

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

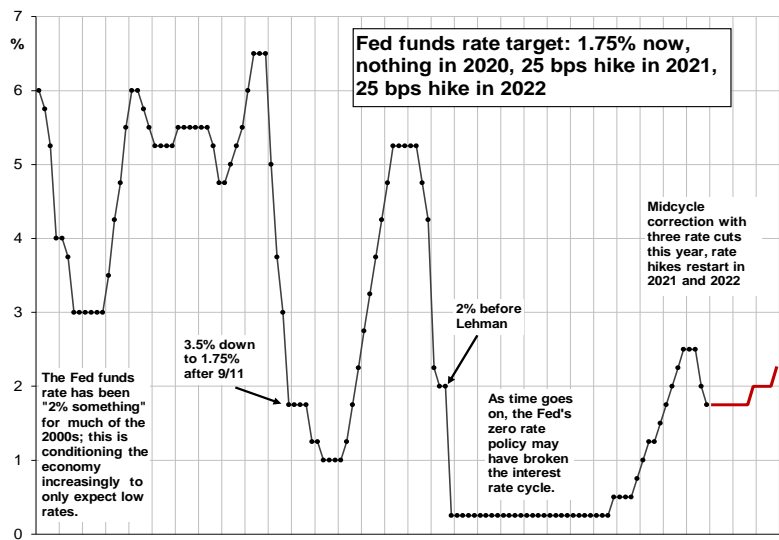
13 DECEMBER 2019

MUFG Bank, Ltd.
 A member of MUFG, a global financial group

FED FORECAST REPEATS THERE WILL BE NO CHANGE IN RATES IN 2020

You've been told. Guess it's fitting. Fed does nothing and the bond market does nothing. The Fed meeting forecasts released at 2pm EST Wednesday weren't all that newsworthy. The September meeting forecasts looked for no change in rates in 2020, one rate hike in 2021, and a second rate hike in 2022. The December meeting forecasts looked for no change in rates in 2020, one rate hike in 2021, and a second rate hike in 2022. No change. The only difference in between meetings was the third rate cut in 2019 to 1.75% in October; the rate cut that 10 of 17 Fed officials didn't want to see happen at the September meeting. Leadership. Fed Chair Powell must be very convincing.

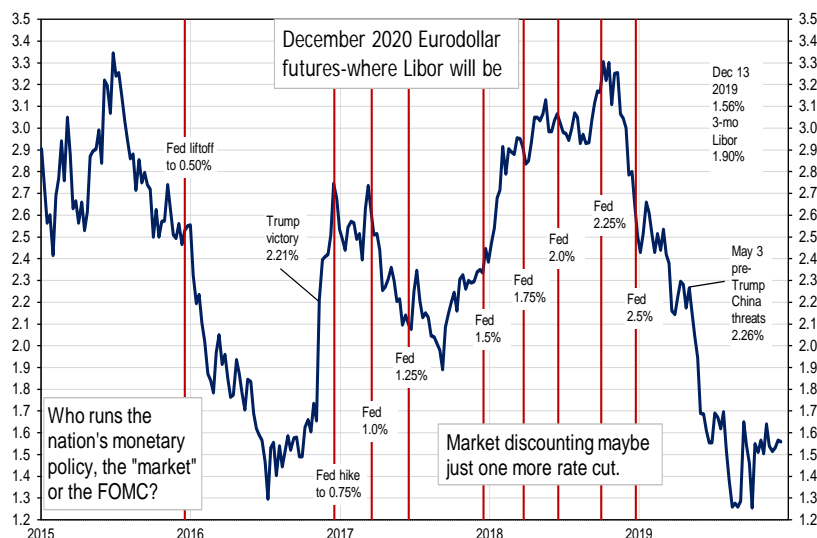
Well, take that back. We forgot. The bond market did react during Powell's press conference. The reason seems rather flimsy, but here goes, and keep in mind the bond "rally" was just with 10-year Treasury yields dropping from 1.805% to 1.78%, and it didn't completely stick. The press conference new news? Powell didn't rule out buying bonds in addition to the Treasury bill purchases they are doing to help settle the overnight funding markets. Big deal. Bonds or Bills, it's not QE. Get over it. This important news was followed quickly by



