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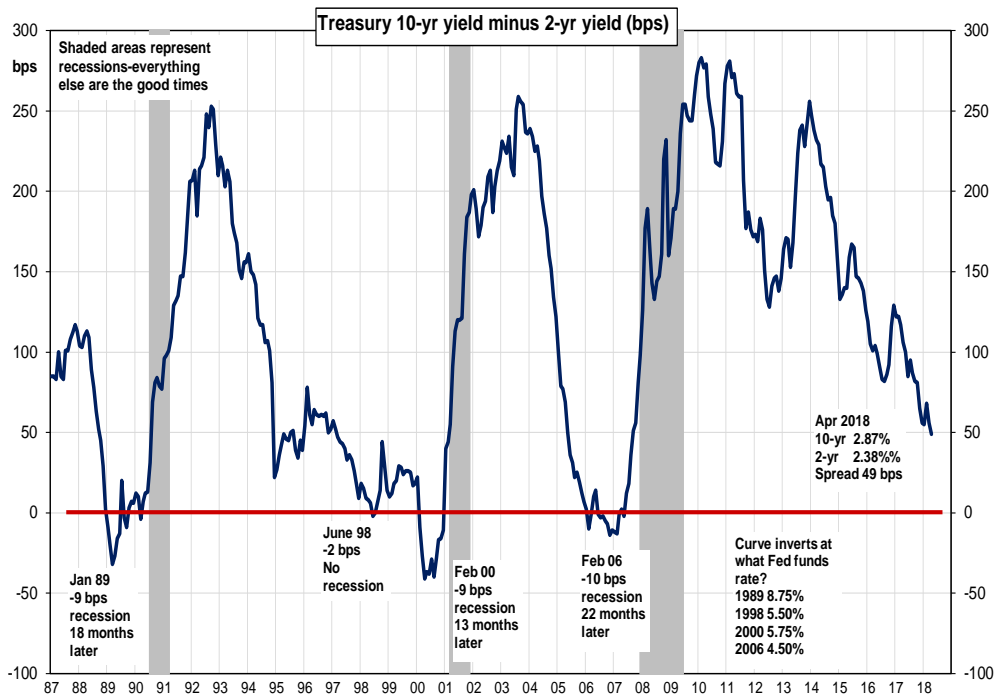
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“DOES INVERTED YIELD CURVE MEAN RECESSION?” POWELL ANSWER MAY HAVE BROADER IMPLICATIONS FOR WHERE RATES ARE HEADED

Easy does it. The Fed’s gradual path of interest rate hikes is gradual. Don’t overdo it. The final question asked during Fed Chair Powell’s first Fed meeting press conference in March may have been more telling about what he thinks about monetary policy. Don’t overdo it.

Would you tolerate an inverted yield curve? The 2-yr 10-yr curve has gone negative before recessions.

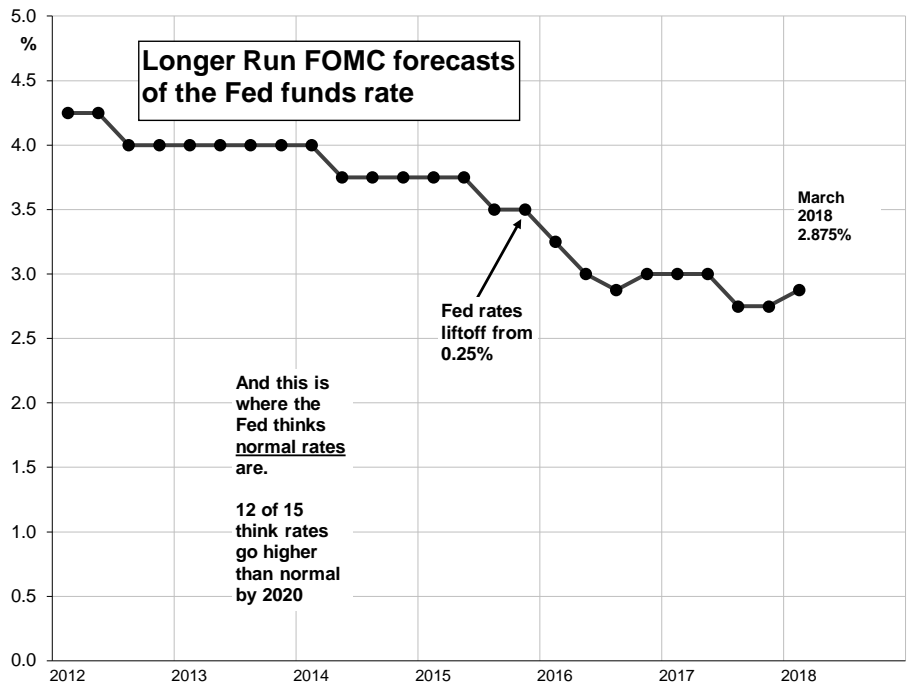
“You know, it’s an interesting question, and there are a range of views there. I think it’s true that yield curves have tended to predict recessions if you look back over many cycles, but a lot of that was just situations in which inflation was allowed to get out of control, and the Fed had to tighten, and that put the economy into a recession. That’s really not the situation we’re in now, so I don’t think that recession probabilities are particularly high at the moment, any higher than they normally are. But, having said that, I think there are good questions about what a flat or inverted yield curve does to intermediation. It’s hard to find in the research data, but nonetheless, I think those are issues that we’ll be watching carefully.”



