

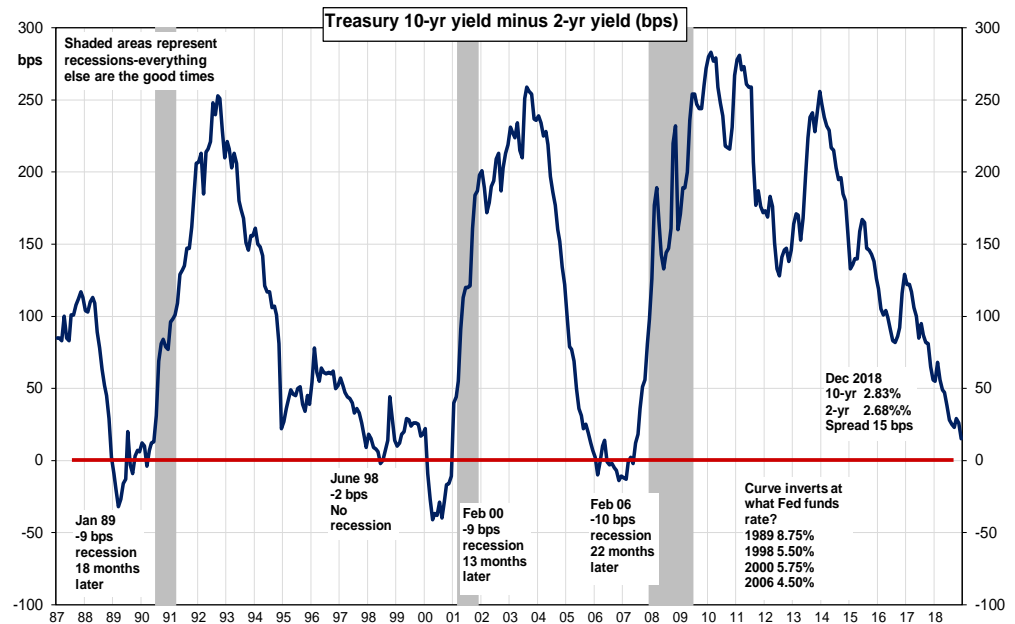
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## INVERTED YIELD CURVE AN EVEN BETTER LEADING INDICATOR OF RECESSION THAN THE STOCK MARKET

Markets and business leaders are thinking a recession is coming. This is partly due to the fears of what comes next when this long economic expansion from the recession finishes its tenth year of growth in June 2019. Something might go wrong just as it has before when the economy hits old age. The prior record for growth was exactly ten years during the Clinton presidency, right



before he passed the baton to President Bush who took office in January 2001 and the economy went into recession two months later in March 2001 which of course was Bush's fault. Anyway, the Tax Cuts and Jobs Act maybe gave the economy a little more pep in its step to make it to the 10 year mile marker. Investment spending rebounded as well when gloom from the oil price crash in 2014-16 lifted.

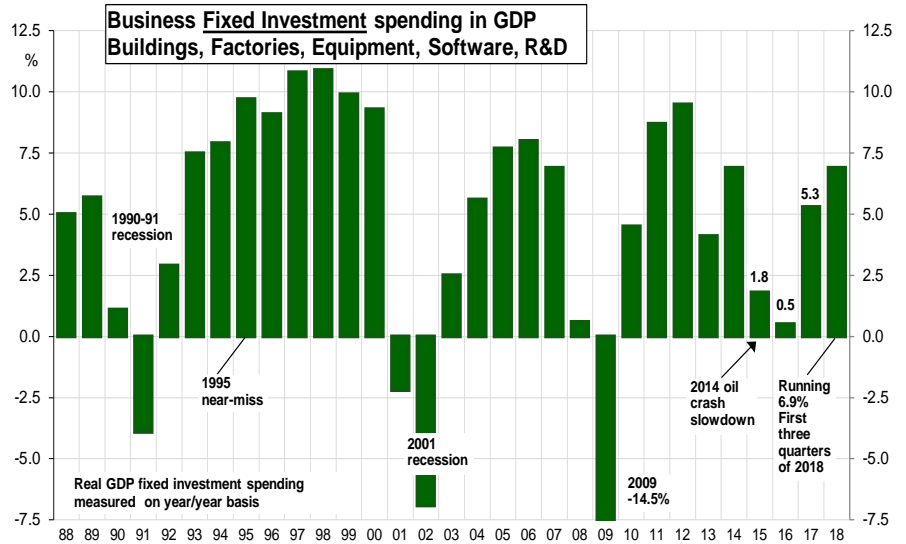
How important is a yield curve inversion's effect on the economy when as graphed here, the 2-year Treasury yield rises higher than the 10-year yield? Part of the history is that when the Fed used to push short-term rates higher it lead to an outflow of deposits from savings & loan financial institutions which then could no longer provide mortgages for home buyers. That's no longer the case of course, and we don't want to look back in history further than the last three recessions which took place over the last thirty years. Financial markets, technology, demographics, globalization, everything has changed to make looking back too far in time a waste of time. There's nothing to be learned from the 70s and 80s recessions. It's the past. Just let go. (Besides there wasn't a 2-year Treasury note until 1976, that's why some people think the yield curve between 1-year Treasury bills and 10-year notes