Fed Individual Forecasts					Longer run
Fed funds rate at year-end					
Votes	2019 End	2020 End	2021 End	2022 End	
1	1.625	1.625	1.625	1.625	2.000
2	1.625	1.625	1.625	1.875	2.250
3	1.625	1.625	1.625	1.875	2.250
4	1.625	1.625	1.625	1.875	2.375
5	1.625	1.625	1.625	1.875	2.500
6	1.625	1.625	1.875	1.875	2.500
7	1.625	1.625	1.875	2.125	2.500
8	1.625	1.625	1.875	2.125	2.500
9	1.625	1.625	1.875	2.125	2.500
10	1.625	1.625	2.125	2.375	2.500
11	1.625	1.625	2.125	2.375	2.500
12	1.625	1.625	2.125	2.375	2.500
13	1.625	1.625	2.125	2.375	2.750
14	1.625	1.875	2.125	2.625	2.750
15	1.625	1.875	2.375	2.625	3.000
16	1.625	1.875	2.375	2.875	3.250
17	1.625	1.875	2.375	2.875	
Median Meeting	1.625	1.625	1.875	2.125	2.500
	Dec 19	Dec 19	Dec 19	Dec 19	Dec 19

Powell saying no rate hikes (that's what the market heard) unless inflation made a "significant" move higher and the trend was "persistent." Given the forecasts for rate hikes in 2021 and 2022, we'd like to think Powell meant no rate hikes above a "neutral" 2.5% unless inflation was significantly persistent.

Persistently significant. But what do we know. Not a whole lot to look forward to if you are a Fed watcher the next, one, two, three, yes, three years. Three years is a long enough time period to be bordering on the "long run" and we forgot the economist who famously said in the long run we're all dead. We think he got a Nobel Prize for it. There won't be much life left three years from now in the bond market or for the Wall Street families it feeds if the Fed sticks with this interest rate forecast.



In conclusion, not much else to say, so wrap it up. Net, net, the Fed has signaled that its directionless monetary policy will drift into the future, destination unknown. They cut interest rates three times this year without heightened recession risks or a financial markets crisis, the two reasons normally thought to require monetary stimulus from the central bank. What's up next for the captain and his crew now that they have a 1.75% rudder that barely sticks down in the water far enough to steer the economic ship? Nothing. Nothing is up next. Fed officials must think they are Google or something not wanting to do any harm. To the economy. Fed Chair Powell almost seems to want a pat on the back for halting the gradual pace of rate hikes in January during the crisis and cutting rates three times to stabilize the economy and extend the record expansion of growth that is putting a record amount of Americans to work.

Okay, stay calm, Fed officials forecast no change in rates in 2020, but the median forecast still has one rate hike in 2021 to 2.0% and one more rate hike in 2022 to 2.25%. That's something for the markets to trade on. A lousy 50 bps of rate hikes over the next three years, with the rate hikes two to three years away, so far out on the investment horizon that Powell has in the past downplayed the outer-year FOMC rates forecasts as being out too far in the future for the Fed to predict with any accuracy at all. Forget about it. The market waited all day for this crummy T-shirt saying "50 BPS by 2022 or Bust." Rate hikes are coming. Two of them. Bet on it. Bet the ranch.