Interesting comment. We cannot remember any other Fed Chairman looking back in history and saying Fed policy, higher interest rates, sent the economy into a recession. There have been other comments from past Fed officials before about how they might have overdone the rate hikes back there in 2004-06. Past meaning that they were there at the time. The Fed funds rate went from 1 percent to 5.25 percent in 17 consecutive steps, one at each of

the eight meetings they have each year. Why did they tighten policy so much pushing interest rates to 5.25%? Inflation never really got that high after all, or at least never showed signs of breaking out to much higher levels that could harm the economic expansion. Core PCE inflation never rose on an annual average basis higher than 2.2% during the housing bubble economy years in the mid-2000s. We can ask why they tightened so much now, looking back at this time, even though it is clear they thought the economy was overheating with the unemployment rate below full employment levels and inflation in danger of shooting higher. We do not think Fed Chair Powell will push interest rates too high during his time in office if he can avoid it; he is likely to be more skeptical that inflation will rise to worrisome levels. The Committee still has a Fed funds rate forecast of 3.5%, but it's way out there on the horizon, 2-1/2 long years from now at the end of 2020.

As far as Powell's words on the inverted yield curve, we finally found something here we can agree with. The track record of the 2-yr 10-yr yield curve is that it has inverted one to two years before the last three recessions, 90s, 2001, mid-2000s, which makes it not a very good indicator of recession. The 2-year yield went higher than the 10-year yield a fourth time, in June 1998 when the financial world was in the middle of the 1997 Asia financial crisis and 1998 Global financial markets crisis... but no recession.



It does seem as if policymakers, past and present, aren't as afraid that inflation will break out to higher levels. Wage-inflation? Average hourly earnings first hit 4% in 2006 and yet core PCE inflation only made it as high as 2.2% on a sustainable basis. We had crude oil moving up to \$140 and yet core inflation only made it as high as 2.2% on a sustainable basis. We are starting to wonder what kind of rocket fuel inflation needs in order to take off to worrisome levels that requires the Fed to step on the economy's brakes. We are still thinking the Fed funds rate could go to 4% this cycle: 5.25% in 2006 was too high, 3% sounds too low of a price to choke off the credit spigot. Why don't you just meet me in the middle at 4%.

To get there, 3% neutral rates would probably need to move up in their forecasts. Because it is not clear what could trigger a "tightening" of monetary policy in their minds. What would it take for them to move the Fed funds rate above neutral, above 3%, which could slow economic growth? One would think growth would have to run above 3% on a sustained basis for them to contemplate that. We will have to see how high the full committee will push rates above normal if the unemployment rate remains low and core PCE inflation is 2.2%.

A 3% or 4% Fed funds rate? The bottom line is if inflation does not get out of control, then the Fed is not going to tighten, and will not take away the punch bowl by raising interest rates higher than normal. Besides, Powell is another Trump appointee, and Trump has said he likes low interest rates. What are normal rates? Normal currently is the 3% longer run Fed funds rate forecast made at the March 2018 meeting. And while we don't like forecasting that bond yields will rise above the Fed's longer run Fed funds rate forecast, we will stick with the 3.5% 10-yr yield forecast at the end of 2019 and 4.0% yield forecast for the end of 2020 for now. Their longer run Fed funds rate forecasts moved down from 4%, maybe now it will slowly move back up. One further caveat: the yield curve 2s/10s never inverted before the Fed funds rate rose to 4.5% looking back in modern economic history. Why the curve would think of inverting now with the Fed funds rate at 1.75% is not clear. Short-term yields are not very restrictive now, not considered tight enough to affect the demand for credit one wouldn't think. It's not logical.

