equity bullish, bond bearish
	Leading Indicators	m/m	nov	-0.13	-0.06		**	Equity and bond neutral
Canada	New Housing Price Index	m/m	nov	0.0%	0.1%	0.0%	**	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
3-mo Libor yield (bps)	280	278	2	Up
3-mo T-bill yield (bps)	237	238	-1	Neutral
TED spread (bps)	43	40	3	Neutral
U.S. Libor/OIS spread (bps)	241	242	-1	Up
10-yr T-note (%)	2.72	2.74	-0.02	Neutral
Euribor/OIS spread (bps)	-31	-31	0	Neutral
EUR/USD 3-mo swap (bps)	0	-2	2	Down
Currencies	**Direction**			
dollar	down			Neutral
euro	up			Up
yen	up			Neutral
pound	up			Neutral
franc	up			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	$61.84	$61.68	0.26%	
WTI	$52.83	$52.59	0.46%	
Natural Gas	$3.05	$2.97	2.59%	
Crack Spread	$13.99	$14.16	-1.20%	
12-mo strip crack	$16.28	$16.34	-0.40%	
Ethanol rack	$1.41	$1.41	-0.23%	
Metals				
Gold	$1,291.74	$1,286.65	0.40%	
Silver	$15.68	$15.57	0.69%	
Copper contract	$265.25	$263.75	0.57%	
Grains				
Corn contract	$ 378.75	$ 376.25	0.66%	
Wheat contract	$ 519.50	$ 513.75	1.12%	
Soybeans contract	$ 910.25	$ 906.75	0.39%	
Shipping				
Baltic Dry Freight	1189	1238	-49	
DOE inventory report				
	Actual	**Expected**	**Difference**	
Crude (mb)	-1.7	-1.8	0.1	
Gasoline (mb)	8.1	3.4	4.7	
Distillates (mb)	10.6	1.0	9.6	
Refinery run rates (%)	-1.10%	-0.50%	-0.60%	
Natural gas (bcf)	-91.0	-51.0	-40.0	

Weather

The 6-10 and 8-14 day forecasts show warmer temperatures for most of the country, with cooler to normal temperatures on the East Coast. Precipitation is expected for most of the country.

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.

January 11, 2019

Does the Federal Reserve adjust policy for asset prices? This is perhaps one of the most controversial topics in U.S. monetary policy. Alan Greenspan faced this issue in the early 1990s. Both Volcker and Greenspan wanted to focus monetary policy on containing inflation. But, Larry Lindsey, a Fed governor at the time, noted that if outside forces, such as technology and trade, were keeping inflation down then the Fed could engage in easy monetary policy without the risk of rising price levels. He warned this could cause asset bubbles.[10] Greenspan, an adept corporate infighter, prevented Lindsey's position from gathering any momentum. But, as the "irrational exuberance" speech showed on December 20, 1996, he became concerned about overheating financial markets.[11] However, the reaction to the speech led the powerful Greenspan to realize there wasn't much upside in conducting monetary policy to quell asset bubbles. Instead, policy evolved to address the aftermath of bubbles.

Still, the idea of low interest rates triggering asset inflation never really went away. The Great Financial Crisis proved that the costs of cleaning up after a bubble could be considerable. It was one thing to have a bubble in technology stocks; in general, technology becomes obsolete so quickly that excess capacity in that sector doesn't have a lasting effect. On the other hand, a bubble in housing can depress economic activity for years. Jeremy Stein, a Fed governor from 2012 to 2014, raised concerns about financial excesses.[12]

In the current configuration of the FOMC, shown below, we rate them according to their policy bias (on a 1 to 5 scale, with 1 being the most hawkish and 5 most dovish) and by theoretical inclination. The latter reflects traditional hawks, characterized by a restrictive view of the Phillips Curve, traditional doves, who have an expansive view of the Phillips Curve, moderates, who make policy based on a variety of factors but tend to be "data-dependent" (in practice, atheoritical and not tied to the Phillips Curve) and financial asset-sensitive. The table below shows the breakdown. The number shows policy bias based on our analysis of comments and voting patterns. The colors show what we view as their theoretical background. Among the voters this year, the average is nearly 3, suggesting a moderate voting bloc. This year, there is only one dove and one hawk, five moderates and three financial market-sensitive voters. The doves tend to raise rates reluctantly; hawks tend to cut rates with the same distaste. Moderates are mostly a diverse group from a theoretical perspective. For our purposes, the important difference of this group compared to the traditional hawks and doves is skepticism about the Phillips Curve. These voters tend to watch trends in the overall economy and make policy decisions. Interestingly enough, three of the governors appointed by President Trump have been moderates and he also promoted Jerome Powell to chair of the FOMC. For a president who

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[10] Mallaby, Sebastian. (2016). *The Man Who Knew: The Life and Times of Alan Greenspan*. New York, NY: Penguin Books. (pp. 435-36.)