is the better curve to forecast a recession, but don't waste your time. Recessions are too infrequent to spend a lot of time trying to find the leading indicator that always works.)

Our 2-year/10-year yield curve analysis based on the graph on page one. A pretty spotty forecasting record, long lead times, and sometimes the curve gets down to nearly zero and sits there without going the final 20-30 basis points further to inversion. The 2-year note is 2.54% on Friday and 10-year note is 2.70%, spread is 16 bps; the idea where 2-yrs climbing to 2.63% and 10-yrs falling to 2.62%, inverting the curve, is somehow meaningful on forecasting an imminent recession seems doubtful.

So, the history 2s/10s. 1990-91 recession: curve inverted 18 months before; June 1998 curve inverted, no recession; 2001 recession: curve inverted 13 months before; 2007-09 recession: curve inverted 22 months before. That is the track record, not a lot to hang your forecasters hat on here. We used to think it was important to ask where was the Fed funds rate, how tight was monetary policy, when the curve inverted. Companies investment plans are based in part on short-term borrowing costs, at what level might higher interest rates curb their investment and thus slow the economy?

Unless the inverted curve means rates are high enough to curb business investment, there is no recession



Well, the record again shows, all interest rates were much higher than they are today. The Fed funds rate is 2.5% right now which doesn't sound "tight" to us. When the yield curve inverted 22 months before the 2007-09 recession (plenty of time to get "your affairs in order"), the Fed funds rate was 4.5% or 200 bps higher than today, which makes one wonder why everyone wants the Fed to !STOP!

Eight Down Years for Stocks in the Last Thirty Years					
Event 1	1990	2,633.66	-4.3	Recession hits the Dow industrials	
Event 2	2000	10,786.85	-6.2	Fed hikes to 6.5%	
Event 2	2001	10,021.50	-7.1	Recession, 9/11, Fed cuts rates to 1.75%	
Event 2	2002	8,341.63	-16.8	WorldCom, Fed rate cut 1.25%, Iraq war slowdown	
Event 3	2005	10,717.50	-0.6	Not enough to count, but Fed hikes to 4.25%	
Event 4	2008	8,776.39	-33.8	Recession, no argument there, Lehman bankruptcy	
Event 5	2015	17,425.03	-2.2	1,000 pt flash crash, Oil, China, World growth	
Event 6	2018	23,327.46	-5.6	Fed rates, Trump, Oil, China (trade) war	

