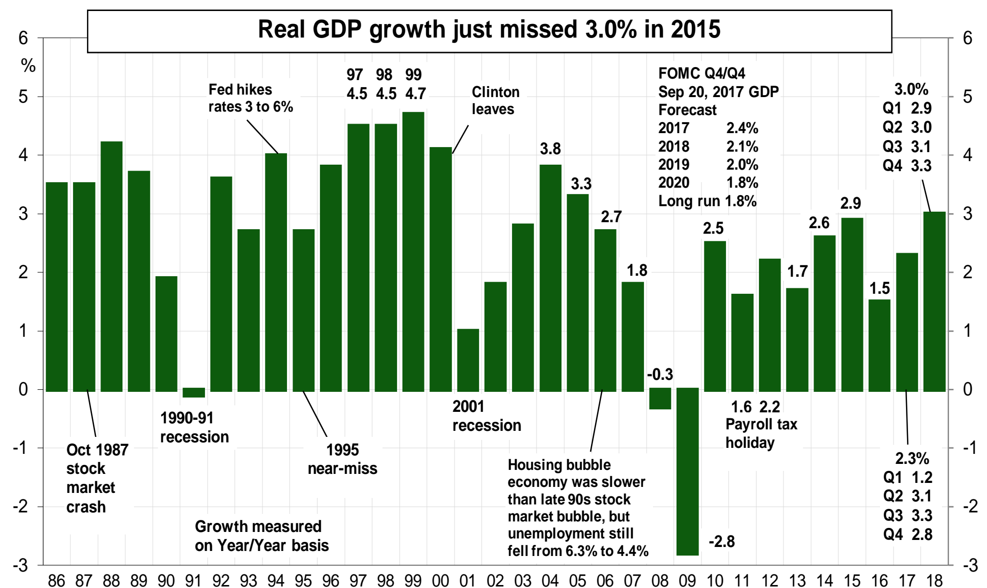
CHRISTOPHER S. RUPKEY, CFA
MANAGING DIRECTOR
CHIEF FINANCIAL ECONOMIST
ECONOMIC RESEARCH OFFICE (NEW YORK)
(212) 782-5702
crupkey@us.mufg.jp

MUFG | 1251 Avenue of the Americas
New York, New York 10020
A member of MUFG, a global financial group

15 DECEMBER 2017

~~Year-end Review and Outlook for 2018~~

GDP, GDP, GDP, WHO'S GOT THE GDP FORECAST?



It's all about growth… or it used to be before the economy reached the pinnacle of success: full employment. At Fed Chair Yellen's last press conference, she said they really don't understand inflation very well. Might as well say they don't understand GDP growth very well either. Remember how for years they thought they needed faster 3% GDP growth to bring down the unemployment rate? Well, we never got 3% growth, despite trying and trying for it, keeping interest rates low and hurting those who live on the interest on their savings accounts in the process. We never got 3% growth and yet unemployment fell to decades lows anyway.

Now another group wants to play economist and forecast GDP. The Trump Administration. This time to make the $1.5 trillion tax cuts partly pay for themselves by generating additional growth. Don't try this on your own, you really need to be a professional economist to forecast GDP. Someone plying their trade who is in nationally ranked surveys of economists, like the Blue Chip Economic Indicators survey, like the Philadelphia Fed's Livingston Survey, the oldest continuous forecasting survey in this country, like the National Association for Business Economics (NABE) with 2,300 members.

Of course, the Fed plays the forecasting game as well. All sixteen Fed Governors and regional Federal Reserve Bank Presidents. That's why it is interesting to compare and contrast the Trump estimates

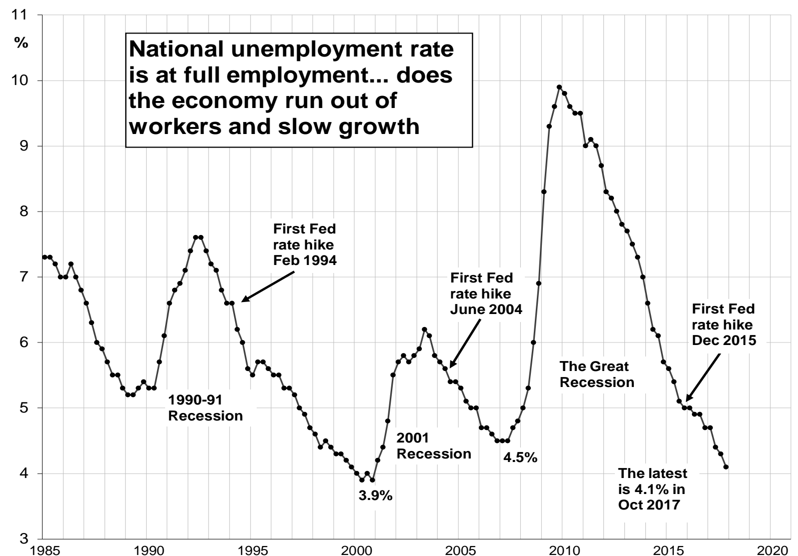
MUFG

on growth from the tax cuts this week with the Fed forecasts at the December meeting released to the world at 2pm New York time on Wednesday, December 13.