[11] Ibid, pp. 504-506.

[12] https://fraser.stlouisfed.org/title/1163/item/2372 and https://fraser.stlouisfed.org/title/1163/item/476707

seems to prefer doves, he has been steered into appointing moderates. Finally, there are three members who, in the comments, seem much attuned to the behavior of financial markets. Governor Brainard has voted as a dove but has expressed concern about market overheating and has used that position to support recent rate hikes.

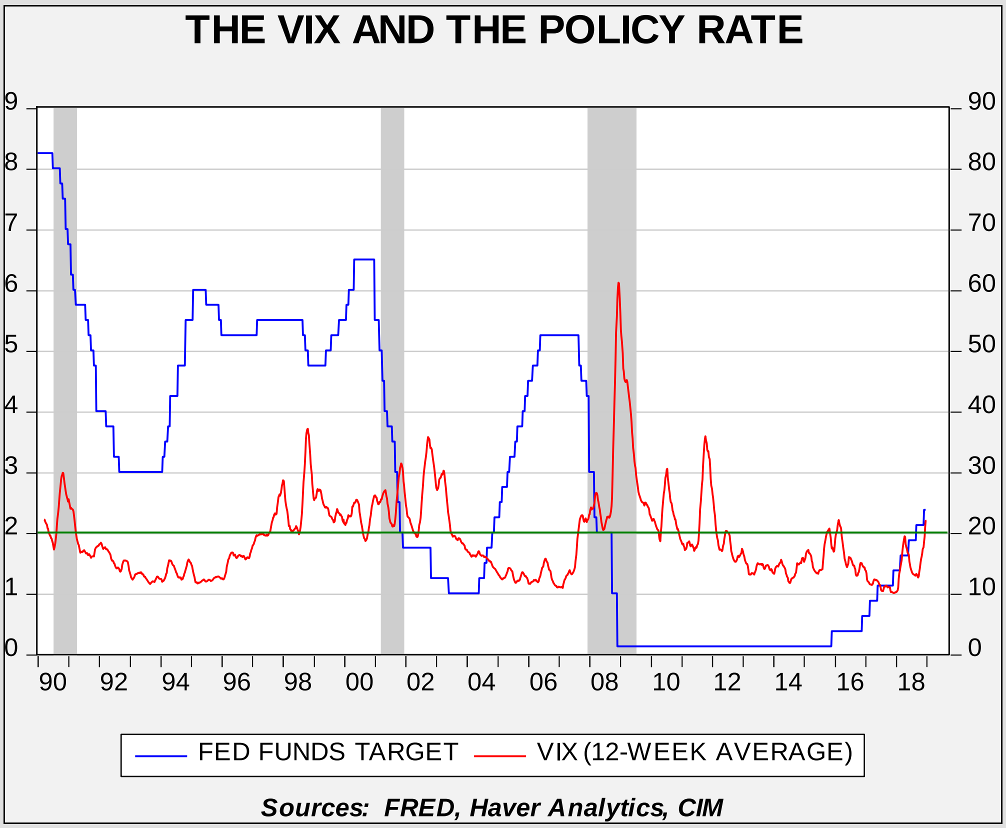
		all	2019	2020
Powell		3	3	3
Clarida		3	3	3
Brainard		4	4	4
Bowman		3	3	3
Quarles		2	2	2
Goodfriend				
Vacant				
Williams NY		2	2	2
Evans CHI		4	4	
Bullard STL		5	5	
George KC		1	1	
Barkin RICH		2		
Bostic ATL		3		
Daly SF		4		
Mester CLEV		2		2
Rosengren BOS		2	2	
Kashkari MINN		5		5
Kaplan DAL		3		3
Harker PHI		3		3
		3.00	2.90	3.00
DOVE				
MODERATE				
TRADITIONAL HAWK				
FINANCAL SENSITIVE				

This year, we have three voters we dub as "financial-sensitive." Thus, financial market behavior may be important to the path of policy this year.