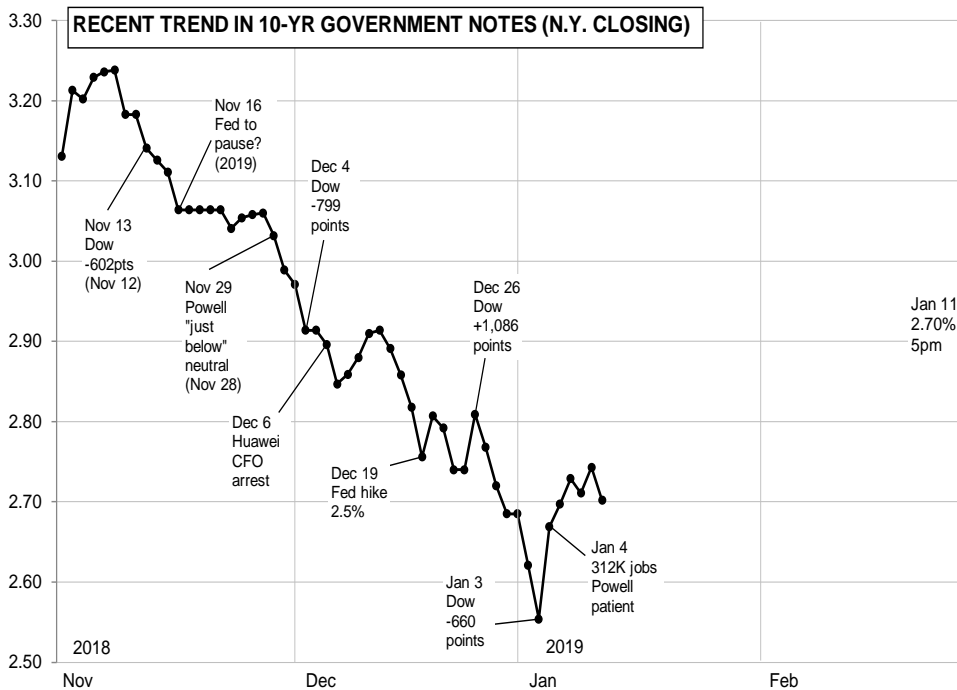
The recent stock market turbulence may have been due as well to fears of the yield curve inverting and what that could do to corporate profits in a recession. Maybe we should revisit the history of that other good leading indicator of a recession: the stock market. The stock market, S&P 500 has already fallen (Oct-Dec 2018 high-to-low) as much as it did in the 1990-91 recession, which means equity markets have discounted a recession or thinks we are already in a recession we guess. Maybe a better way to think about stocks and the economy is to look at the annual down years for stocks, how many times has it happened when the news was bad enough to kick stocks down and keep them down for all year.

In conclusion, the stock market says recession and the yield curve says we are close but no cigar. Nevertheless, there is enough going on here to make Fed policy makers nervous and hit the pause button. We think their patient-flexible comments are merely there to say they will pause until the June 2019 meeting. They shouldn't be telling us they are done for the year.

## MARKETS OUTLOOK

	31-Dec 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020
30-Yr Treasury	3.02	3.20	3.30	3.35	3.45	3.45	3.50	3.60	3.70
10-Yr Note	2.68	3.00	3.10	3.20	3.30	3.30	3.40	3.50	3.60
5-Yr Note	2.51	2.85	3.00	3.10	3.20	3.25	3.35	3.45	3.60
2-Yr Note	2.49	2.80	3.00	3.10	3.20	3.20	3.35	3.45	3.60
3-month Libor	2.81	2.70	2.95	2.95	3.20	3.20	3.45	3.45	3.70
Fed Funds Rate	2.50	2.50	2.75	2.75	3.00	3.00	3.25	3.25	3.50
2s/10s spread	19	20	10	10	10	10	5	5	0

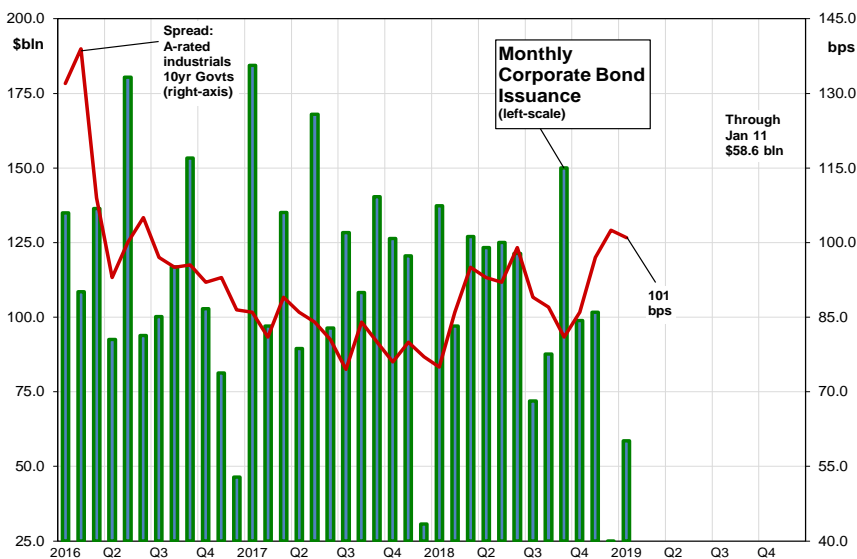
Not a whole lot to point to for this week for the bond market with 10-year yields closing at 2.70% versus 2.67% last week. The U.S. Treasury is still open, during one of the longest government shutdowns in history, selling 3-yr, 10-yr, 30-yr coupons (\$78 billion) and 10-yr yields just 3 bps higher. Dow industrials climbed about 550 points this week, but the bond market is not concerned about “growth” given the Fed speak this week says no more rate hikes for some time. The Fed is concerned about the stock



