

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

19 JANUARY 2018

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

## POWELL ON INTEREST RATES

Where are interest rates going? No more fundamental question. This is the reason we look at the economic indicators. Where the rubber meets the road. What does the economy mean for interest rates? Can we guess what the Fed might do with interest rates in the future?

We looked back at some of Powell's speeches. What might he do on rates. Even if his views to date are going to be heavily biased by the tendency of Fed governors to echo the views of the all-powerful Fed Chair/Chairman. It is a Board after all. The Semiannual Monetary Policy Report before Congress is in February before Powell's first meeting in March where the rate hike odds remain high at 84%. We will see what he says after Yellen leaves office on February 3.

The real problem for the outlook on rates seems to be the Fed's own interest rate forecasts, now that they finally lifted off with the first rate hike in December 2015. Two years later the Fed funds rate is no longer 0.25% it is 1.5% with a forecasted path on rates that has not changed much. The economy is at full employment and the path stays the same. The path stays the same even though core PCE inflation (Powell favors this inflation measure in keeping with Yellen's preference) doesn't reach 2.0% "target" until 2019. Yellen has always said these forecasts are just forecasts, and forecasts can change, but it looks like the path ahead for interest rates is set in stone for the markets despite the Fed's efforts to qualify what their estimates mean. They are downplaying their power at making the current level of interest rates and their path ahead a reality. They own the market for now.

### Powell speech February 22, 2017

#### *Low interest rates*

"Another unanticipated feature of this recovery has been the low level of both short- and longer-term interest rates. At 2.4 percent, the yield on the 10-year Treasury is far below levels typically seen before the financial crisis. Of course, Fed policy is a factor in holding down longer-term yields." *Thanks for the reminder. That's right! Don't even offer up any additional reasons.* "But longer-term rates have been declining for more than 30 years, for several reasons..." *Oh, no*

The Fed's path of rates is spoiling the movie, giving away the ending, and causing speculators, investors, and hedgers to lose interest. Less reason to trade for anyone involved in the fixed income markets. There is less uncertainty out there this cycle. We have never had a Fed forecast of where they think rates will go as we come out of a recession. The Fed is going to raise rates to normal levels

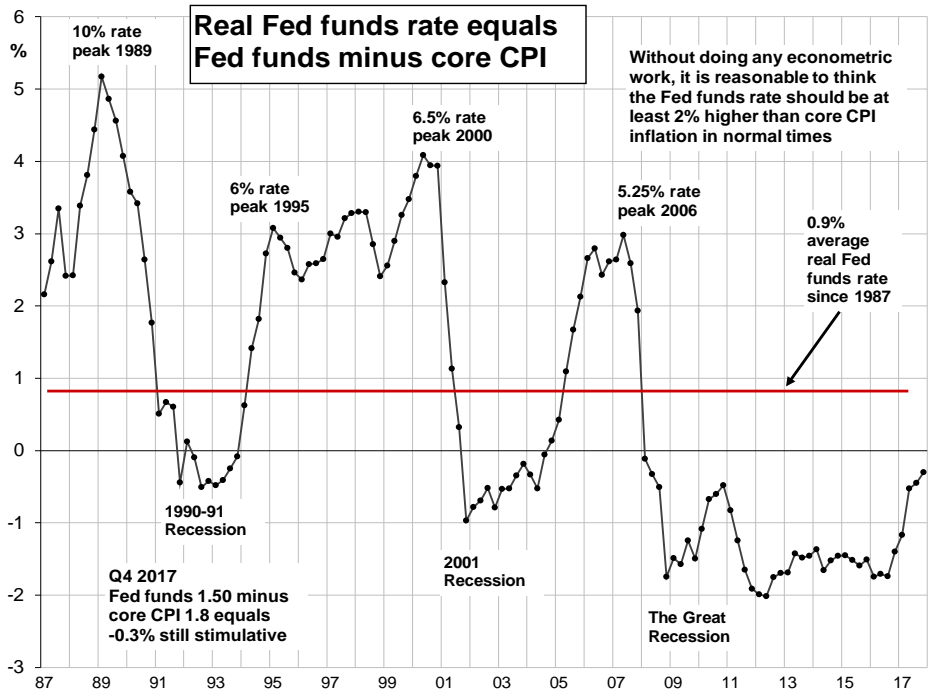
and the speed will be three rate hikes this year, two next year, and two the year after that. 1.5% Fed funds now, 2.25% at the end of 2018, 2.75% at the end of 2019, and 3.25% at the end of 2020. Where's the risk? Where's the uncertainty. Our real fear is that they will raise rates to normal and then stop. Stop and sit. Do nothing. They are good at that.