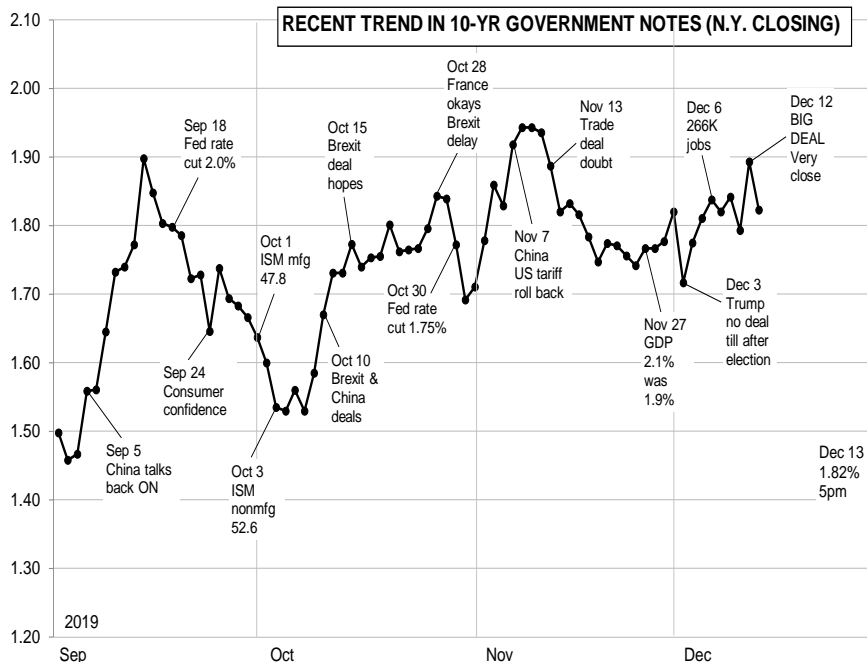
Powell press conference opening

Over the course of the past year, our views about the path of interest rates that would best achieve our employment and inflation objectives changed significantly, as the economy faced some important challenges from weaker global growth and trade developments. As the year progressed, we adjusted the stance of monetary policy to cushion the economy from these developments and to provide some insurance against the associated risks. In addition, inflation pressures were unexpectedly muted, strengthening the case for a more supportive stance of policy. Rather than modestly increasing the target rate for the federal funds rate this year as seemed appropriate a year ago, we reduced it by 3/4 percentage point. This shift has helped support the economy and has kept the outlook on track. The medians of participants' projections for economic growth, the unemployment rate, and inflation are little changed from a year ago, aside from a lower inflation projection for 2019. Of course, that is the function of monetary policy—to adjust interest rates to promote employment and price stability in response to forces acting on the economy.

MARKETS OUTLOOK

	29-Mar 2019	28-Jun 2019	30-Sep 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021
30-Yr Treasury	2.81	2.53	2.11	2.20	2.25	2.30	2.40	2.50	2.70
10-Yr Note	2.41	2.01	1.67	1.75	1.80	1.90	2.10	2.20	2.40
5-Yr Note	2.23	1.77	1.55	1.55	1.65	1.75	1.85	2.05	2.25
2-Yr Note	2.26	1.76	1.62	1.60	1.60	1.70	1.80	2.00	2.20
3-month Libor	2.60	2.32	2.09	1.90	1.90	1.90	1.90	1.90	1.90
Fed Funds Rate	2.50	2.50	2.00	1.75	1.75	1.75	1.75	1.75	1.75
2s/10s spread	15	25	5	15	20	20	30	20	20

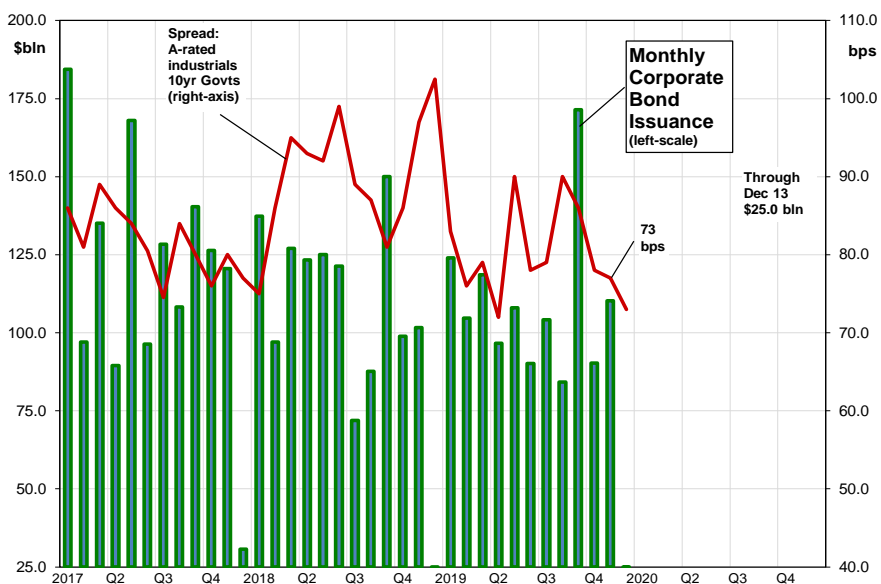
A quiet week till Trump tweeted at 935am EST Thursday after the stock market just opened "Getting Very close to a BIG DEAL." Bond yields lifted from 1.81% as high as 1.95% Thursday night helped along by the BIG WIN for Boris Johnson which is likely to speed Brexit through. What's not to like: Brexit and China-U.S. trade risks taken off the table. Not sure why yields fell back to earth. The final retracement took place during the China side press conference Friday: uncertainty over the amount of agriculture exports?