market and world growth, but they may be late to the worry game as stocks have recovered from the December lows and China’s currency is appreciating which means there is greater confidence that their economy is not going off the rails and that a trade agreement with the U.S. is coming.

## CORPORATE BONDS: ANHEUSER-BUSCH INBEV, KROGER, ENERGY TRANSFER

Corporate offerings were \$47.0 billion in the January 11 week versus \$11.6 billion in the January 4 week. On Thursday, Anheuser-Busch InBev sold \$15.5 billion 6s/10s/12s/20s/30s/40s. It priced a \$4.25 billion 4.75% 10-yr (m-w +30bp) at 205 bps (Baa1/A-). The alcoholic beverage company will use the proceeds to repay debt coming due in 2021 to 2024 and 2026. Corporate bond yields (10-yr Industrials rated A2) were 101 bps above 10-yr Treasuries this week versus 105 bps last Friday.



## FEDERAL RESERVE POLICY

The Fed meets January 29-30 to consider its monetary policy. There is no expectation of a rate increase. The odds of a rate hike at the March 2019 meeting are only 2 percent.

The market was already thinking a rate cut, jumping another step ahead, after Fed officials said over the last two weeks that they were hitting the pause button on the gradual rate hikes path.

[Fed Vice Chairman Clarida's](#) remarks

Thursday night, got interpreted as the Fed would do what it takes if conditions worsened. We aren't sure what Fed rate cuts could ever hope to achieve from the 2.5% level. Not enough difference in borrowing rates to effect business investment spending one wouldn't think. Fed officials could get some positive "announcement effect" on the market, but that may be less than it was in the old days as most market players realize the Fed has little left in the toolkit to stimulate the economy. Clarida's final comment in his remarks are in the text box here, and the words speak for themselves. Clarida was at Pimco before coming over to the Fed and has long held the view that the new neutral for interest rates is closer to 2% where prior to the financial crisis and recession the neutral rate was more like 4%. He also mentioned in his remarks that if the Fed's low unemployment rate model of the economy predicts more inflation, they should wait for actual inflation to rise rather than jumping the gun with higher interest rates. The model could be wrong he said. He is not helping our higher interest rate forecast this year.

Selected Fed assets and liabilities					Sep 10
Fed H.4.1 statistical release					2008**
billions, Wednesday data	9-Jan	2-Jan	26-Dec	19-Dec	pre-LEH
<b>Factors adding reserves</b>					
U.S. Treasury securities	2222.412	2222.517	2240.717	2240.661	479.782
Federal agency debt securities	2.409	2.409	2.409	2.409	0.000
Mortgage-backed securities	1637.123	1637.123	1637.123	1648.687	0.000
Primary credit (Discount Window)	0.007	0.005	0.012	0.018	23.455
Term auction credit (TAF auctions)	0.000	0.000	0.000	0.000	150.000
Asset-backed TALF	0.000	0.000	0.000	0.000	
Maiden Lane (Bear)	0.000	0.000	0.000	0.000	29.287
Maiden Lane II (AIG)	0.000	0.000	0.000	0.000	0.000
Maiden Lane III (AIG)	0.000	0.000	0.000	0.000	
<u>Central bank liquidity swaps</u>	0.086	4.207	4.207	0.070	62.000
Federal Reserve Assets	4104.3	4106.2	4123.3	4123.0	961.7
3-month Libor %	2.80	2.79	2.81	2.79	2.82
<b>Factors draining reserves</b>					
Currency in circulation	1711.945	1720.052	1716.129	1709.041	834.477
Term Deposit Facility	0.000	0.000	0.000	0.000	0.000
Reverse repurchases w/others	2.537	19.481	1.005	5.982	0.000
<b>Reserve Balances (Net Liquidity)</b>	<b>1664.186</b>	<b>1607.335</b>	<b>1660.932</b>	<b>1649.163</b>	<b>24.964</b>
Treasuries within 15 days	2.090	2.091	18.209	18.209	14.955
Treasuries 16 to 90 days	92.622	92.622	72.334	72.333	31.549
Treasuries 91 days to 1 year	290.222	290.222	302.121	302.120	69.272
Treasuries over 1-yr to 5 years	958.045	958.061	964.817	964.808	170.807
Treasuries over 5-yr to 10 years	260.849	260.887	264.607	264.587	91.863
Treasuries over 10-years	618.585	618.634	618.630	618.604	101.337
**September 10, 2008 is pre-Lehman bankruptcy of 9-15-08					

