

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

29 DECEMBER 2017

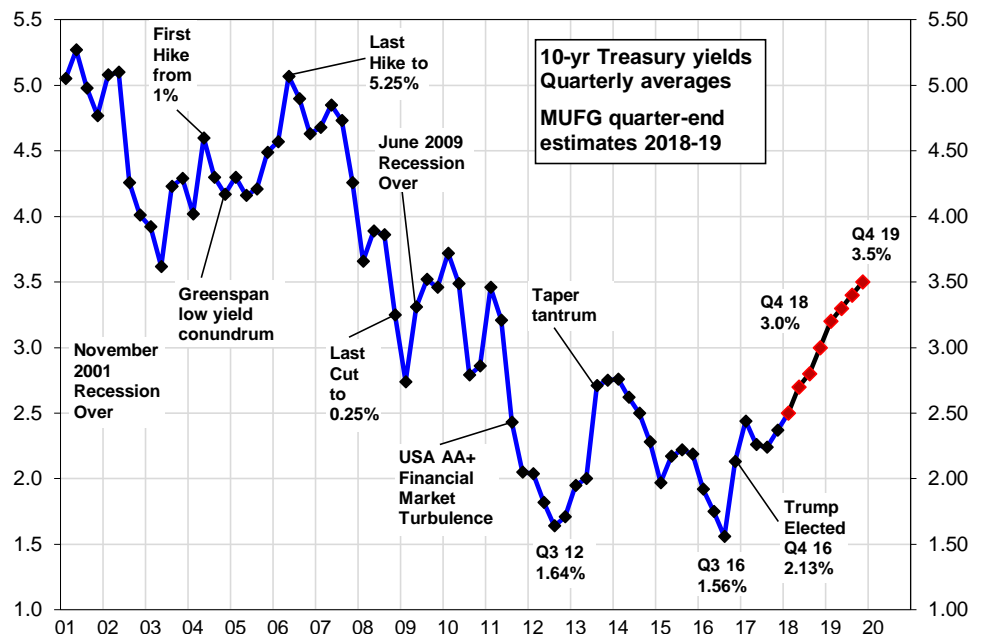
MUFG | 1251 Avenue of the Americas
 New York, New York 10020
 A member of MUFG, a global financial group

HIGHER BOND YIELDS: HAPPY NEW YEAR, 2018 WILL BE THE YEAR

Bond yields closed at 2.41% this year, not quite up to the 2.44% level at the end of 2016, so the yield recovery since the Great Recession and financial crisis did not make further progress this year. At least yields are hanging in there. Hope springs eternal.

Fed policy should be supportive of higher bond yields in 2018 as officials forecast three more rate