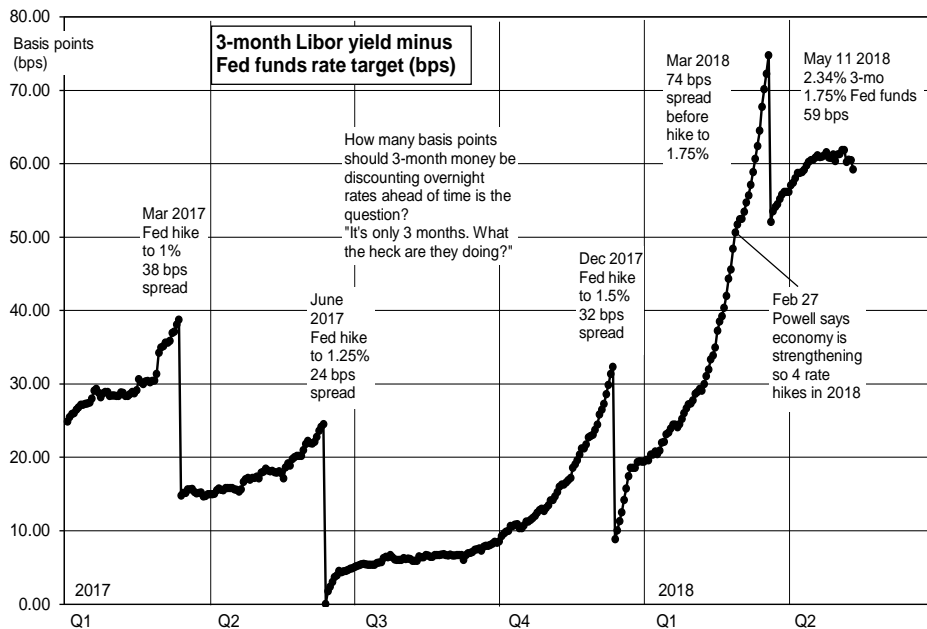
FEDERAL RESERVE POLICY

The Fed meets June 12-13 to consider its monetary policy. The committee hasn't voted, but the market has, and for a long time now too; the market odds of a 25 bps rate hike to 2.0% are 98%. Incoming Fed Vice Chairman Williams said recently he thought neutral rates were not far away at 2.5%. Thank goodness, he added that the Fed funds rate might go a little above his 2.5% neutral because the committee sees core PCE inflation above target at 2.1% in 2019 and in 2020 and the economy is operating beyond full employment with an unemployment rate of 3.9%. On the other hand, he could've just been coming up with a narrative to explain the dots forecasts for rates: 2.25% in 2018, 3.0% in 2019, and 3.5% in 2020.

Three-month Libor has stopped rising. It was 2.34% Friday for a 59 bps spread over the 1.75% Fed funds rate. If 3-month Libor is still 2.34% on June 13 when the Fed raises the Fed funds rate to 2.0%, then the spread will come down to 34 bps which is still relatively wide, given there will be three more months to go before another potential rate hike to 2.25% on September 26.

Selected Fed assets and liabilities					Sep 10 2008**
Fed H.4.1 statistical release billions, Wednesday data	9-May	2-May	25-Apr	18-Apr	pre-LEH
Factors adding reserves					
U.S. Treasury securities	2395.528	2395.460	2413.218	2413.079	479.782
Federal agency debt securities	4.391	4.391	4.391	4.391	0.000
Mortgage-backed securities	1744.972	1744.972	1744.967	1756.290	0.000
Primary credit (Discount Window)	0.000	0.160	0.034	0.000	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	0.000
Maiden Lane (Bear)	1.715	1.714	1.714	1.710	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	0.000
Central bank liquidity swaps	0.080	0.117	0.082	0.082	62.000
Federal Reserve Assets	4405.8	4403.6	4420.5	4433.3	961.7
3-month Libor %	2.36	2.36	2.37	2.36	2.82
Factors draining reserves					
Currency in circulation	1649.163	1646.124	1643.335	1642.295	834.477
Term Deposit Facility	0.000	0.000	0.000	0.000	0.000
Reverse repurchases w/others	2.720	6.520	3.570	14.021	0.000
Reserve Balances (Net Liquidity)	2046.775	1991.823	2010.948	2067.159	24.964
Treasuries within 15 days	26.228	26.228	34.346	34.346	14.955
Treasuries 16 to 90 days	90.360	90.359	86.284	86.282	31.549
Treasuries 91 days to 1 year	290.879	290.878	289.432	289.430	69.272
Treasuries over 1-yr to 5 years	1068.428	1068.418	1079.938	1079.919	170.807
Treasuries over 5-yrs to 10 years	304.602	304.579	308.277	308.229	91.863
Treasuries over 10-years	615.031	614.998	614.941	614.872	101.337