Maybe the risk is they don't move rates up above 2.75% "normal" levels, the longer run median forecast of all 16 officials. They show a median forecast of 3.25% at the end of 2020, but that's a long way off. What if inflation doesn't go up? We are worried that low inflation, or continued "slow-growth" of less than 3%, will scuttle some of those rate hikes the next three years.

Powell was asked about this scenario in questioning at the Economic Club of New York on June 1, 2017. If inflation is still 1.5% short of the target that "would be a very challenging situation," he said. This is not the situation they face today, but they are committed to 2% inflation, and the relative lack of inflation down the road "would clearly enter into my own views about the appropriate level of tightening." This sound like a no more rate hikes without more inflation answer to us.

Getting back on topic. Why did Powell again say that bond yields were low when he spoke last February when 10-yr yields were 2.4%. The reasons beyond the obvious-- that Fed officials have put their boot down hard on bond yields keeping them low with their own low 1.5% Fed funds rate.

Powell threw out a grab bag of low-bond yield reasons in his speech last February. Reduced term premiums is a look in the mirror reason with little explanatory power, using interest rates on the curve to value other interest rates on the yield curve. Savings of the baby boom generation and weak investment demand never seemed very convincing either. Departed Fed Vice Chair Fischer talked a lot about the importance of investment, bringing up the old theories of Swedish economist Wicksell who wrote something on this in 1898. That was some time ago. We think the Fed funds rate is the main reason bond yields are low. It's them. Fed officials. Their policy. They could always test it out, raise the Fed funds rate, and see if bond yields go up higher. Just a thought.



### Powell speech February 22, 2017

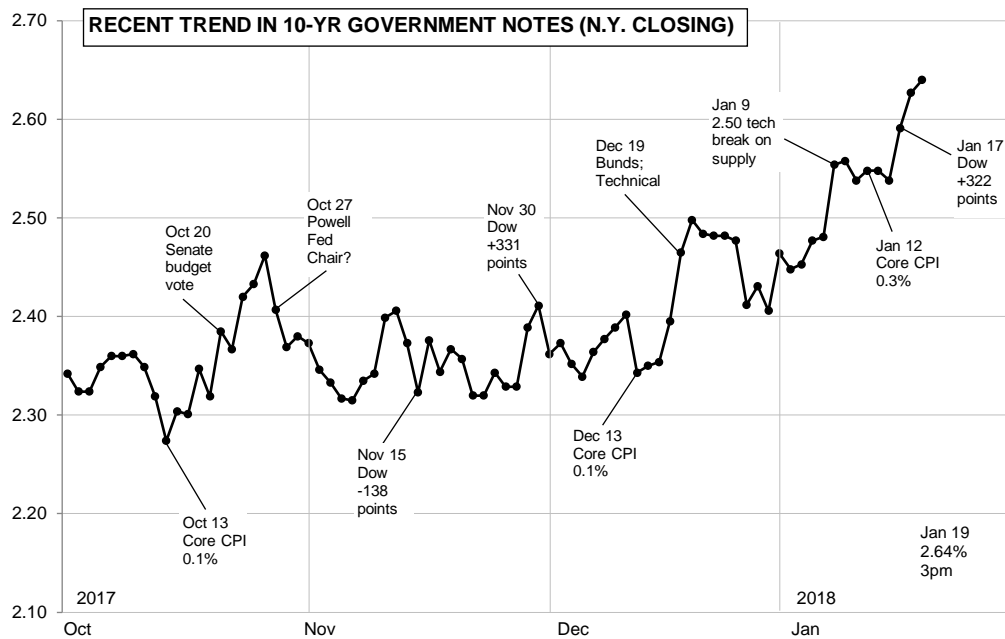
*Low interest rates (continued)*

But longer-term rates have been declining for more than 30 years, for several reasons. Much of the decline is due to significantly lower long-term expectations of inflation, as well as reduced term premiums, likely reflecting both lower inflation risk and the fact that, with anchored inflation expectations, nominal bonds have become an attractive hedge against market risk. Regulatory changes have raised demand for safe assets. Lower potential growth implies lower returns and therefore lower rates. Changes in savings and investment demand owing to demographics and other factors have put downward pressure on yields as well.