### Clarida January 10, 2019

The U.S. economy enters 2019 after a year of strong growth, with inflation near our 2 percent objective, and with the unemployment rate near 50-year lows. That said, growth and growth prospects in other economies around the world have moderated somewhat in recent months, and overall financial conditions have tightened materially. These recent developments in the global economy and financial markets represent crosswinds to the U.S. economy. If these crosswinds are sustained, appropriate forward-looking monetary policy should seek to offset them to keep the economy as close as possible to our dual-mandate objectives of maximum employment and price stability.

### Eurodollar futures say no more Fed rate hikes

#### Year-ends for Interest Rates

Percent %	2018	2019	2020	2021
Eurodollar futures	2.803	2.69	2.515	2.505
Fed's Dec forecast	2.5	3.0	3.25	3.25

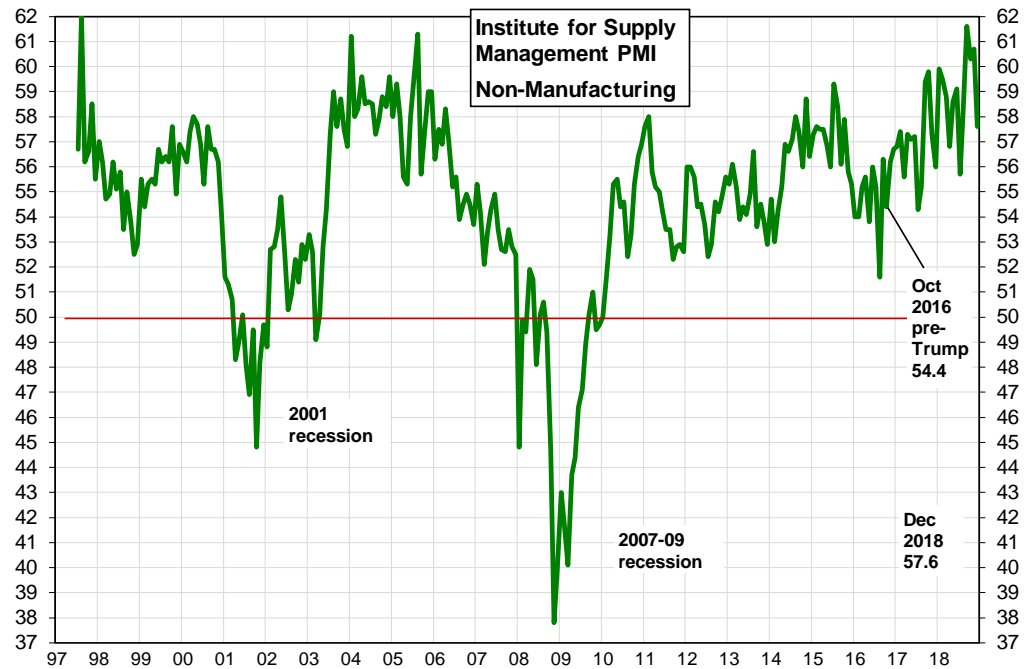
Eurodollar futures price where 3-month Libor will be in the future.  
Friday, January 11, 2019 3-month Libor 2.79%

## OTHER ECONOMIC NEWS THIS WEEK

### Now it's Services PMI's turn to fall (Monday)

Now it's Services PMI's turn to fall, but like a tree in the forest with nobody there, the market doesn't care.