On Monday, the Treasury issued a one-page analysis of growth and revenue estimates from the tax reform legislation. The dust hasn't settled on the tax act and final terms are not known, but it doesn't matter much for the Treasury one-pager because the economic growth numbers simply use the Economic Assumptions in the Fiscal Year 2018 budget from the Office of Management and Budget (OMB) earlier this year. Real GDP 2.5% in 2018, 2.8% in 2019, then 3.0% in 2020 and on and on and beyond, until the cows come home, or we mean for the rest of the 10 year period.

	Actual			Forecast				
	2014	2015	2016	2017	2018	2019	2020	
GDP YY	2.6	2.9	1.5	2.3	3.0	2.8	2.7	MUFG
GDP YY	2.4	2.6	1.6	pre-7-28-17 revision				MUFG
GDP Q4s	2.7	2.0	1.8	2.6	3.1	2.8	2.7	MUFG
Fed Q4s	2.7	2.0	1.8	2.5	2.5	2.1	2.0	Fed officials
Treasury	2.7	2.0	1.8	---	2.5	2.8	3.0	Dec 11, 1-pager
GDP annual % (YY), all below including Fed and Treasury is Q4/Q4 % changes								

Treasury says the ten year average then will be 2.9% and this is seven-tenths faster than earlier baseline projections for just 2.2% real economic growth. The bottom three lines of the table above are all on a Q4/Q4 percent change basis. The Treasury numbers are greater than the Fed's of course: Fed sees 2.0% GDP in 2020, and Treasury says 3.0%. Our own number is 2.7% in 2020, although trying to forecast out a couple of years is plenty enough. Our 2018 number of 3.1% is faster than either the Fed or Treasury somehow. It seems to us like the tax reform will boost spending pretty early if it is going to at all. Part of the reluctance of economists to predict 3% growth was they got burned forecasting 3% for several years after the recession ended in 2009. The interesting thing is that growth got closer to 3% under Obama than we thought. After the annual benchmark revision to GDP in July this year, real GDP in 2015 was boosted from 2.6 to 2.9 percent… just missed. This is year-on-year percent change data that shows a steadier pattern of what is taking place in the economy. YY doesn't bounce around as much. The only problem being if things tail off late in the year, then the year/year data won't tell what is happening "currently." For instance, 2.9% year/year in 2015, but Q4/Q4 was down from 2.7% in 2014 to 2.0% in 2015, capturing the oil price crash which didn't affect year/year GDP until 2016. Are we clear? Had enough of GDP analysis? We have.