# MARKETS OUTLOOK

	29-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	2.74	2.90	3.00	3.10	3.30	3.40	3.50	3.60	3.70	3.80	3.80
10-Yr Note	2.41	2.50	2.70	2.80	3.00	3.20	3.30	3.40	3.50	3.70	3.70
5-Yr Note	2.21	2.20	2.40	2.60	2.80	3.00	3.15	3.30	3.40	3.60	3.60
2-Yr Note	1.89	1.95	2.20	2.45	2.65	2.85	3.10	3.30	3.40	3.60	3.80
3-month Libor	1.69	1.90	2.10	2.40	2.60	2.90	3.10	3.40	3.40	3.60	3.90
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	52	55	50	35	35	35	20	10	10	10	(10)

Yields keep moving higher this week in keeping with the uptrend. The biggest move was Wednesday with the Dow industrials rising 322 points. There is also a lingering perception that foreigners don't want Treasuries, fed this week by the Treasury International Capital flow data (TIC) at 4pm EST on Wednesday showing China purchases were off. TIC data are not very



accurate. Not a lot of technical resistance for this yield rally. The high from March 2017 was 2.63%, and 2.64% was the high yield from the Trump election rally hit in December 2016.

## FEDERAL RESERVE POLICY

The Fed meets January 30-31 to consider its monetary policy. Yellen's last one. No press conference, no expectation of policy changes. The March 21, 2018 meeting odds of a rate hike remain stuck at green-light-go 84%. The odds climbed to new highs of 70% on the second trading day of 2018 with the release of the December Fed meeting minutes, and have never looked back. The Fed forecast in December laid out three bowls of porridge on the economy's table this year and Fed officials are still commenting this week about how much we can