Phase I looks good to us. Get rid of this news factor for markets and bury any future headlines. No December 15 tariff hike and the September 1 tariff on "\$112 billion" cut in half to 7.5% from 15%.

CORPORATE BONDS: STEEL DYNAMICS, WELLTOWER, CALPINE

Corporate offerings were \$5.2 billion in the December 13 week versus \$19.4 billion in the December 6 week. On Monday, Quest Diagnostics priced a \$800 million 2.95% 10-yr (m-w +20bp) at 115 bps (Baa2/BBB+). The medical diagnostic testing services company will use the proceeds to repay at maturity or redeem its 4.75% and 2.5% senior notes due in 2020. Corporate bond yields (10-yr Industrials rated A2) were 73 bps above 10-yr Treasuries Friday versus 73 bps last Friday.



OTHER ECONOMIC NEWS THIS WEEK

CPI inflation running somewhat above Fed 2 percent target (Wednesday)

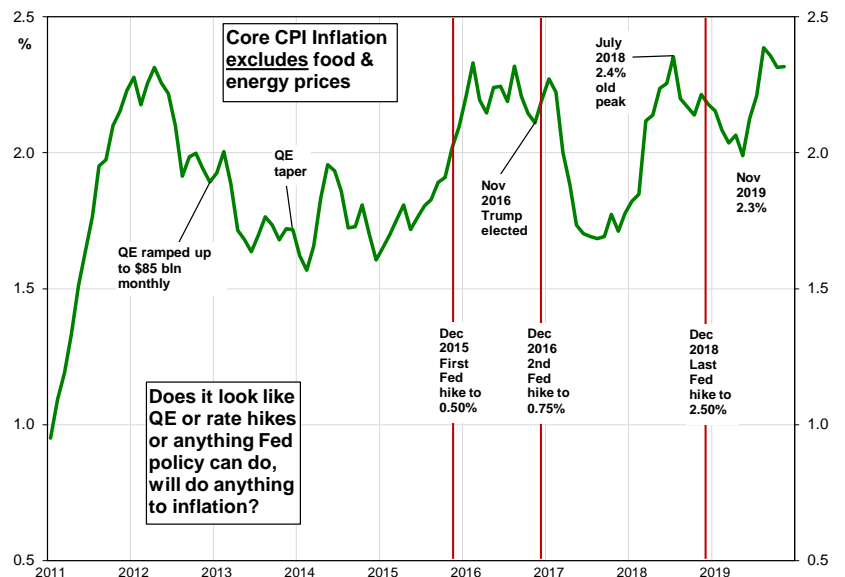
Breaking economy news. Fed Chair Powell just gave a speech up in Rhode Island trying to answer why inflation running somewhat below 2 percent is a big deal. The answer came out this morning with the CPI inflation report that shows headline inflation of 2.1% in November, and core inflation of 2.3% in November. Inflation isn't running somewhat below 2 percent. Maybe the Fed has the wrong measure of inflation.

In fact, the *Fed Listens* tour around the country found people said costs of medical care, housing, and college were all going up. CPI medical care services prices are on a tear with those visits to the family doctor up 5.1% the last year. The Fed's preferred measure of inflation, the PCE deflator, doesn't see medical care prices rising much if at all, which shows you just how flawed the Fed's thinking is. Maybe their inflation measure is running somewhat below 2 percent because PCE inflation doesn't measure health care costs properly. Just as the Americans the Fed talked to on the *Fed Listens* tour said. Doesn't sound like Washington is listening.

Core consumer inflation pressures are still out there in the economy with core CPI monthly changes of 0.2% in October and in November. 0.2 times twelve equals core CPI inflation of 2.4 percent which isn't nothing. 2.4 percent a year over the next 10 years will make those dollar bills in people's pockets worth 25 percent less which adds to income inequality in the nation. Fed officials are cutting interest rates this year instead of raising interest to more normal levels. Seems like rates are going the wrong way.