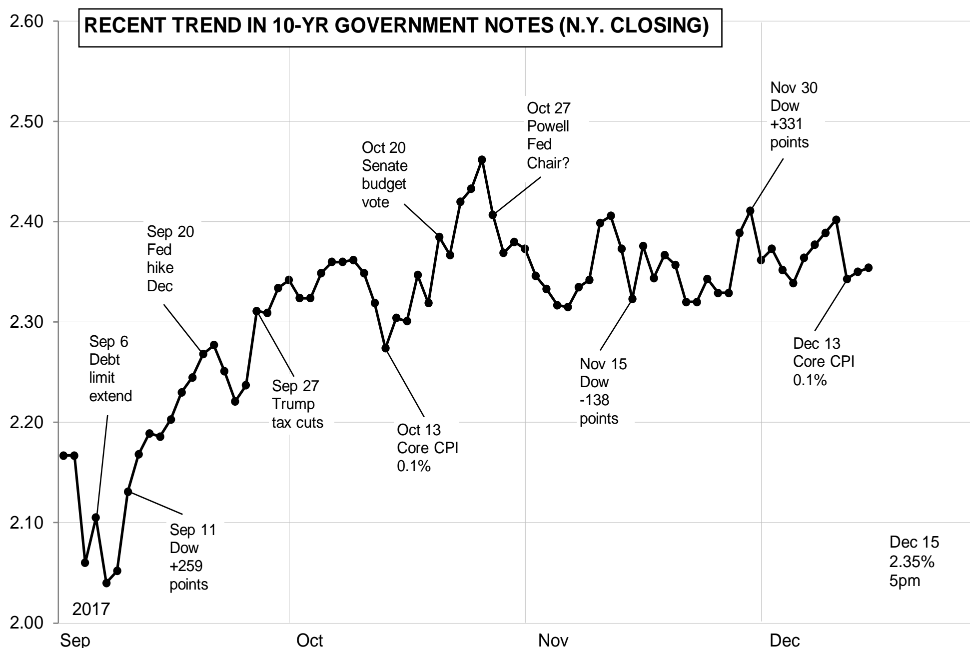


The bottom line is the Federal Reserve is not buying the growth forecasts the administration is selling. Not in the long run anyway. The Fed forecasts are probably too pessimistic, given that growth was already 2.9% a while back before the oil crash slowed it down. The price of oil has recovered so maybe growth can too somewhat. We don't know if growth will be as much as 3.0% for that many years starting in the year 2020 however. Seems like quite a stretch of the imagination is required for that to happen. The whole exercise is a bit suspect of course, trying to estimate Federal government revenues from 3% GDP growth. Anyway, damn the deficits and full speed ahead is what all the President's men and Congress seem to be saying. It will be interesting to see the fiscal stimulus effects on the economy in 2018 and 2019. At the very least growth should be strong enough to keep the Fed on the gradual rate hike path, three more in 2018, and two more in 2019.

MARKETS OUTLOOK

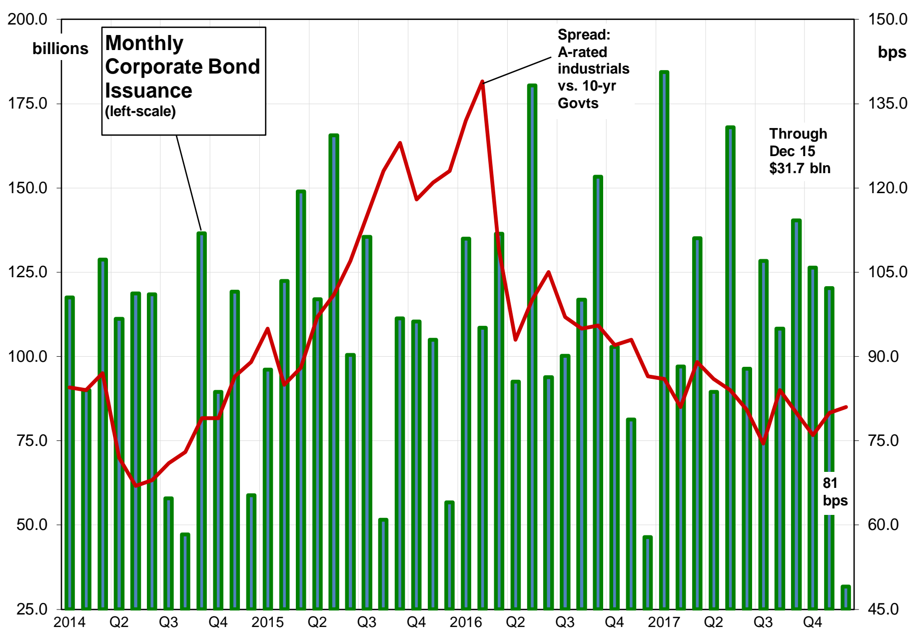
	15-Dec 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
30-Yr Treasury	2.69	2.90	3.00	3.10	3.30	3.40	3.50	3.60	3.70	3.80	3.80
10-Yr Note	2.35	2.50	2.70	2.80	3.00	3.20	3.30	3.40	3.50	3.70	3.70
5-Yr Note	2.15	2.20	2.40	2.60	2.80	3.00	3.15	3.30	3.40	3.60	3.60
2-Yr Note	1.84	1.95	2.20	2.45	2.65	2.85	3.10	3.30	3.40	3.60	3.80
3-month Libor	1.61	1.90	2.10	2.30	2.60	2.80	3.10	3.30	3.30	3.55	3.80
Fed Funds Rate	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.25	3.50	3.75
2s/10s spread	51	55	50	35	35	35	20	10	10	10	(10)

The outlook is here every week, nothing special for the holidays really. Economy won't go off the rails in 2018; we are just waiting on the Fed to normalize interest rates to 3-4 percent. It is the end of the year and markets are slowing down. There was a massive acceleration in retail sales on Thursday with little market reaction to speak of. Can't blame traders; Fed won't raise rates more quickly in 2018.



CORPORATE BONDS: HUMANA, NEXTERA, PACKAGING CORP, VORNADO

Corporate offerings were $9.4 billion in the December 15 week versus $20.3 billion in the December 8 week. On Thursday, Andeavor sold $1 billion 10s/30s. It priced $500 million 3.8% 10-yrs (m-w +25bp) at 147 bps (Baa3/BBB-). The petroleum refiner/marketer will use the proceeds to repay its revolving credit facility and for general corporate purposes. Corporate bonds (10-yr Industrials rated A2) were 81 bps above 10-yr Treasuries this week versus 79 bps last Friday.