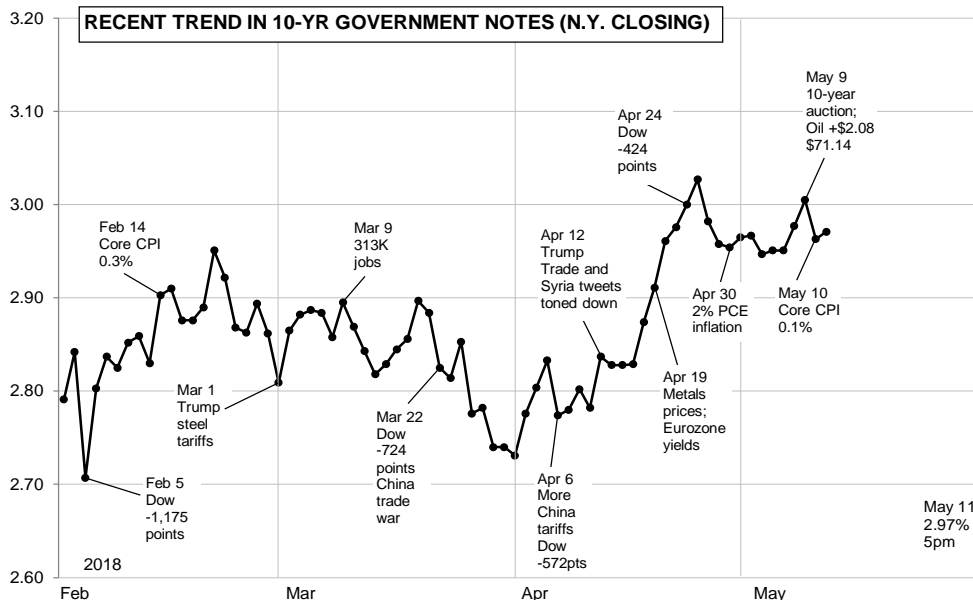
**September 10, 2008 is pre-Lehman bankruptcy of 9-15-08



MARKETS OUTLOOK

	29-Mar 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020
30-Yr Treasury	2.97	3.10	3.10	3.20	3.35	3.45	3.60	3.55	3.75	3.75	3.90	4.00
10-Yr Note	2.74	2.80	2.90	3.00	3.20	3.30	3.50	3.50	3.70	3.70	3.90	4.00
5-Yr Note	2.56	2.60	2.70	2.80	3.05	3.15	3.40	3.45	3.65	3.65	3.90	4.00
2-Yr Note	2.27	2.40	2.55	2.80	3.00	3.15	3.40	3.40	3.60	3.80	4.00	4.20
3-month Libor	2.31	2.30	2.55	2.80	3.05	3.30	3.55	3.55	3.70	3.95	3.95	4.20
Fed Funds Rate	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.25	3.50	3.75	3.75	4.00
2s/10s spread	47	40	35	20	20	15	10	10	10	(10)	(10)	(20)

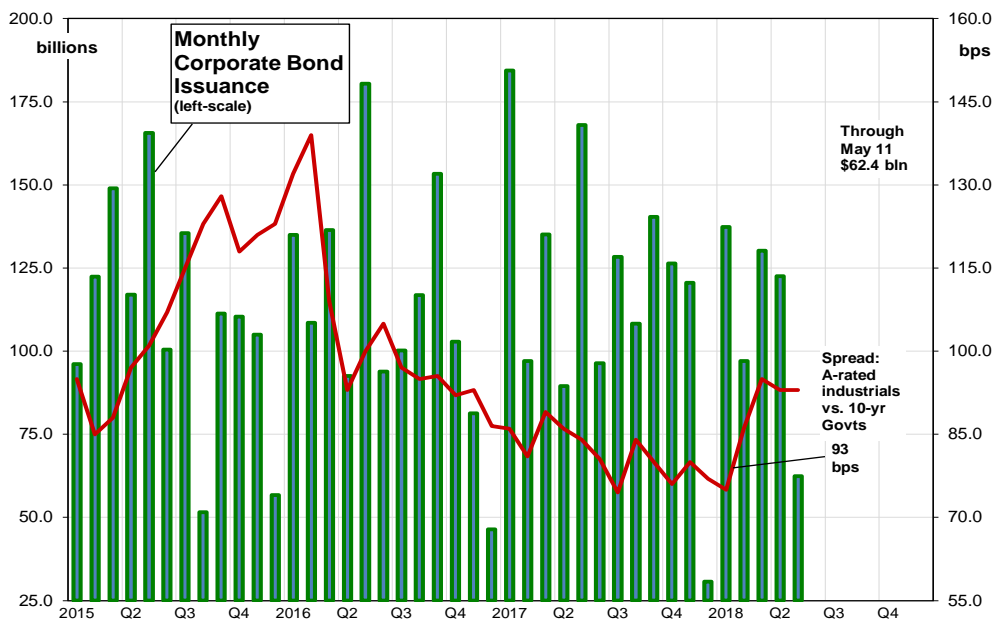
For a week with a lot of news, 10-yr Treasury yields closed relatively unchanged at 2.97%. The Treasury quarterly refunding auctions and \$70 oil after Trump exited the Iran nuclear deal did not send yields soaring. As far as supply, there will be months to go before the Treasury starts selling significantly more longer maturity notes and bonds. The Treasury quarterly refunding announcement, on



Wednesday May 2, said issuance would increase by \$27 billion with about 40% being 2-year and 3-yr notes, so upward pressure on 10-year yields from supply may be less than we thought. The supply of Treasury bills should decline a little after peaking in March so the effect on Libor is over.