However, as Greenspan noted, it's hard in real time to determine whether an asset market is in a bubble. And, it can be equally difficult to determine whether the cost of raising rates to prevent the bubble is less expensive than addressing the aftermath. The key problem with asset bubbles is that they leads to malinvestment. In a long-lasting asset, that can mean years of technical inefficiency because capacity can't be fully utilized. Thus, a housing bubble can lead to too much real estate that can take years to absorb; cutting interest rates can help slow the inevitable decline in prices but may actually expend the period necessary to balance the market. On the other hand, a bubble in wheat lasts one growing season and policymakers shouldn't bother to address the problem.

In addition, it would be politically explosive for policymakers to raise rates solely because equity or home prices have risen "excessively." The backlash would threaten central bank independence. Thus, if the Fed is worried about an asset bubble, it would need some measure other than valuation to raise rates.

One possibility we have examined recently is volatility. Does the FOMC adjust rates based on the equity market VIX? There appears to be some evidence that policymakers may be sensitive to market volatility.



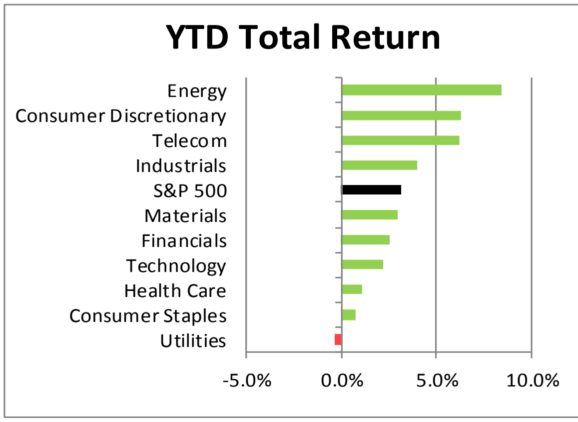
This chart shows the weekly fed funds target with the 12-week average of the CBOE VIX index. We have placed a bold line at 20 for the VIX. Since the late 1990s, we note that the FOMC was inclined to keep lowering rates with a VIX above 20; a reading under 20 would tend to support policy tightening. So, in 2002, Chair Greenspan kept cutting rates even though the economy was in clear recovery. It may have been due to perceptions that investor sentiment was overly negative. The 2004-06 tightening cycle occurred with a VIX persistently below 20. In fact, rate cuts seemed to occur as the VIX rose. We also note that the 2016 pause occurred after the VIX rose back above 20, and tapering was announced in 2016 after a prolonged period of a low VIX. The current pause coincides with the recent lift in volatility.

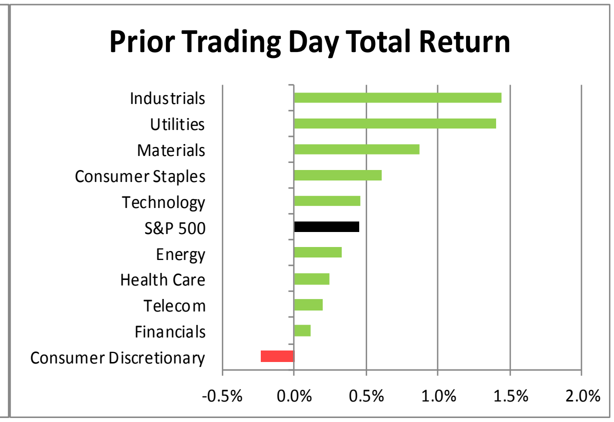
We also examined adding the VIX to the Mankiw Rule model variations. What we found is that the index is statistically significant in three of the variations and the correct sign in two. However, in the variations it did correctly affect, it didn't necessarily improve the forecasting accuracy by more than 10 bps. This performance suggests that the VIX may have an impact on policy but the Phillips Curve variables, labor market data and inflation, are still more important. However, the hard part to divine is the impact of the VIX on the moderate voters. Even if all of the market-sensitive members pay attention to the VIX, the moderates may only pay attention at extremes.