MUFG

FEDERAL RESERVE POLICY

Selected Fed assets and liabilities					Sep 10
Fed H.4.1 statistical release					2008**
billions, Wednesday data	13-Dec	6-Dec	29-Nov	22-Nov	pre-LEH
Factors adding reserves					
U.S. Treasury securities	2454.256	2454.474	2456.959	2456.822	479.782
Federal agency debt securities	4.391	4.391	4.391	4.391	0.000
Mortgage-backed securities	1780.237	1767.096	1767.095	1778.683	0.000
Primary credit (Discount Window)	0.004	0.005	0.024	0.010	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)	1.712	1.709	1.709	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	0.042	0.035	0.035	0.035	62.000
Federal Reserve Assets	4499.8	4483.9	4484.5	4497.5	961.7
3-month Libor %	1.59	1.52	1.48	1.46	2.82
Factors draining reserves					
Currency in circulation	1604.008	1602.906	1599.963	1598.883	834.477
Term Deposit Facility	0.000	0.000	0.000	0.000	0.000
Reverse repurchases w/others	143.392	76.368	67.019	51.634	0.000
Reserve Balances (Net Liquidity)	2322.762	2158.636	2271.171	2329.834	24.964
Treasuries within 15 days	0.000	0.000	7.869	7.869	14.955
Treasuries 16 to 90 days	97.060	97.060	65.013	65.010	31.549
Treasuries 91 days to 1 year	328.412	328.413	335.543	335.542	69.272
Treasuries over 1-yr to 5 years	1095.451	1095.454	1117.114	1117.078	170.807
Treasuries over 5-yrs to 10 years	310.420	310.425	308.302	308.286	91.863
Treasuries over 10-years	622.912	623.122	623.118	623.038	101.337

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

Balance sheet unwind: Treasury security holdings dropped $11.4 billion from $2.465 trillion on October 25, 2017.

The Fed met December 12-13 to consider its monetary policy. They raised rates 25 bps to 1.5%, no surprise. There were two dissents from the Chicago and Minneapolis Reserve Banks: might as well combine the two offices as they have thought alike for so long now. Must be something in the water out there.

We were surprised they kept with the program and continue to see three rate hikes in 2018 and two more in 2019. No low inflation worry. The press statement no longer says core inflation "remained soft." Although they continue to monitor inflation developments closely. The final Yellen press conference this week went on longer than normal, the last time, but nothing really in there to bet on whether they use one of the three rate hikes next year and raise the Fed funds rate to 1.75% on March 21, 2018. The Fed funds futures odds of a March 2018 rate hike closed Friday at 66%. Hearing Yellen's "The Nation's Chief Economist" responses to the press questions makes us wonder about the brave new world the Fed is entering when a noneconomist moves into the captain's chair next year. Hopefully it will not be too problematic with no storm clouds on the horizon and all they need to do is move rates up to normal, five baby steps, shouldn't be too challenging over the next two to three years that the forecast currently envisions.

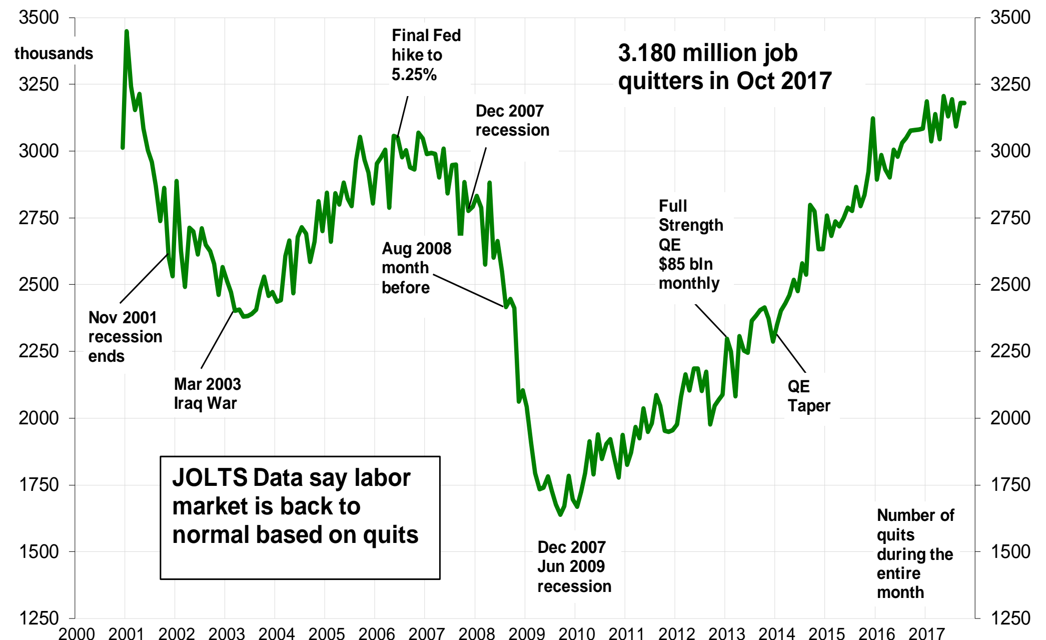
Fed Individual Forecasts			
Fed funds rate			
Votes	2020 End	2020 End	Change
1	1.375	1.125	0.250
2	2.375	2.375	0.000
3	2.625	2.375	0.250
4	2.625	2.500	0.125
5	2.875	2.625	0.250
6	3.000	2.625	0.375
7	3.000	2.750	0.250
8	3.000	2.875	0.125
9	3.125	2.875	0.250
10	3.125	2.875	0.250
11	3.125	3.000	0.125
12	3.125	3.125	0.000
13	3.125	3.500	-0.375
14	3.500	3.500	0.000
15	4.125	3.625	0.500
16	4.125	3.875	0.250
17			
Median	3.063	2.875	0.188
Meeting	Dec 2017	Sep 2017	