Breaking economy news. The ISM non-manufacturing index tumbled in December by 3.1 points to 57.6, but the stock market seems to have cut its losses on this news if anyone was watching. Payroll jobs jumped 312K in December so it is hard to make the case that the economy is turning down based on this anecdotal



report of surveyed purchasing managers in the services industry. There were 16 service industries reporting growth, and only one, Mining, is in decline. The economy is still chugging along according to one participant. Indeed. It's the holiday season. Unlike the drop in the ISM manufacturing index, services orders were actually higher as opposed to the sharp drop in manufacturing orders in the survey reported Thursday. Even Powell downplayed the weaker ISM manufacturing statistics last Friday during his panel discussion with old chums Bernanke and Yellen.

Services is by far the larger employer among nonfarm private companies. Private nonfarm payroll employment was 127.858 million in December where manufacturing jobs totaled 12.842 million and services nearly ten times larger at 106.906 million. The decline today in the ISM services index was a sharp one, but the index trend has been erratic with violent swings up and down the last few years which makes it difficult to tell a consistent story about the services economy. The bottom line is that services activity seems to be okay late in the economic cycle, and any reading above 50 is one that shows the services economy is growing.

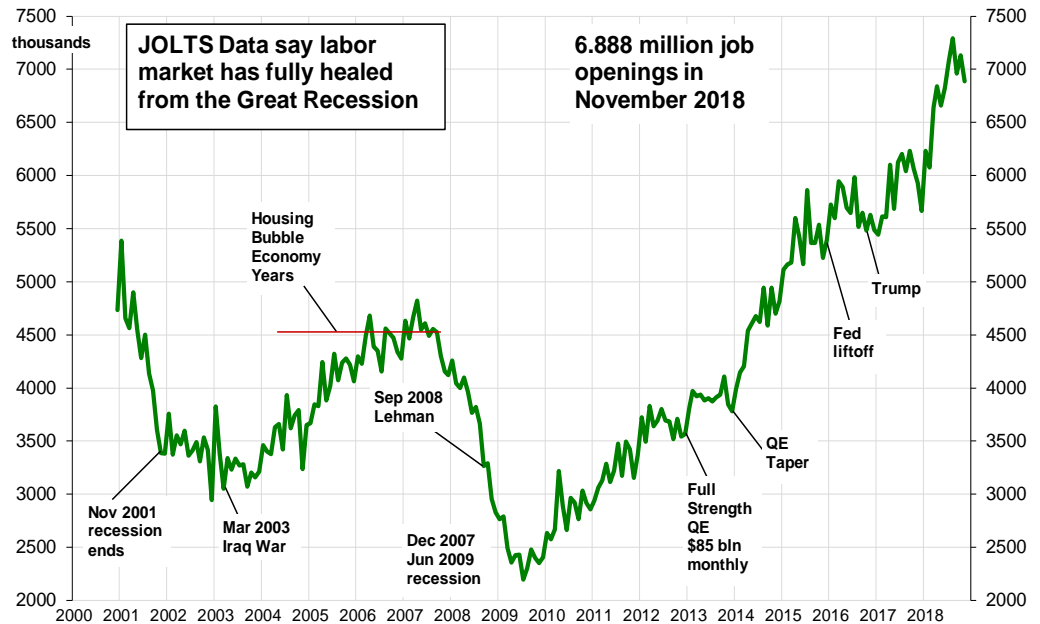
Net, net, purchasing managers at service companies show increasing caution at the end of the year which may yet reflect a turning of the tide on business sentiment and take a toll on the economic outlook in 2019. Virtually everyone is expecting growth to slow this year, but how much and how far the slowdown takes us is still anyone's guess. The stock market wasn't impressed with this latest reading of flagging purchasing managers confidence, but stocks may be simply yawning in their best been there done that way where the recent plunge in stock prices discounted everything but the kitchen sink including a big old U.S. recession. Stay tuned. Story developing. Growth is still expected this year but there is increasing caution as well with the economy poised to break the ten-year longevity record for growth this summer if all goes well.