Net, net, the economy is growing 2 percent which is fast enough to set off the sparks of inflation. The bond market doesn't see it with 10-year yields motionless this morning; the bond vigilantes riding rates up and down the curve and making markets and big bets all left town long ago.

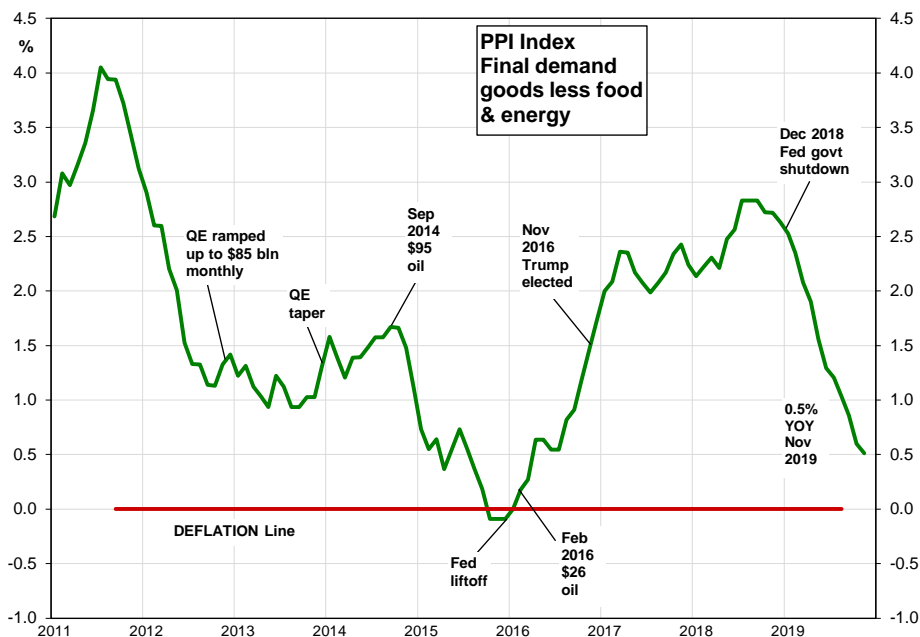
The message for Fed officials who are meeting today is that there is not no inflation. Economic growth is 2 percent, and CPI inflation is also running somewhat above 2 percent in November. The wheels of the economy are turning more slowly this year as the growth boost from last year's Tax Cuts and Jobs Act starts to fade, but inflation continues to increase. There are not worrisome deflation undercurrents in this economy and Fed officials do not need to cut interest rates further to boost economic demand. The economy is better than they think. Bet on it.



PPI inflation remains cool, seasonal adjustment problems boost jobless claims (Thursday)

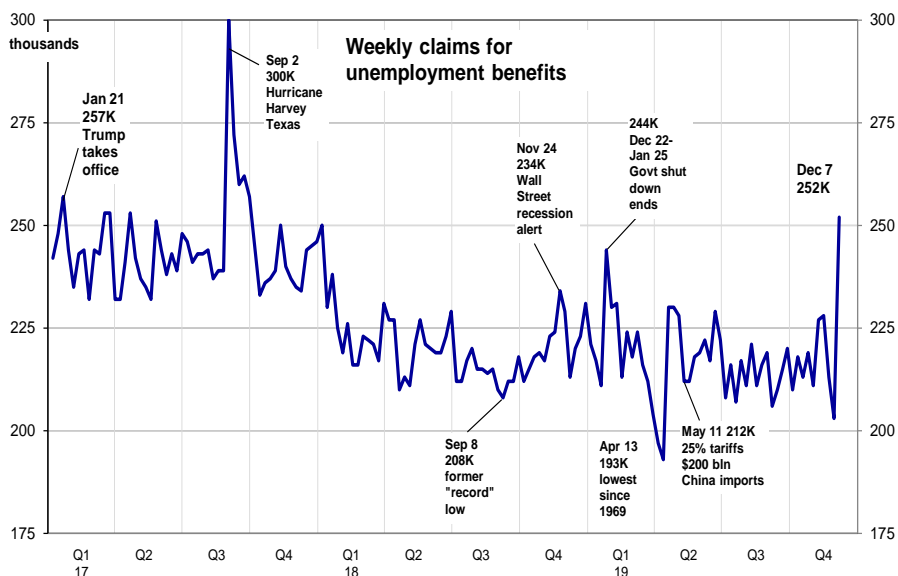
Breaking economy news. PPI final demand prices were unchanged in November and are up 1.1 percent from year-ago levels. Producer prices have slowed dramatically from the peak of 3.4% seen in July 2018. The manufacturing recession virtually guarantees that reduced demand will keep a lid on producer price inflation next year, a trend which can only serve to reinforce the Fed's retreat to the sidelines where they aren't thinking of changing interest rates at all during 2020.