As far as the Fed funds rate hikes, the only change made was to where rates will be at the end of 2020. The median rate forecast for 2020 will be 3.06% now, almost 20 bps higher than the September meeting forecast of 2.875%. Both yields are higher than the 2.75% longer run rate which shouldn't be thought of as terminal, like it will be the final rate hike in the cycle. Most of the 2020 forecasts moved up although there were some big jumps to 4.125% by a couple of hawks. One big decline as well from 3.5% at the September meeting as Fischer got replaced by Quarles? Don't know. We don't need to know who owns each forecast, no need to put a name against it; Yellen said at the press conference she would never reveal her "dot" forecast. Okay by us. We are tiring of the slight imprecision in each Fed funds rate forecast which can be "the value of the midpoint of the projected appropriate range or the projected appropriate target level." We are done with thinking the Fed cannot control the Fed funds rate. Just ask for Fed officials' forecasts for the top of the Fed funds rate range. In other words, the Fed raised rates from 1.25 to 1.50 percent this week, the top of the "range." That's all we care about. 1.5% is the Fed funds rate target.

OTHER ECONOMIC NEWS THIS WEEK

No Jolt for the economy from increased employment postings

Breaking economy news. JOLTS job openings drop back to 5.996 million in October from higher revised openings of 6.177 million in September. The September job openings level, just short of 6.2 million workers needed right now, is the record high since the data were released in December 2000.



The biggest decline was in the Northeast, 7.8%, smaller declines in the South and Midwest, while the West actually saw more help wanted signs out there. If you want a job head South young man, it still remains true, the South has the most openings right now of 2.096 million. Bring back those factories from overseas, give corporations massive tax cuts so they can hire more workers? Not necessary. Manufacturers currently need thousands of workers to man the factory shop floors, normally skilled labor that is in short-supply, with openings of 402 thousand in October down from 435 thousand in September. The economy cannot create jobs when there is no one to fill them.

The Jolts data also detail a measure of just how confident workers are out there toiling away in the labor force. The so-called Quits level shows that 3.18 million workers quit their jobs in October which is unchanged from September. You have to be pretty confident in your ability to find more work if you quit your job and Americans are supremely confident. More workers are quitting their jobs than any time seen since 2001 before the recession. The job quitters are a favorite secondary indicator of labor market trends known to be favored by Fed Chair Yellen so say good-bye to these data once noneconomist Jerome Powell takes over the Chair position in February.

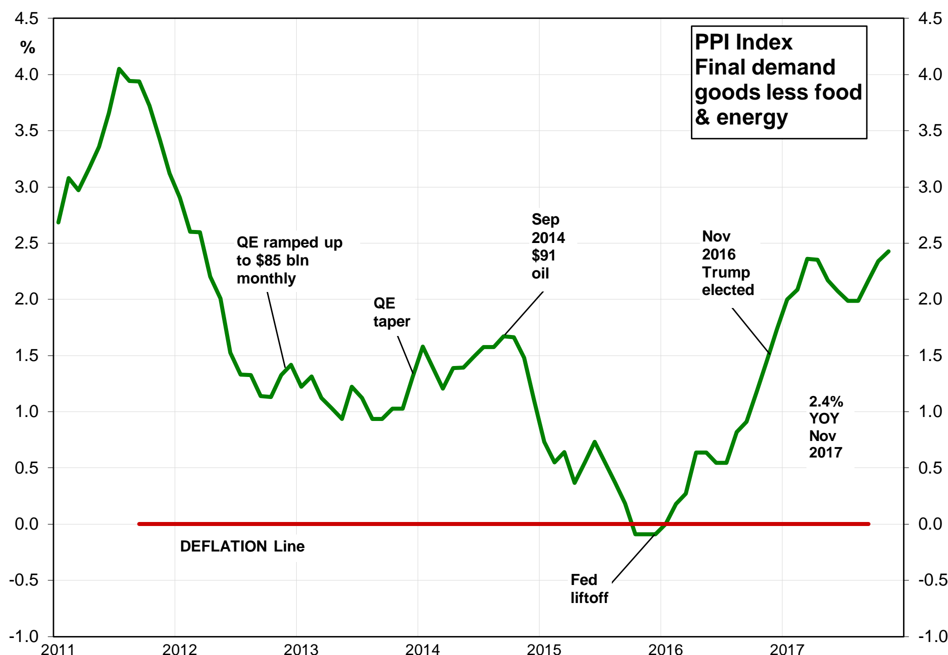
Net, net, the Jolts data in October, the small decline in job openings, are not a reason to think the economy's wheels have stopped spinning as quickly and that one of the longest economic expansions in the nation's history is nearing the end. The economy's fortunes remain bright as demand for workers hovers close to two-decade highs. The economy is strong enough to weather another rate hike and we expect Fed officials to raise rates a third time this year on Wednesday. It remains an open question about just how companies will weather this looming shortage of workers however. The economy will not continue to strengthen without the labor to produce the goods and services that the nation requires. The economy is better than you think today, but for tomorrow, who knows?