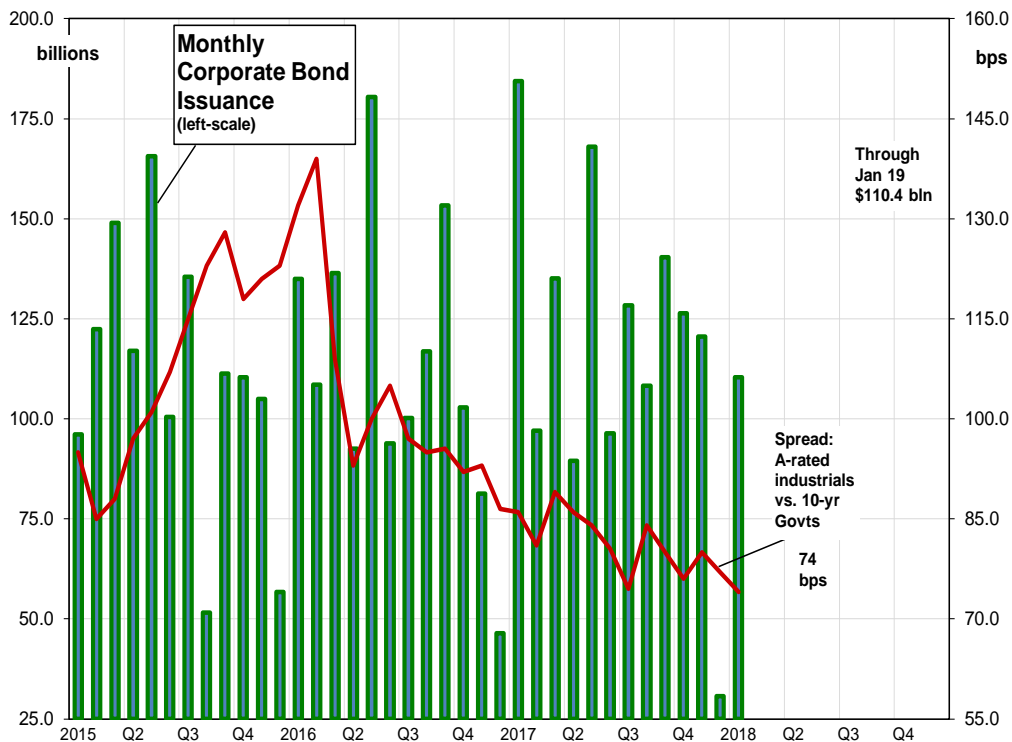
Selected Fed assets and liabilities					Sep 10 2008**
Fed H.4.1 statistical release					pre-LEH
billions, Wednesday data					
	17-Jan	10-Jan	3-Jan	27-Dec	
<b>Factors adding reserves</b>					
U. S. Treasury securities	2447.009	2448.209	2448.208	2454.219	479.782
Federal agency debt securities	4.391	4.391	4.391	4.391	0.000
Mortgage-backed securities	1770.349	1764.930	1764.929	1764.926	0.000
Primary credit (Discount Window)	0.096	0.107	0.038	0.108	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	1.715	1.713	1.712	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	0.118	12.067	12.067	12.008	62.000
Federal Reserve Assets	4486.4	4493.2	4490.9	4495.7	961.7
3-month Libor %	1.74	1.71	1.70	1.69	2.82
<b>Factors draining reserves</b>					
Currency in circulation	1610.257	1612.650	1618.531	1616.323	834.477
Term Deposit Facility	0.000	0.000	0.000	0.000	0.000
Reverse repurchases w/others	20.548	57.954	131.622	147.749	0.000
<b>Reserve Balances (Net Liquidity)</b>	<b>2234.452</b>	<b>2257.894</b>	<b>2194.651</b>	<b>2176.452</b>	<b>24.964</b>
Treasuries within 15 days	27.847	3.098	3.098	17.504	14.955
Treasuries 16 to 90 days	80.038	107.658	107.658	79.555	31.549
Treasuries 91 days to 1 year	317.233	315.420	315.420	328.412	69.272
Treasuries over 1-yr to 5 years	1083.901	1085.113	1085.113	1095.446	170.807
Treasuries over 5-yrs to 10 years	316.716	314.035	314.035	310.412	91.863
Treasuries over 10-years	621.273	622.884	622.884	622.890	101.337

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

eat. Cleveland Fed's Mester said three or four. San Francisco Fed's Williams said three hikes make sense. Dallas Fed's Kaplan says three. Chicago Fed's Evans favors less than three. New York Fed's Dudley says fiscal stimulus could lead the economy to overheat, but he is retiring and will be replaced by the middle of the year. No reason not to hike rates to 1.75% in March anyway.

## CORPORATE BONDS: PARADE OF BANK DEBT OFFERINGS MOSTLY

Corporate offerings were \$49.5 billion in the January 19 week versus \$32.4 billion in the January 12 week. On Thursday, Southwestern Electric Power (AEP) priced a \$450 million 3.85% 30-yr (m-w +15bp) at 97 bps (Baa2/A-). American Electric Power (AEP) is a public utility holding company that will use the proceeds to repay maturing debt and for general corporate purposes. Corporate bonds (10-yr Industrials rated A2) were 74 bps above 10-yr Treasuries this week versus 75 bps last Friday.



## OTHER ECONOMIC NEWS THIS WEEK

### Production jumps on mining and utilities, manufacturing gains somewhat less (Wednesday)

Breaking economy news. Industrial production soars 0.9% in December to cap a 2017 gain of 3.6%. At least one economic statistic is hitting the 3 percent mark the Trump administration has set for economic growth. Mining jumped 1.6% to finish up 11.5% in 2017 as oil & gas drilling has come back to life with crude oil nudging up near \$65. Utility production jumped back 5.6% in December with the early cold winter weather and will likely increase again in January looking out at the thermometer this morning.