## Fewer job openings: you missed your chance. (Tuesday)

Breaking economy news. Job openings keep falling, not in a worrisome manner, but it looks like there are fewer opportunities than there were earlier this summer certainly as the positive boost from the Tax Cuts and Jobs Act signed last December starts to fade. There are 6.888 million job openings in November down from 7.131 million a month ago and that all-time record high of 7.293 million in August 2018. Don't get us wrong, there is certainly a lot of opportunity out there for new employment, it is just that there is somewhat less than before. The stock market really cratered in December so it will be interesting to see if this added or subtracted from those help wanted jobs boards in next month's report. The stock market's sharp losses generated a lot of uncertainty, and companies don't add to staff if the outlook is increasingly uncertain.

It is not all gloom and doom, assuming that is a correct characterization as 6.888 million job openings in November are still greater than the official 6.294 million unemployed in December, the number of people behind that 3.9% unemployment rate. Not all gloom and doom because many sectors of the economy require more workers this month. Companies need even more of you if you work in education or health care, durable goods manufacturing, finance and insurance (Yay!).



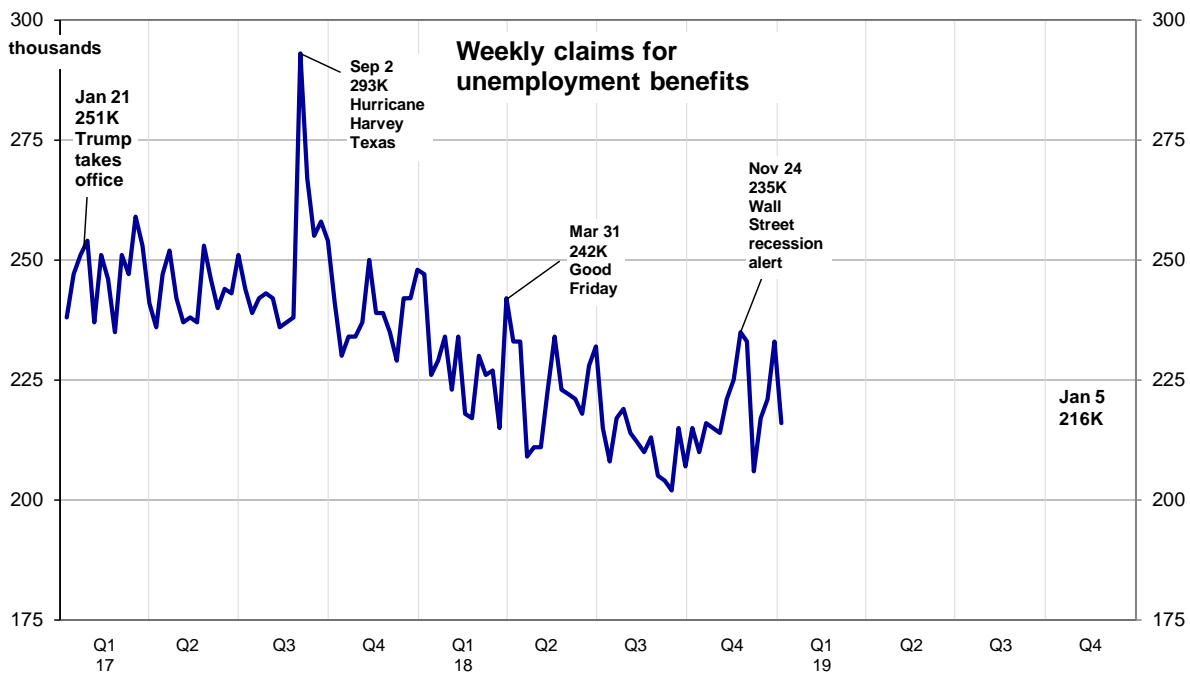
Net, net, America is still the land of opportunity for workers to the chagrin of management perhaps who are having increasing trouble hiring and retaining the help they need to produce the goods and services that makes the wheels of the economy spin. Job openings moved above 6 million earlier this year which seems to be tied to increasing business confidence after the signing of the Tax Cuts and Jobs Act and the labor market remains strong with the economy cruising along at full employment for now.