Unemployment claims soared to recession-level heights of 252 thousand this week, but there appears to be a glitch caused by faulty seasonal adjustment factors getting hit with a double-whammy. Thanksgiving came a week later in 2019, and the December 7 week is the start of cold-weather winter layoffs where unemployment benefits applications typically soar. Unadjusted first-time jobless claims jumped 100K to 317K in the December 7 week.



Recession is not right around the corner; rather jobless claims are arising due to the late Thanksgiving and the start of winter for the labor markets at the beginning of December each year.

Net, net, inflation at the company level continues to rise less than 2 percent at an annual rate showing the import tariffs placed on many supply-chain factory inputs used in domestic production are not fanning the fires of inflation yet. It is remarkable that producers still don't have the ability to raise prices on their goods and services this long into the record economic expansion. With labor costs moving up, producer prices have to get marked up eventually. But for now, inflation at the company level remains subdued.



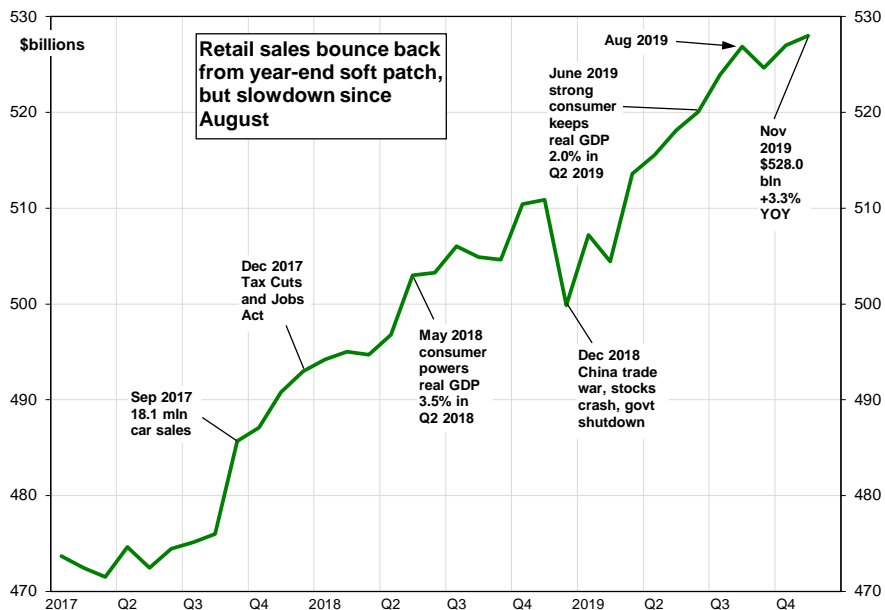
Retail sales nothing to cheer about this year... it's early yet, but (Thursday)

Breaking economy news. Retail sales rose just 0.2% in November. Where oh where has the consumer gone. They bought a lot of cars off the dealer lots in November with sales up 3.6% to 17.1 million at an annual rate even if the retail sales report said sales increased just 0.5%. Department store sales were down, and have been down every single month since July. Health and personal care, Clothing, Sporting goods and books, sales at all these stores were negative in November. Even dining or drinking out at restaurants and bars didn't contribute to retail sales in November.

Meanwhile, the US can't import any inflation with nonfuel import prices falling 0.1% in November and down 1.4% from last year. These nonenergy import prices (before tariffs are put on) fell every month but one this year, not counting July when prices were unchanged.

Net, net, consumers didn't take as many trips to the shops and malls as expected in November with maybe some trade war uncertainty, but more likely it's just due to the

fact that Thanksgiving and the big Black Friday biggest shopping day of the year came a week later this year. We believe Christmas is still coming for the economy and it better, as consumer spending is two-thirds of the economy. As it stands, retail sales are running in place at just 1.9% in the fourth quarter which is a dramatic slowdown from 5.7% in the third quarter and 7.7% in the second quarter.