MUFG

If producers see inflation long enough then consumers will too

Breaking economy news. PPI inflation rises 0.4% in November. That is three consecutive months of 0.4% increases and PPI Final Demand prices are now rising 3.1%. The last time inflation was rising over 3% was back in January 2012 almost six years ago. Producers in America running factories and shipping goods to store shelves see inflation. Why can't Fed officials and their staff economists see inflation is the real question.

Net, net, Producers are seeing a sharp pickup in inflation to 3% and this demand-led price push from higher commodity prices is a classic early warning signal that consumer goods will also see increasing inflationary pressures. Producer prices are like a canary in a coal mine warning that something worrisome is about to happen on the inflation front. The economy cannot expand steadily for nine years and not start to run a little hotter and an economy that is heating up eventually produces inflation.



PPI final demand prices are rising 3% and this will give Fed officials that are cautious on the inflation outlook the confidence to raise rates this week knowing that core consumer inflation will start moving back up to its 2% target. Let's not forget that core PCE inflation was 1.9% as recently as February at the start of the year before those idiosyncratic one-offs in the prices of some goods slowed it down for a while. Basically, it was the cell phones in your pockets and purses that believe it or not are actually cheaper than you thought and have dragged down consumer inflation.

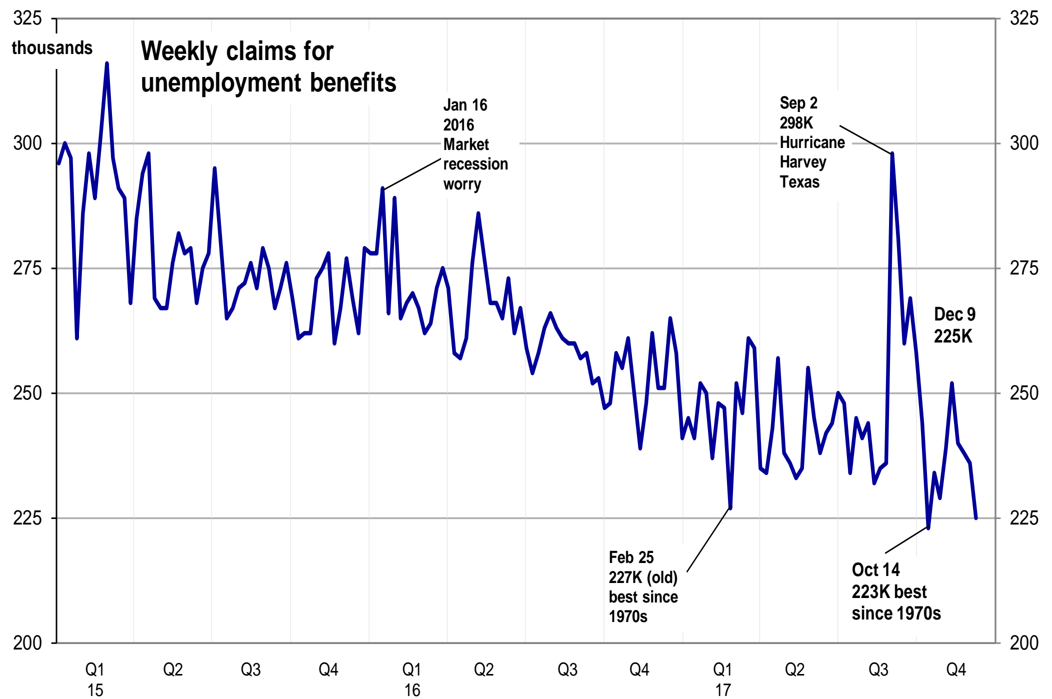
The bottom line is there is not no inflation. Inflation is not dead, it is very much alive and well at the producer level where goods are assembled for consumer markets. The economy is stronger than you think and now it is starting to generate some inflation heat. Bet on it.