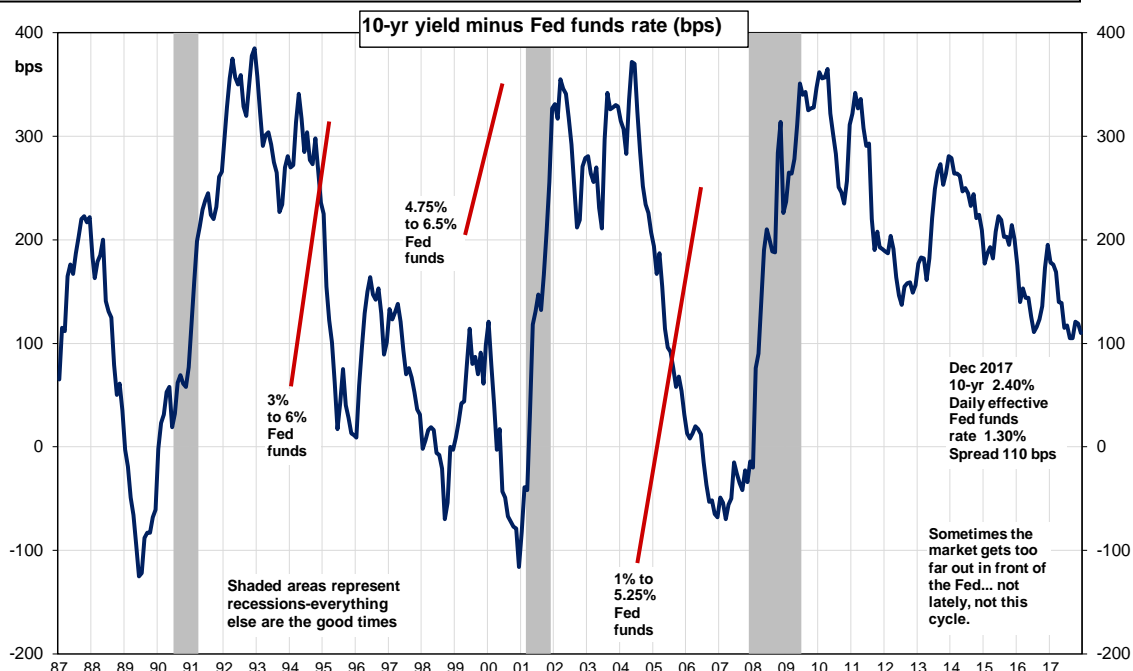
hikes to 2.25%. (We still see four rate hikes to 2.50% in 2018.) The 10-yr yield is unlikely to see significant backsliding in 2018 as 2.25% should serve as the floor for bond yields at a minimum. There are not many times historically that 10-yr yields trade lower than the Fed funds rate target. Inflation is a wild card as are the wild opinions from some fringe Fed officials about the importance of inflation as a goal of monetary policy. We are not convinced of their arguments over why low inflation should be a concern for markets and we don't find many people out there in the country who care about this issue either. Bernanke tried to say low inflation risked the economy falling into deflation which seems like a stretch. Yellen tried to say low inflation meant low interest rates so the Fed funds rate tool would not work when we hit the next recession. They wouldn't be able to cut interest rates from high enough of a level to stimulate investment and increase economic growth. Do they need to do anything? Maybe the economy will recover naturally from a recession is our thought without all the Queen's Horses and all the King's Men down at the Federal Reserve in Washington attempting to ride to the rescue.



Maybe inflation will be supportive of higher bond yields or maybe not, but supply and demand might be helpful in getting 10-yr Treasury yields up to the magic 3% level. Those massive tax cuts you are getting will not be paid for by higher economic growth and tax collections for a while... if ever.

There will be more Treasury bond auctions in 2018 as the Federal budget deficit widens on the massive tax cuts, and the Fed's balance sheet wind down of Treasuries will be paid for with more Treasury bond auctions as well. Treasuries coming off the Fed's balance sheet will be sold

Fed has to keep pushing in 2018 or bond yield normalization rally will stall.



back to the American public which increases supply and theoretically pushes bond yields up. The Fed holdings of Treasuries has trickled down slowly so far, but by October 2018 the wind down should be closer to full speed which means a maximum \$30 billion per month will be unwound and sold back to the public at the Treasury's regular auctions. \$360 billion per year will be added to the Federal budget deficit each year meaning new supply could exceed \$1 trillion annually over the next several years.

Federal Budget Deficits fiscal years ending September \$bln										
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
OMB (FY17 Budget)	458	1,412	1,294	1299	1086	679	484	438	584	665
Fed QE Purchases of Govts		293	7	600	0	414	387	13	2	2
Treasuries Held in Custody fgn central banks	256	624	392	212	193	38	89	-20	-185	232
Foreign private purchases Govts (TIC)	252	267	579	320	218	53	178	210	85	143
Commercial Bank holdings Treasuries	1	50	103	-17	23	-36	186	64	62	0

