

Blue Chip Financial Forecasts[®]

**Top Analysts' Forecasts Of U.S. And Foreign Interest Rates, Currency Values
And The Factors That Influence Them**

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BLUE CHIP FINANCIAL FORECASTS®

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At Least 75 Basis Points Of Rate Hikes In 2018

Domestic Commentary As unanimously predicted last month by our panelists, the Federal Reserve's Open Market Committee (FOMC) hiked its federal funds rate target range by 25 basis points to 1.25%-1.50% at its December 12th-13th meeting. That marked the third 25-basis-point increase of 2017 and the fifth 25-basis-point increase since December 2015. Moreover, the updated "dot plot" released by the FOMC at its December 12th-13th meeting continued to suggest that policymakers will increase the federal funds rate target range by a further 75 basis points in 2018, followed thereafter by an additional 50 basis points of tightening in both 2019 and 2020.

Based on a special question asked of our panelists during our December 20th-21st survey, 50.3% also predict the FOMC will hike rates by a further 75 basis points in 2018. Among those not expecting 75 basis points of increases in 2018, 20.9% of the panelists forecast 100 basis points of rate hikes in 2018, 23.3% of the panelists predict we will see 50 basis points of tightening, and 4.7% of the panelists contend the FOMC will enact only one 25-basis-point increase in 2018.

As for when the FOMC will next enact a rate hike, nearly three-quarters (74.4%) of the panelists responding to a special question said it will occur at its March 20th-21st meeting – the first presided over by Jerome Powell who will replace Janet Yellen as Chair of the Federal Reserve Board. A bit less than a quarter of the panelists (23.3%) said the first hike of 2018 will not occur until the FOMC's June 12th-13th meeting, while one of our panelists (2.3%) believes that the FOMC will strike again at its next meeting, increasing rates at its January 30th-31st meeting.

Driving expectations among policymakers and our panelists that it will be appropriate for the FOMC to continue its normalization of both interest rates and its balance sheet is the shared belief that the economy will continue to grow at an above-trend pace over the forecast horizon with the output gap now closed and the economy already at full employment.

The Summary of Economic Projections (SEP) released in conjunction with the FOMC's December meeting indicated greater optimism among policymakers about economic growth and unemployment compared to the September meeting's SEP, but no change in expectations about inflation. The median projection for real GDP growth in 2018 rose 0.4 of a percentage point to 2.5% (q4/q4), while the median estimate for growth in 2019 and 2020 rose 0.1 of a percentage point and 0.2 of a percentage point, respectively, to 2.1% (q4/q4) and 2.0% (q4/q4). December's median projections for the unemployment in Q4 of the next three years fell 0.2 of a percentage point compared to the September SEP to 3.9% in 2018 and 2019, and to 4.0% in 2020. Median expectations for the q4/q4 change in the personal consumption expenditures (PCE) price index and the core PCE price index remained at 1.9% for 2018 and 2.0% in 2019 and 2020.

During the press conference that followed the FOMC's December meeting, chairwoman Janet Yellen noted that most policymakers had taken into account the likelihood of fiscal stimulus (passage of the Republican tax reform legislation) when making their projections, but stressed that other factors also likely played a role. Yellen further noted that the impact of the tax reform package on the economy would primarily impact the demand side of the economy, but might also boost the supply side, thereby lifting potential GDP.

Our panelists, too, look for the tax reform legislation to have a positive impact on economic growth. Indeed, a bit more than 70% of those responding to a special question stated that they had upped their forecasts of 2018 growth because of it. So far, however, they tend to believe it will provide a relatively modest boost to growth. Asked how much the tax reform package would contribute to real GDP's growth rate in 2018, the consensus response was only 0.29 of a percentage point. Moreover, when asked what they assume will be

the economy's average annual increase in real GDP over the next ten years, the consensus of our panelists was 2.17%, considerably short of the 2.9% average assumed by the Trump Administration.

That said, the economy has certainly been humming along over the past three quarters, growing well in excess of its presumed potential rate. After expanding 3.1% (saar) in Q2 and 3.2% (saar) in Q3, the consensus now predicts real GDP will register growth of 2.8% (saar) in Q4 2017, 0.1 of a percentage point faster than estimated a month ago by the consensus. That would mark the strongest three-quarter stretch for real GDP growth since the last three quarters of 2014. No doubt contributing to our panelists' upward revisions to growth in Q4 have been reports of greater-than expected strength during the first two months of the quarter in consumer spending, housing starts, industrial production, and business equipment spending. Likely preventing reported GDP growth in Q4 from being even stronger, October data on trade (the latest available) suggests the net export deficit will widen a good bit in Q4 due to strong import growth, thus subtracting from GDP. Moreover, it also appears that inventories will represent a drag on GDP's growth rate in Q4.