Economy is booming with retail sales shot out of a cannon this month

Breaking economy news. Jobless claims second lowest of the year and since the 1970s, retail sales up big with upward revisions, and import prices, well dead in the water no change, no imported inflation in November.

MUFG

Jobless claims fell 11K to 225K in the December 9 week. Maybe instead of having Yellen take a victory lap at her final press conference yesterday, maybe the soft-ball questions should have pressed her harder on what she left undone. Like leaving interest rates at absurdly low levels nine years into an economic expansion while the economy is roaring. Her biggest mistake was she never thought the economy was good enough. Wrong.



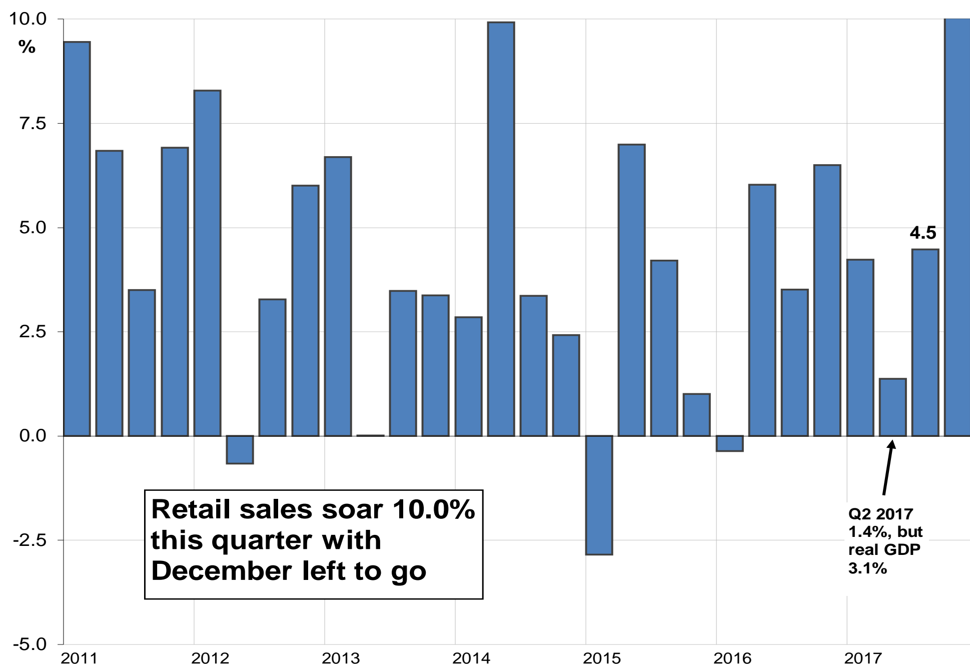
Retail sales today, we hope they are measuring it correctly, retail sales are smoking hot, up 6.4% the last year, put that in your slow recovery 2 percent GDP growth pipe and smoke it. Shoppers are spending their massive tax cuts today while there are still store-bought goods on the shelves.

We are going to look back at this time and wonder why people were still talking the economy down. This is what the economy looks like at full employment, folks out at the shops and malls buying up everything in sight. It is not going to work to keep interest rates down below 3% for the next three years. Bring Yellen back, don't let her leave the building, hey lady... your work is not done.

Retail sales are picking up steam and this will power the economy through to the end of the year with a strong finish and who knows how fast consumer spending will go once the public sees those tax cuts they say in polls they don't want. The economy in 2018 is going to be gangbusters when it comes to growth. The Trump administration sees just 2.5% GDP growth in 2018 but that isn't what we see based on the current rapid pace of of consumer spending. Growth should hit or rather stay at the current 3% rate for most of 2018 with these tax cuts putting more spending power in the consumer's pockets and purses.

Again, we will try to get the numbers out. Retail sales were 1.9% in September after the August storm, and 0.2% in October. Now today, the skies have cleared and it’s time to go shopping. Retail sales 2.0% September, 0.5% October, and 0.8% in November. Actual car & light truck sales fell to a 17.3 million annual rate in November from 18.0 million in October, but the Census Bureau says ex-auto sales were 1.0% in November, so car sales weakness barely slowed overall retail sales to that 0.8% in November we just mentioned.

The consumer economy seems to be on steroids or something. People certainly don't look that unhappy about the handouts from Washington coming their way. What $20 trillion national debt. The tax cuts go away in ten years, but who cares. Live for today is what the consumer is saying. Every single retail sales category is up in November. Furniture 1.2%, Electronics up 2.1%, Clothing 0.7%, Sporting goods 0.9%, Internet sales 2.5%, Eating and drinking, you know who you are, up 0.7%. Even Department stores up 0.3% although the broader category of General merchandise sales was unchanged.



Net, net, the Fed looks right as rain to raise interest rates yesterday and pencil in another three rate hikes in 2018 because the economy is picking up steam on the backs of consumers. The central bank might want to consider moving soon to take away the punch bowl because this party is going on a little too long. The economy is stronger than you think. Consumers are betting on it. It's going to be a Happy New Year for all.