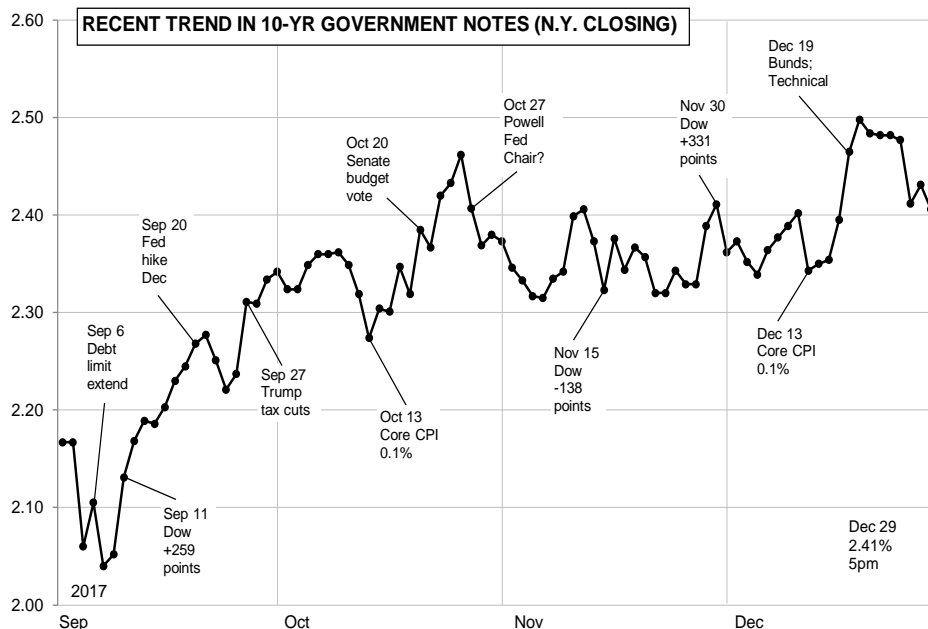
There were trillion dollar budget deficits in the Obama years 2009-2012 and yields didn't go higher. But a lot of the extra supply was taken off the market by massive foreign buying of Treasuries and the Fed's QE purchases of about \$900 billion helped as well. Foreign buying was strong in 2017 as well although part of that was a return to trend; Treasuries held in custody for foreign official accounts dropped \$185 billion in 2016 as China struggled to control its currency. Commercial banks could help soak up the deficit, buying Treasuries in 2018 as there are fewer opportunities to make new loans this late in the economic expansion. Banks last bought Treasuries in significant amounts back in 2014, \$186 billion, due to the Dodd Frank banking reform law.

In conclusion, the supply picture should see a sharp increase in 2018-19 which will work to push bond yields somewhat higher. The Federal budget deficits will break \$1 trillion and the Fed balance sheet unwind will add almost \$400 billion starting late in 2018.

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)

There was a steady rally from 2.47% on Wednesday starting at the NY open, with no obvious fundamental reason and despite a so-so 5-yr Treasury note auction. Consumer confidence at 10am fell from 128.6 in November to 122.1 in December and supported the rally even if no real buying came in on the weak economy news. We look for four Fed rate hikes in 2018 with 10-yr Treasuries ending the year at 3.0%.



FEDERAL RESERVE POLICY

The Fed meets January 30-31 to consider its monetary policy. Yellen's last one. Could get teary though we won't have the meeting verbatim transcript for 5 more years. Maybe they could issue these a little more quickly than five years on if they are interested in transparency.

The balance sheet wind down is proceeding according to plan. There is a self-imposed decline limit in the first three months (\$18 billion total), but starting in Q1 2018 the decline over the three months will be limited to \$36 billion. Not that much extra supply added to the regular Treasury coupon actions yet. As far as the Fed's interest rate policy, we expect a 25 bps rate hike to 1.75% on March 21, 2018, and the market based odds of a move are fairly high surprisingly at 58%.

Selected Fed assets and liabilities					
	27-Dec	20-Dec	13-Dec	6-Dec	Sep 10 2008**
Fed H.4.1 statistical release					
billions, Wednesday data					
Factors adding reserves					
U.S. Treasury securities	2454.219	2454.237	2454.256	2454.474	479.782
Federal agency debt securities	4.391	4.391	4.391	4.391	0.000
Mortgage-backed securities	1764.926	1775.451	1780.237	1767.096	0.000
Primary credit (Discount Window)	0.108	0.077	0.004	0.005	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	1.712	1.712	1.709	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	12.008	0.057	0.042	0.035	62.000
Federal Reserve Assets	4495.7	4494.7	4499.8	4483.9	961.7
3-month Libor %	1.69	1.66	1.59	1.52	2.82
Factors draining reserves					
Currency in circulation	1616.323	1607.915	1604.008	1602.906	834.477
Term Deposit Facility	0.000	0.000	0.000	0.000	0.000
Reverse repurchases w/others	147.749	127.582	143.392	76.368	0.000
Reserve Balances (Net Liquidity)	2176.452	2237.141	2322.762	2158.636	24.964
Treasuries within 15 days	17.504	17.504	0.000	0.000	14.955
Treasuries 16 to 90 days	79.555	79.556	97.060	97.060	31.549
Treasuries 91 days to 1 year	328.412	328.412	328.412	328.413	69.272
Treasuries over 1-yr to 5 years	1095.446	1095.449	1095.451	1095.454	170.807
Treasuries over 5-yrs to 10 years	310.412	310.416	310.420	310.425	91.863
Treasuries over 10-years	622.890	622.901	622.912	623.122	101.337