It is just that the labor market is not going into overdrive where it could lead to an overheating economy with labor shortages, sharply higher wages and more inflation, and this will keep the Federal Reserve cautious on the need to move interest rates gradually higher this year. There is no risk that the Fed is behind the curve when it comes to reining in incipient inflation pressures. Slow and steady remains the best course for additional rate hikes. We have penciled in the Fed's next rate hike for their June meeting this year.

## Jobless claims tumble 17K to 216K in the Jan 4 week sounding the all-clear sign (Thursday)

Jobless claims turned back down at the start of the year which represents good news as it tells Fed officials that the turbulence in financial markets and growth slowdown in many parts of the world has not made its way to U.S. shores. You can't have a recession without job losses and right now the opposite trend is taking place where companies are holding onto their workers, not firing them, in the tightest labor market seen since the 1960s.

There are increasing risks and caution over the economic outlook in 2019, but jobless claims say the seas are calm and it looks to be smooth sailing for the economy for now. Time will tell if the Federal government shutdown leads to a temporary rise in layoffs in companies that provide services and goods to the Federal government. In the December 22 week, the total number of Federal employees receiving unemployment benefits were just 11.375 million versus 16.38 million a year ago. Stay calm. Carry on.

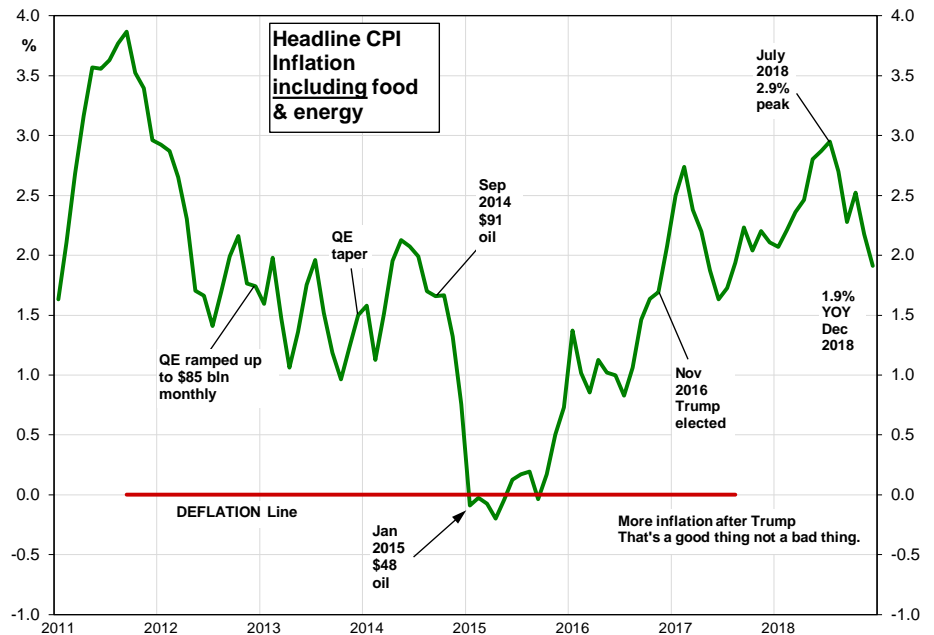


## Deflation Today Deflation Tomorrow (Friday)

Breaking economy news. Headline CPI falls 0.1% in December and is likely to fall again in January. Energy prices are down sharply since October and are likely to keep a lid on inflation pressures next month as well. Core inflation is steady at 2.2 percent mostly due to the rising costs of housing which has a big weight in overall consumer purchases of goods and services less food and energy.

Net, net, with consumer prices falling overall this month the Federal Reserve can take comfort in the fact that the tightest labor market in a generation is not producing enough inflation for the Fed to spoil the party and take away the economy's punch. Call them patient or flexible or even chicken given the president's critical tweets, the Fed simply doesn't have the evidence of an inflationary economy that is in danger of overheating, so they don't have to risk putting an end to the longest economic expansion almost in history by pushing interest rates any higher.

We don't know that they are done with rate hikes for good, but the Fed can certainly take the next six months off for the economy's good behavior and take another look at the inflation temperature reading again at the June meeting. If there is a recession coming this year, it won't be due to an overshoot on rates by the Fed. Bet in it.





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