CORP BONDS: GENERAL DYNAMICS, CON ED, KELLOGG, SOUTHERN CAL GAS

Corporate offerings were \$47.0 billion in the May 11 week versus \$23.8 billion in the May 4 week. On Thursday, GlaxoSmithKline sold \$6.0 billion 3s/5s 7s/10s/FRNs. It priced a \$1.75 billion 3.875% 10-yr (m-w +15bp) at 90 bps (A2/A+). The global pharmaceutical company will use the proceeds to partly fund its purchase of Novartis' consumer healthcare



business. Corporate bonds (10-yr Industrials rated A2) were 93 bps above 10-yr Treasuries this week versus 93 bps last Friday.

OTHER ECONOMIC NEWS THIS WEEK

Wow. 6.550 million jobs out there in March. Employers beware. (Tuesday)

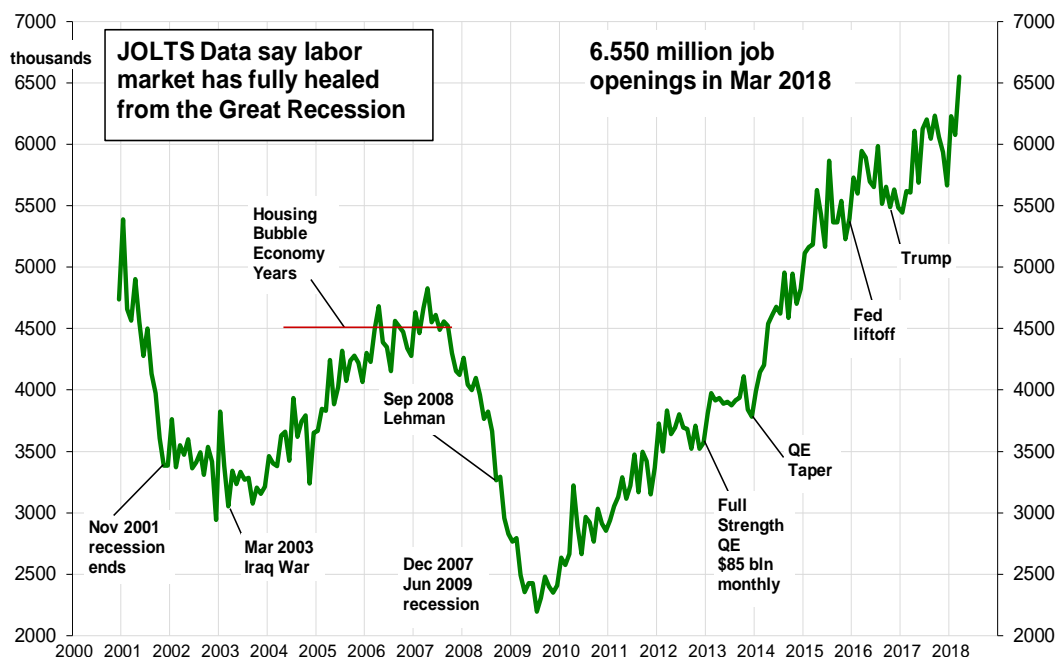
Breaking economy news. Jolts data show job openings soared in March with an outsized increase of 472 thousand to 6.55 million. There are more job openings out there than there are unemployed people in the U.S. The 3.9% unemployment rate in April is based on 6.346 million unemployed people. 6.55 million jobs for the 6.346 million unemployed shows this is the most lopsided, mismatched labor market in the nation's history. Somehow the word is not getting out to the unemployed that there is a job for every single one of them.

The quits rate. How many people are quitting their jobs which used to be one of Yellen's favorite economic statistics. Not sure what Powell's favorite economic statistic is. These are statistics only an economist could love. 3.344 million quitters out there in March, the most yet for this long economic recovery, a statistic that screams confidence in the economic outlook.

The volatility in the stock market and brewing trade war, at least in words, has not made American workers less confident, they still believe they can quit their jobs and get a new one with a snap of the fingers because jobs, jobs, jobs are everywhere.