Therefore, in conclusion, we can probably say the following—when the VIX is below 20, the Fed is probably more likely to consider tightening policy. A reading above 20 may lead to a pause or could encourage further easing. However, the relationship isn't precise, which suggests the traditional hawks and doves don't pay much attention to market volatility. The VIX may be the way that market-sensitive FOMC members can incorporate financial markets into their policy decisions without overtly targeting valuations or returns.

Data Section

U.S. Equity Markets – (as of 1/10/2019 close)

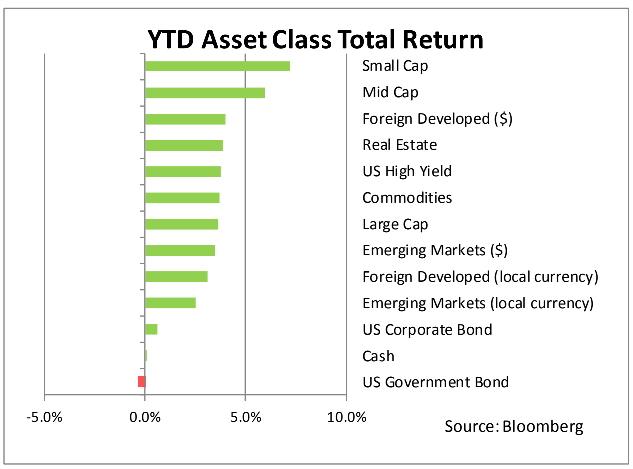




(Source: Bloomberg)

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 1/10/2019 close)

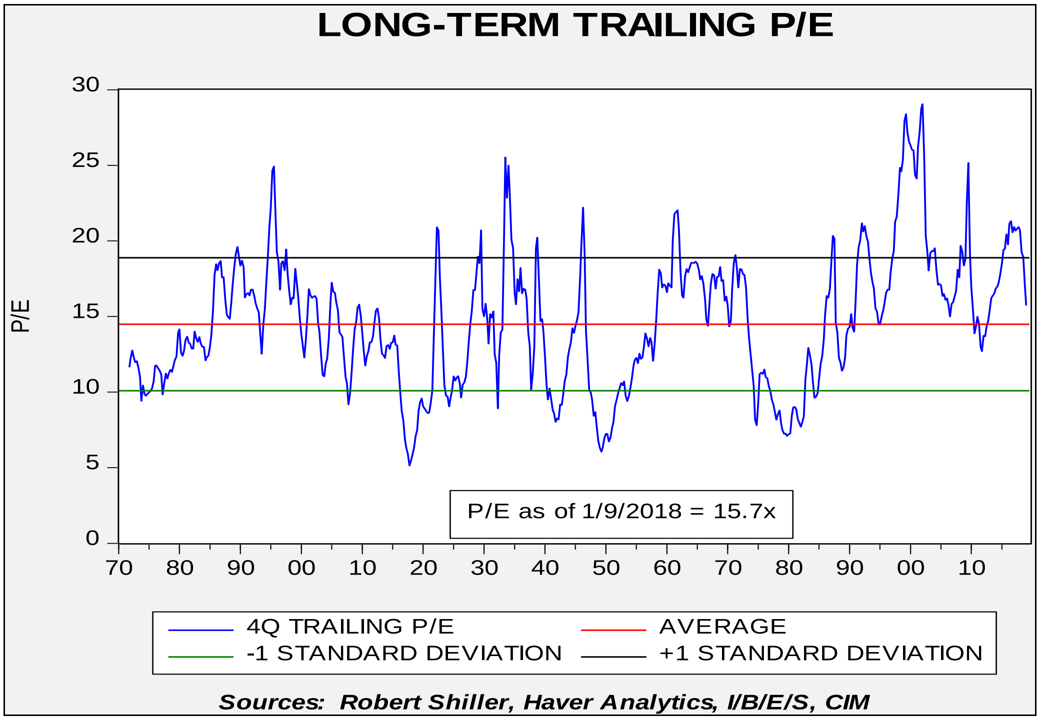


This chart shows the year-to-date returns for various asset classes, updated daily. The asset classes are ranked by total return (including dividends), with green indicating positive and red indicating negative returns from the beginning of the year, as of prior close.

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

January 10, 2019



Based on our methodology,[13] the current P/E is 15.7x, up 0.1x from last week. The rebound in equities and a modest decline in earnings estimates led to the decline.

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[13] This 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 (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 long-term dataset for P/E ratios.