MUFG

Analyst Certification

The views expressed in this report accurately reflect the personal views of **Christopher S. Rupkey**, the primary analyst responsible for this report, about the subject securities or issuers referred to herein, and no part of such analyst's compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed herein.

The information herein is provided for information purposes only, and is not to be used or considered as an offer or the solicitation of an offer to sell or to buy or subscribe for securities or other financial instruments. Neither this nor any other communication prepared by The Bank of Tokyo-Mitsubishi UFJ, Ltd. (collectively with its various offices and affiliates, "BTMU") or should be construed as investment advice, a recommendation to enter into a particular transaction or pursue a particular strategy, or any statement as to the likelihood that a particular transaction or strategy will be effective in light of your business objectives or operations. Before entering into any particular transaction, you are advised to obtain such independent financial, legal, accounting and other advice as may be appropriate under the circumstances. In any event, any decision to enter into a transaction will be yours alone, not based on information prepared or provided by BTMU. BTMU hereby disclaims any responsibility to you concerning the characterization or identification of terms, conditions, and legal or accounting or other issues or risks that may arise in connection with any particular transaction or business strategy. While BTMU believes that any relevant factual statements herein and any assumptions on which information herein are based, are in each case accurate, BTMU makes no representation or warranty regarding such accuracy and shall not be responsible for any inaccuracy in such statements or assumptions. Note that BTMU may have issued, and may in the future issue, other reports that are inconsistent with or that reach conclusions different from the information set forth herein. Such other reports, if any, reflect the different assumptions, views and/or analytical methods of the analysts who prepared them, and BTMU is under no obligation to ensure that such other reports are brought to your attention.

Copyright 2017 MUFG All Rights Reserved

The articles and opinions in this publication are for general information only, are subject to change, and are not intended to provide specific investment, legal, tax or other advice or recommendations. The information contained herein reflects the thoughts and opinions of the noted authors only, and such information does not necessarily reflect the thoughts and opinions of MUFG or its management team. We are not offering or soliciting any transaction based on this information. We suggest that you consult your attorney, accountant or tax or financial advisor with regard to your situation. Although information has been obtained from sources we believe to be reliable, neither the authors nor MUFG guarantee its accuracy, and such information may be incomplete or condensed. Neither the authors nor MUFG shall be liable for any typographical errors or incorrect data obtained from reliable sources or factual information.

About MUFG Americas Holdings Corporation

Headquartered in New York, MUFG Americas Holdings Corporation is a financial holding company and bank holding company with total assets of $148.1 billion at December 31, 2016. Its main subsidiaries are MUFG Union Bank, N.A. and MUFG Securities Americas Inc. MUFG Union Bank, N.A. provides an array of financial services to individuals, small businesses, middle-market companies, and major corporations. As of December 31, 2016, MUFG Union Bank, N.A. operated 365 branches, comprised primarily of retail banking branches in the West Coast states, along with commercial branches in Texas, Illinois, New York and Georgia, as well as two international offices. MUFG Securities Americas Inc. is a registered securities broker-dealer which engages in capital markets origination transactions, private placements, collateralized financings, securities borrowing and lending transactions, and domestic and foreign debt and equities securities transactions. MUFG Americas Holdings Corporation is owned by The Bank of Tokyo-Mitsubishi UFJ, Ltd. and Mitsubishi UFJ Financial Group, Inc., one of the world's leading financial groups. The Bank of Tokyo-Mitsubishi UFJ, Ltd. is a wholly owned subsidiary of Mitsubishi UFJ Financial Group, Inc. Visit http://www.unionbank.com/ or http://www.mufgamericas.com/ for more information.

About MUFG (Mitsubishi UFJ Financial Group, Inc.)

MUFG (Mitsubishi UFJ Financial Group, Inc.) is one of the world's leading financial groups, with total assets of approximately $2.6 trillion (USD) as of December 31, 2016. Headquartered in Tokyo and with approximately 350 years of history, MUFG is a global network with more than 2,200 offices in nearly 50 countries. The Group has more than 140,000 employees and about 300 entities, offering services including commercial banking, trust banking, securities, credit cards, consumer finance, asset management, and leasing. The Group's operating companies include Bank of Tokyo-Mitsubishi UFJ, Mitsubishi UFJ Trust and Banking Corporation (Japan's leading trust bank), and Mitsubishi UFJ Securities Holdings Co., Ltd., one of Japan's largest securities firms.

Through close partnerships among our operating companies, the Group aims to "be the world's most trusted financial group," flexibly responding to all of the financial needs of our customers, serving society, and fostering shared and sustainable growth for a better world. MUFG's shares trade on the Tokyo, Nagoya, and New York (MTU) stock exchanges. Visit www.mufg.jp/english/index.html.