Net, net, the labor market is literally on fire it is so hot, with job openings the greatest in history. No wonder unemployment dipped under 4% in last week's report for April. Everyone who can pick up a shovel has already joined the workforce. Massive tax cuts for corporations cannot boost jobs creation if there is no one out there in the country to hire. The only people dropping out of the labor force are retiring baby boomers, everyone else that was sitting on the fence and not in the labor force is starting to come back in because companies need them badly.

This is just the jolt of good news that policy makers need to continue with their gradual pace of rate hikes. If there were any doubters on the Committee that is going to change with the big leap in job openings the last three months. The labor market is hot and getting hotter by the day so central bankers need to continue to take the punch bowl away because higher wages and greater inflation are on the way. Bet on it. Jobs with greater rewards are out there. Go get yours today.



Oilflation may be coming, but PPI inflation cools down this month (Wednesday)

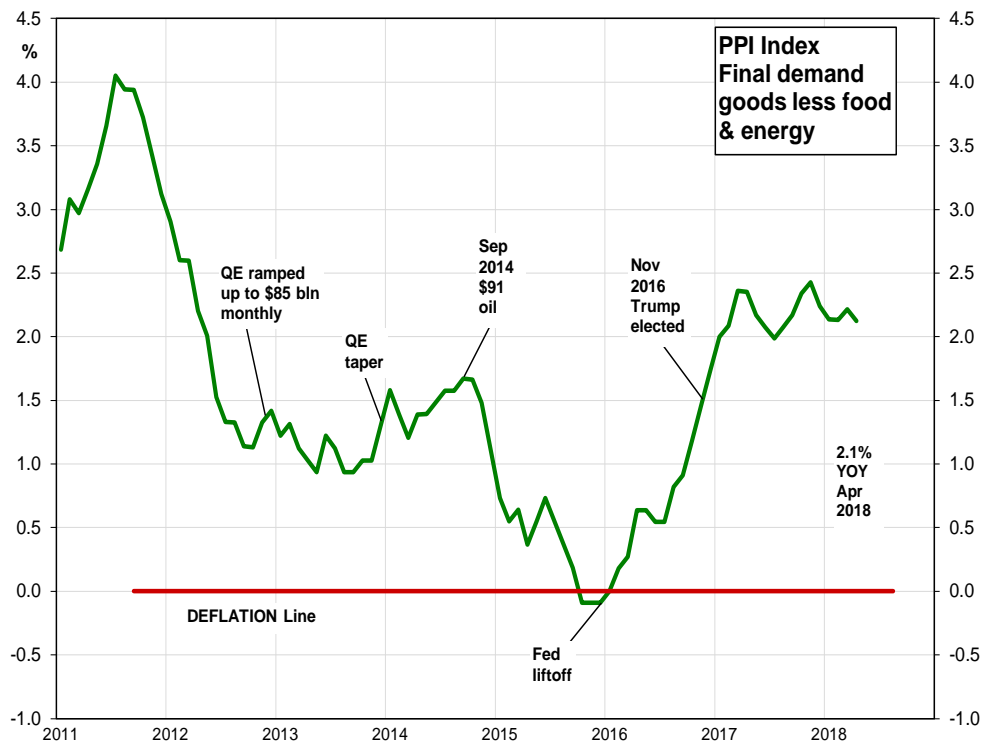
Breaking economy news. PPI data, once one of the biggest market moving economic indicators in the world, second maybe only to the monthly trade deficit figures. Final demand prices minus the more volatile components of food and energy and trade, rose just 0.1% in April after rising at a faster 0.4% monthly rate in January, February and March. Inflation is not heating up, it is cooling down according to producers, and the year-to-year rate of final demand prices less food, energy, and trade is running 2.5%. If it were running at a faster pace of over 3%, we would start to worry about the inflation outlook, and it was 2.9% year-on-year in March, but has since slowed down.

Inflation isn't breaking out, although with Trump exiting the Iran nuclear deal, higher energy prices could kick-start a new round of inflation at the producer level as companies seek to pass on the costs of this important raw material into the final products they manufacture. Higher oil prices may herald that more inflation is on the way, but not today.

Net, net, today's producer prices data aren't what you would expect to see when the economy hits the wall of full employment and inflationary pressures suddenly appear with a vengeance. Underlying inflation pressures are building in the economy, but have not broken out yet, so there is no reason for the Fed to speed up the pace of its interest rate path.

For the moment this is a miracle economy unlike any other seen in other expansions because growth is fast enough to put people to work, but not fast

enough to lead to greater inflation. Too much inflation, and the Fed's response, has brought down the economy in every business cycle since the 70s. There is no sign inflation is going too high in today's report, suggesting this economy is destined for the record books and is on track to break the 10 year expansion during the 90s. Stay tuned. Story developing.