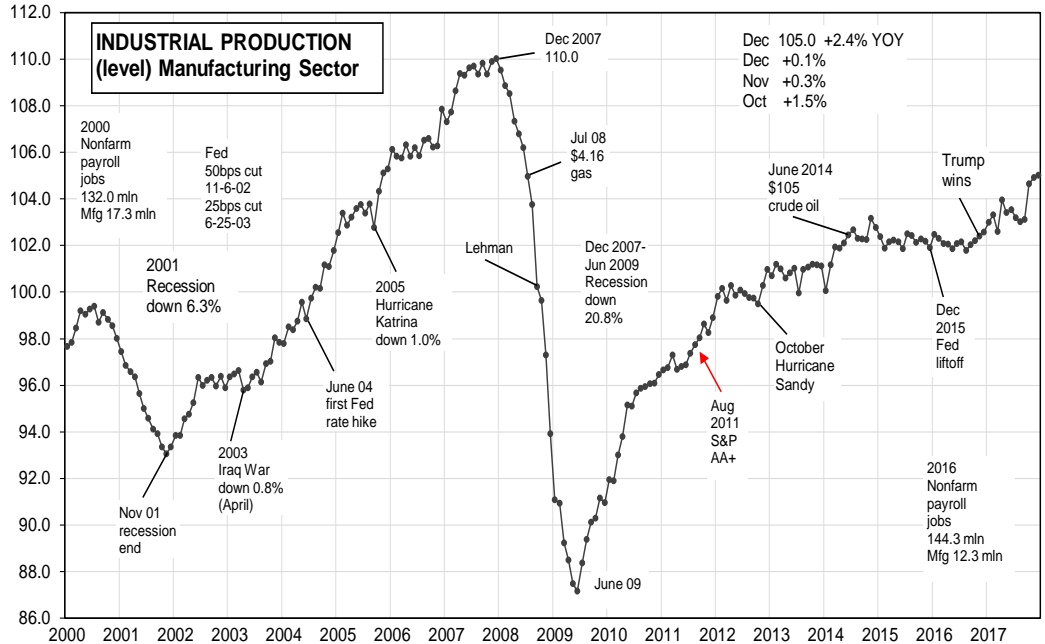
Manufacturing workers are in demand as factories are running at a quicker pace this year. Manufacturing production rose just 0.1% in December, but the gain is a solid 2.4% relative to last December. Factory output might have been slightly better this year if it had not been for the summer hurricanes even though production bounced strongly back from the storms with that 1.5% gain in October.

Net, net, the economic expansion got a second wind this year and the world economy strengthened due to the resurgence of manufacturing output in the United States. There were not many factories brought home from overseas, but manufacturing output still grew 2.4%

Industrial Production		
December 2017		
% YOY		Weight
3.6	<u>Total Index</u>	<u>100.0</u>
2.4	Manufacturing	76.5
11.5	Mining	12.9
1.8	Utilities	10.6
Manufacturing payroll jobs		
12.5 million +196K YOY		
10.0% of Private Payroll Jobs		

in 2017 the best since 2011. The economic outlook cannot be too dark in the year ahead if the country's manufacturing base is on solid ground.

More goods are leaving the assembly lines in factories across the country and this will give Fed officials the confidence to raise rates further this year and take away the liquidity left over from fighting the slow recovery from recession. The market odds of a rate hike on March 21 are 84% this morning and we expect the Fed under incoming Chairman Powell to take the green light for a rate hike the market is offering it.



It's cold out there, but the manufacturing economy is in better shape than you think. And this is before companies can fully write off the purchase of new equipment and before the gigantic corporate tax cuts hit the bottom line. This is going to be a great year for American factories, output is going up up up. Bet on it.

## Weather freezes out housing starts in December (Thursday)

Breaking economy news. Winter weather is everywhere in the economic data this morning with unemployment claims coming back down from a couple of cold weeks falling 41K to 220K in the January 13 week. 220K is the lowest level seen since the 70s and shows just how tight labor market conditions are out there in the country with workers in short supply. Trump's economics team cannot bring jobs back to America, if there's no one to work them. There seems to be a disconnect between what the Administration thinks is needed for the economy versus what the economy actually needs. The economy really needs no help from Washington as it is strong as a bull and the current expansion is headed for the record books that is likely to break the Clinton years ten year period of growth and prosperity.