The economic outlook for 2020 looks good given the strength of the labor market and 266 thousand new payroll jobs in November, but it won't be if consumers don't start shopping more to help make the economy grow. Stay tuned. Story developing. Today's reports won't be music to Fed officials' ears with inflation inputs struggling and the consumer sitting at home. Monetary policy is in a good place, but it won't be for long if the consumer doesn't pick up the baton and lead the economy forward.

Retail spending, actual dollars, each month

	\$million	% to Total	Percent Changes %		
			Nov	Oct	Year/year
Total Retail Sales	527,994	100.0	0.2	0.4	3.3
Motor vehicles/parts	106,780	20.2	0.5	1.0	4.9
Furniture/furnishings	9,849	1.9	0.1	-0.7	1.9
Electronics/appliances	8,166	1.5	0.7	-0.8	-1.5
Building materials/garden	31,504	6.0	0.0	-0.3	0.4
Food & beverage	65,429	12.4	0.3	0.2	2.9
Health/personal care	29,443	5.6	-1.1	0.5	-0.4
Gasoline stations	43,598	8.3	0.7	1.7	0.5
Clothing/accessories	22,240	4.2	-0.6	-0.3	-3.3
Sporting goods, books	6,573	1.2	-0.5	-0.1	3.4
General merchandise	59,600	11.3	0.1	0.3	-0.1
Department stores	11,054	2.1	-0.6	-0.2	-7.2
Miscellaneous retailers	11,520	2.2	-0.4	0.9	4.3
Eating & drinking places	65,216	12.4	-0.3	-0.1	5.1
Nonstore retailers (internet)	68,076	12.9	0.8	0.6	11.5

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 MUFG Bank, Ltd. (collectively with its various offices and affiliates, "MUFG Bank") 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 MUFG Bank. MUFG Bank 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 MUFG Bank believes that any relevant factual statements herein and any assumptions on which information herein are based, are in each case accurate, MUFG Bank makes no representation or warranty regarding such accuracy and shall not be responsible for any inaccuracy in such statements or assumptions. Note that MUFG Bank 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 MUFG Bank is under no obligation to ensure that such other reports are brought to your attention.

Copyright 2019 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 Mitsubishi UFJ Financial Group, Inc.'s U.S. Operations including MUFG Americas Holdings Corporation

The U.S. operations of Mitsubishi UFJ Financial Group, Inc. (MUFG), one of the world's leading financial groups, has total assets of \$326.5 billion at September 30, 2018. As part of that total, MUFG Americas Holdings Corporation (MUAH), a bank holding company and intermediate holding company, has total assets of \$161.0 billion at September 30, 2018. MUAH's main subsidiaries are MUFG Union Bank, N.A. and MUFG Securities Americas Inc. MUFG Union Bank, N.A. provides a wide range of financial services to consumers, small businesses, middle-market companies, and major corporations. As of September 30, 2018, MUFG Union Bank, N.A. operated 354 branches, consisting primarily of retail banking branches in the West Coast states, along with commercial branches in Texas, Illinois, New York and Georgia, as well as 22 PurePoint® Financial Centers. 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. MUAH is owned by MUFG Bank, Ltd. and Mitsubishi UFJ Financial Group, Inc. MUFG Bank, Ltd., a wholly owned subsidiary of Mitsubishi UFJ Financial Group, Inc., has offices in Argentina, Brazil, Chile, Colombia, Peru and Canada as well as branches, agencies and representative offices in the U.S. Visit <https://www.unionbank.com> or <https://www.mufgamericas.com> for more information.

About MUFG

Mitsubishi UFJ Financial Group, Inc. (MUFG) is one of the world's leading financial groups. Headquartered in Tokyo and with over 360 years of history, MUFG has a global network with over 1,800 locations in more than 50 countries. The Group has over 150,000 employees and offers services including commercial banking, trust banking, securities, credit cards, consumer finance, asset management, and leasing. The Group aims to "be the world's most trusted financial group" through close collaboration among our operating companies and flexibly respond 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 stock exchanges. For more information, visit <https://www.mufg.jp/english>.