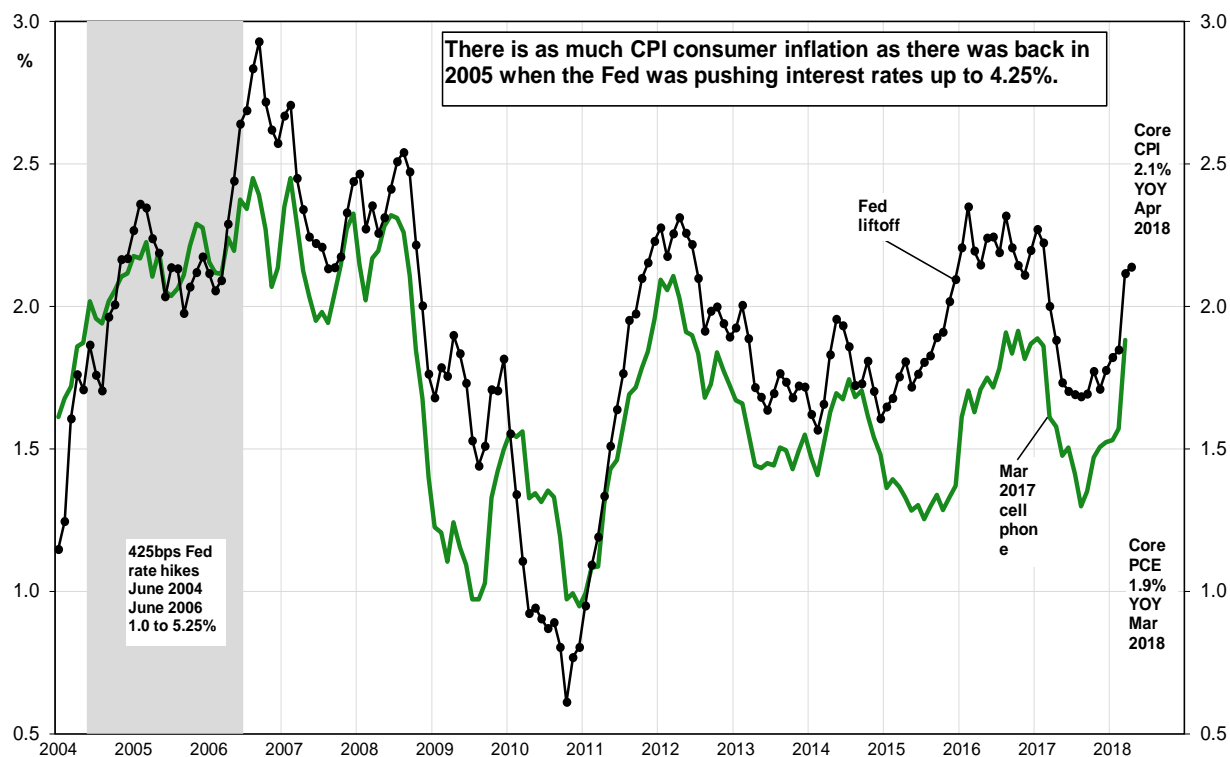


All over the world, inflation is cooling down, cooling down (Thursday)

Breaking economy news. CPI inflation which was thrown in the dustbin by Greenspan nearly twenty years ago. One of his few mistakes. The market ignored him for years and years. The market is broken so now they let the Fed steer them around by the nose. CPI inflation is mostly used to guess at where PCE inflation, that's personal consumption expenditures (PCE), is going because that's what the Fed

under noneconomist Chair Powell targets. PCE inflation for April is released with the personal income report on Thursday, May 31. CPI is fake inflation, wait for PCE inflation.

CPI inflation up 0.2% to 2.5% year-on-year, and core inflation rising just 0.1% to 2.1% year-on-year. Inflation is at the Fed's target, but is not showing signs of moving to even higher, more worrisome levels for central bankers. Without stronger economic demand, the outlook for inflation really depends on how high energy prices get, and right now, gasoline prices at the pump nearing \$3 per gallon has not generated much headline inflation news to scare the bond market. Core CPI is 2.1% and headline CPI is 2.5%, so the differential is 0.4 percentage points. Not enough inflation for the bond market, as cooling inflation sunk the ship on yields for 10-yr Treasury notes from 2.98% at 830am, the report's release time, to 2.94% minutes later.



If you are a consumer, there is some good news on the deflation front. New and used car prices fell in April, as did motor vehicle insurance, airline fares, recreation and communication prices as well.

Net, net, inflation is cooling down all over the world which calls into question the overall health and strength of the recovery. Inflation after nine years of economic growth should be heating up, not cooling down. The world looks more competitive than ever with many companies afraid to raise prices which could cost them in sales. The outlook couldn't be more perplexing with jobless claims showing the labor market in overdrive, the economy at full employment, yet not really throwing off the sparks of higher inflation. For the moment, the inflation threat is simply not materializing.