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

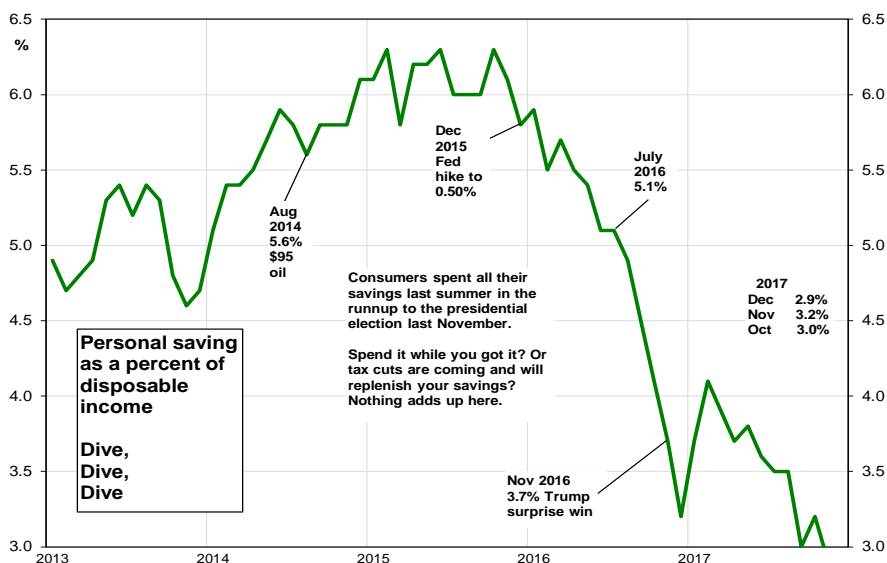
Balance sheet unwind: Treasury security holdings dropped \$11.5 billion from \$2.465 trillion on October 25, 2017.

OTHER ECONOMIC NEWS THE LAST TWO WEEKS

Consumers raid their piggy banks ahead of tax cuts

Breaking economy news. The November personal income report. Durable goods report too. Consumers hit the shops and malls in November doing some early holiday shopping, but they had to dip into their piggy banks to do it. Personal spending rose 0.6% in November, but the savings rate dropped from 3.2% in October to just 2.9% in November. It looks like consumers went to the bank and drew on their savings to fund this year's holiday spending, betting those tax cuts from Washington will refill their coffers early in the New Year. Forget the jobs part of the Tax Cuts and Jobs Act, just show me the money the consumer seems to be saying. The polls say a majority don't want tax cuts, but they are spending the money anyway.

Meanwhile the Fed's preferred inflation measure is out in the same report. There isn't low inflation, and there's not no inflation, there's just so-so inflation. Core PCE inflation bumped up a notch to 1.5% in November which is better than that low inflation reading of 1.3% earlier in the year that made Fed officials nervous. They dropped the reference to soft inflation in their most recent press statement from last week's meeting, and today's better inflation numbers show that to be a wise decision.



Real consumer spending is better this quarter rising 2.5% with only December data left to go versus the downward revised 2.2% reading from the third quarter. We are sticking with our 2.8% forecast for fourth quarter real GDP given the solid spending on the part of consumers.

Business is still shipping a lot of capital goods this quarter before their tax cuts and full write-offs for equipment purchases take effect. Shipments of nondefense capital goods ex-aircraft, a key measure of business investment rose 0.3% in November and October's 1.1% increase was revised to +1.3% in today's report on durable goods.