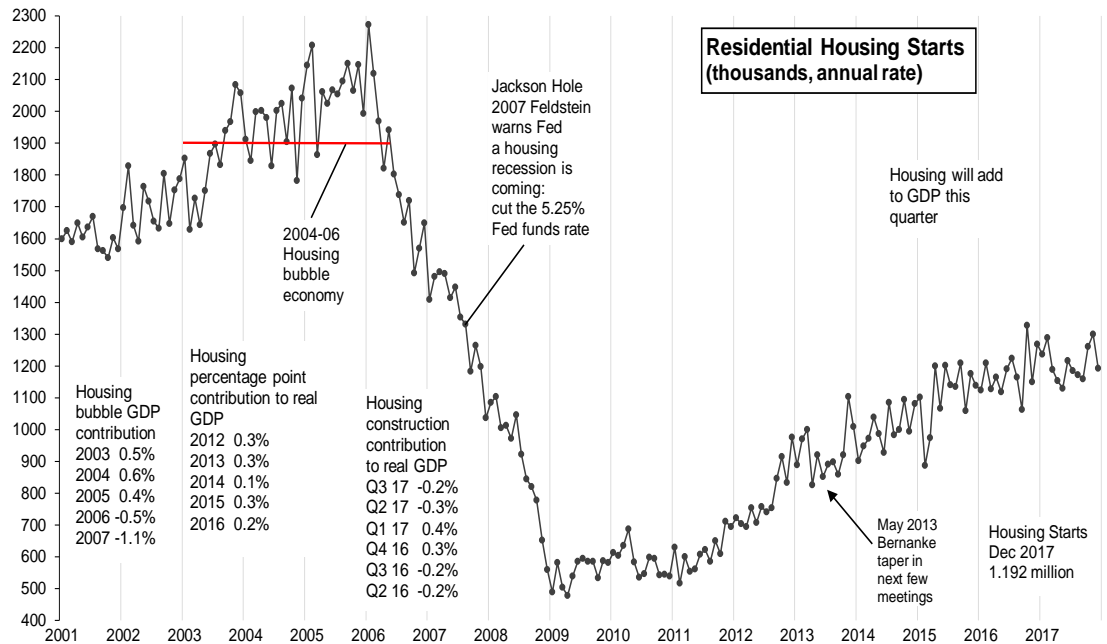
Housing Starts Total, Single-Family, Multi-Family											
	United States			Northeast		Midwest		South		West	
000s	Total	1 unit	Multi	Total	1 unit	Total	1 unit	Total	1 unit	Total	1 unit
Dec 17	1192	836	356	88	47	178	130	582	427	344	232
Nov 17	1299	948	351	92	62	182	142	678	512	347	232
Dec 16	1268	808	460	89	58	222	128	566	418	391	204
% Chgs											
Dec/Nov	-8.2	-11.8	...	-4.3	-24.2	-2.2	-8.5	-14.2	-16.6	-0.9	0.0
Dec/Dec	-6.0	3.5	...	-1.1	-19.0	-19.8	1.6	2.8	2.2	-12.0	13.7

Housing starts fall 8.2% in December to 1.192 million at an annual rate. There were sharp pullbacks in single-family construction in areas of the country hit by the colder than normal winter temperatures

with the Northeast down 24.2%, and the South down 16.6%. Homebuilders certainly cannot find workers to get up on the roof and pound nails in this weather and next month is not likely to be much better.

Net, net, the drop in residential housing construction in December is a one-off winter weather number that will fool no one about the strengthening recovery in housing construction. Mortgage rates are steady at a little less than 4% so higher borrowing costs are certainly not the

reason for the decline in housing starts this month, and the Fed's gradual pace of rate hikes in 2018 is also unlikely to slow housing construction or new home buying. The data on permits has been much steadier and we expect housing starts to match permits in coming months. In December housing starts are 1.192 million and permits are 1.302 million.



We don't expect Fed officials to panic over this latest temperature reading in the market for new homes. A rate hike at incoming Fed Chairman Powell's first meeting in March is still widely expected by the markets. Investment spending has been relatively weak this recovery and is one reason given by Fed officials for the low interest rate conundrum. Not enough investment. Not enough demand for credit that would push rates higher. We expect investment to pick up somewhat this year however as the tax cuts windfall received by corporations gets put to work. The economy was held down by the cold winter weather, but should bounce back quickly in coming months as the country warms up from this recent cold spell. Better spring days are coming for the economy. Bet on it.

---

## 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 2018 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 vouch for 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](http://www.mufg.jp/english/index.html).