This will take some wind out of the remaining Fed hawk's sails and put some of those rate hikes out there on the horizon in jeopardy. Three rate hikes in 2018 and three rate hikes in 2019 may never happen if inflation doesn't start to heat up later on this year.

Not sure how inflation became the yardstick to measure the economy's success. Central banks won't lift rates without assurances that inflation is moving higher. Part of inflation's prominence is that many central banks only have an inflation target. They don't have an economic growth or unemployment rate target that measures finish-line success. So they keep shoveling QE at the markets, having broken their interest rate tool by shoving it to zero long ago. Stay tuned. Story developing. The Fed can continue to raise rates only gradually as a faster response is not necessary with inflation cooling down this month.

Not enough imported inflation to push consumer prices higher (Friday)

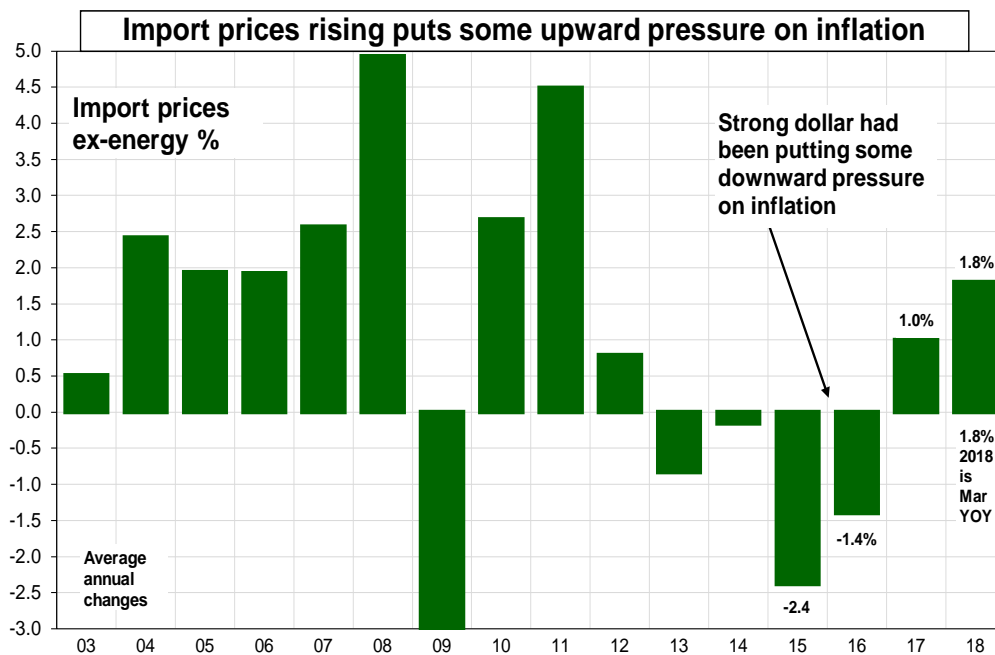
Breaking economy news. Import prices. Rising 0.3% in April after falling 0.2% in March. It bounces around with energy prices, chiefly petroleum.

For consumer price inflation, there is more inflation in services prices, and less inflation, more deflation actually in commodities and other goods prices. One key input into the Fed's models for consumer goods prices is imported goods prices coming in from overseas. The tough talk on trade out of Washington has not led the price of imported goods higher yet which is a good thing as Americans love foreign products. Nonfuel imports prices have picked up this year rising 0.5% in January and 0.4% in February, a little less in March with 0.1%, and now today's April data up 0.2%. Over the last twelve months, nonfuel imports prices rose 1.8%, an increase from 1.0% a year earlier, but they are not moving faster than the Fed's 2.0% target for inflation. Industrial supplies and materials ex-fuels are rising 7.8% the last year, while automotive vehicles and parts are up just 0.3% and consumer goods, non-autos, are up 0.3% year-on-year as well.

Net, net, import prices will cause the prices that US consumers pay to warm up not heat up, so inflation is not likely to shoot higher. Fed officials can relax a little and are no longer monitoring inflation like a hawk anyway.

There are trade wars out there along with some tariffs and quotas, but imported goods are not too expensive yet, and are unlikely to bring too much inflation to our

shores. For one thing, the dollar has gained some strength of late, starting with the recent ECB meeting where growth in Europe may be slowing and rate hikes delayed. Stay tuned. Story developing. Inflation is on the way, but it isn't going to move high enough for the Fed to take all the punch in the punch bowl away. Import prices are relatively benign and the Fed can continue with its gradual path for interest rate hikes, secure in the knowledge that the economy is not in danger of overheating yet. Trade talks are tough, but they aren't making the Fed's job tougher.



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