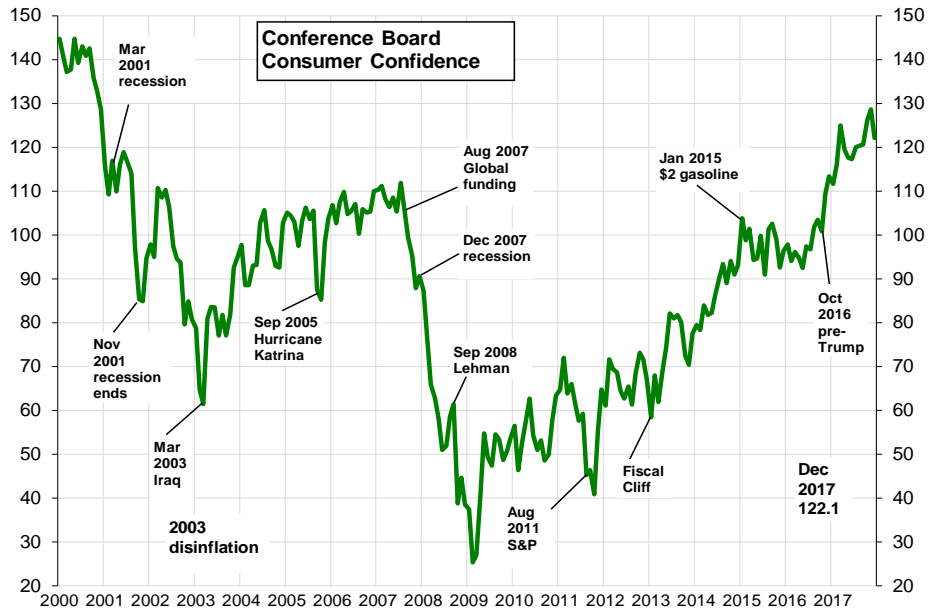
Net, net, the economy is firing on both engines, consumer spending and business equipment purchases, as we head into the end of the year. Growth looks well balanced with consumers and businesses likely to carry the expansion into the record books in 2018. The economic expansion starts its tenth year of growth from the Great Recession and financial crisis next July which is close to breaking that famous ten-year long expansion under President Clinton in the roaring 90s.

Consumers and business leaders are clearly besotted, filled with confidence that these massive tax cuts will lead to better lives and better tomorrows. So far so good for the Trump economics team. Consumers and business leaders are opening their purses, and buying what the administration is selling. Real GDP growth could hit the Trump administration goal of 3% earlier than expected in 2018 if confidence and spending holds up. Bet on it.

Consumer confidence falls back to earth at the turn of the year

Breaking economy news. The consumer confidence survey for December falls a sharp 6.5 points to 122.1 in December as consumers are less impressed with those massive tax cuts than earlier survey readings found. The economy isn't going off the rails or anything but this does inject an air of caution into the 2018 economic outlook. The big jump in confidence in October due to tax reform hopes have come completely unraveled. You can give workers a break on their taxes, but you can't guarantee they are going to spend their paychecks and help make the economy grow. Today's setback for consumer sentiment may endanger the Trump economics team's plan for the tax cuts to pay for themselves if we don't see faster economic growth. A key driver of confidence is the labor market and consumers say jobs are not so plentiful this month.

Net, net, consumers are less confident about the outlook at the end of the year despite having their pockets stuffed with tax cuts cash by the Trump administration and U.S. Congress. Consumer spending is a key driver of economic growth and the nation's overall prosperity so today's report is like an unwelcome storm cloud coming in for 2018's economic outlook. Stay tuned. Story developing.



Consumers don't seem to have as much to celebrate as we thought this New Year and this could throw a monkey wrench into those higher GDP forecasts which could come back to bite the American people and stick taxpayers with a massive tax cuts bill. \$1.5 trillion is a big number and a big deal. Someone's got to pay for it. Any celebration now could bring a big hangover in January. Bet on it.

How's the labor market doing? Conference Board asks the consumer.							
	Dec 17	Nov 17	Oct 17	Sep 17	Aug 17	Jul 17	Jun 17
Confidence Index	122.1	128.6	126.2	120.6	120.4	120.0	117.3
Jobs are:							
Plentiful	35.7	37.5	36.7	32.7	34.4	33.2	32.0
Not so	49.1	45.7	46.2	49.3	47.2	48.1	49.6
Hard to get	15.2	16.8	17.1	18.0	18.4	18.7	18.4

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.