In 2018, the consensus now predicts real GDP will grow 2.5% (saar) in Q1, 2.6% (saar) in Q2, 2.5% (saar) in Q3, and 2.4% (saar) in Q4. The Q1 and Q4 consensus forecasts rose 0.1 of a percentage point since last month's survey, the Q3 forecast increased 0.2 of a percentage point, while the Q2 estimate went unchanged. If the current consensus forecasts of growth in Q4 2017 and over the four quarters of 2018 are achieved that would result in annual real GDP growth of 2.3% in 2017 and 2.7% in 2018 and q4/q4 growth of 2.5% in both 2017 and 2018. The q4/q4 consensus forecasts for 2017 and 2018 match the median projections found in the FOMC's December SEP. The consensus forecasts that real GDP will grow 2.2% (saar) in both Q1 and Q2 of 2019. The Q1 2018 forecast increased 0.1 of a percentage point this month, while the Q2 forecast is our panelists' first crack at forecasting it.

The consensus now predicts the GDP price index will increase 2.2% (saar) in Q4 2017 and the Consumer Price Index (CPI) 3.1% (saar). There was little change from last month in consensus forecasts for either in 2018. The GDP price index forecast to register average annualized increases of 2.0% over the four quarters of 2018 and the CPI average annualized increases of 2.1%. During the first two quarters of 2019, both are forecast to increase only a 0.1-0.2 of a percentage point faster than in 2018. The consensus predicts that 2018's December-over-December change in the personal consumption expenditures price index will increase to 2.0% versus its 12-month rate of change of 1.8% as of November 2017.

As to be expected, the consensus continues to forecast that U.S. interest rates will move higher over the forecast horizon. The primary catalysts: continued normalization of interest rates and its balance sheet by the FOMC and an upturn in inflation and inflationary expectations. Also likely to weigh on U.S. debt markets is a sharp increase in debt issuance by the U.S. Treasury Department at a time when demand is likely to be shrinking. Decreasing monetary accommodation by other major central banks in reaction to above-trend economic growth and a rebound in inflation may also serve to dampen demand for U.S. paper.

Consensus Forecast The consensus predicts the FOMC will raise its federal funds rate target by at least 75 basis points in 2018 and continue to increase in the first half of 2019. Real GDP in 2017 and 2018 will register above-trend increases of 2.5% (q4/q4). Inflation will hit the FOMC's 2.0% target in 2018. About 67% of our panelists believe the 2-yr/10-yr spread will narrow by the end of 2018 (*see page 2*).

Special Questions The consensus puts the odds of a U.S. recession in 2018 at 18.4%, but the odds rise to 29.8% for 2019 (*see page 14*).

Consensus Forecasts Of U.S. Interest Rates And Key Assumptions¹

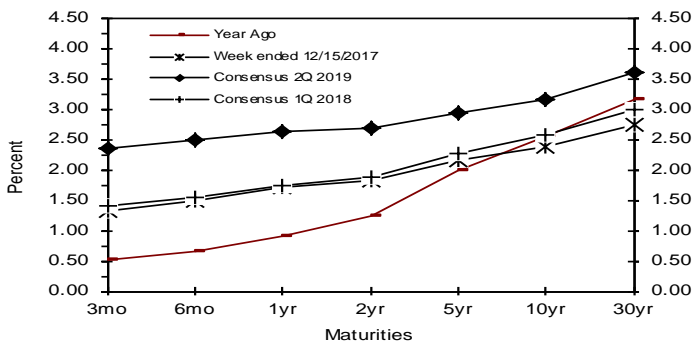
Interest Rates	History								Consensus Forecasts-Quarterly Avg.					
	Average For Week Ending				Average For Month				Latest Qtr	1Q 2018	2Q 2018	3Q 2018	4Q 2018	1Q 2019
	Dec. 15	Dec. 8	Dec. 1	Nov. 24	Nov	Oct	Sep	4Q 2017*	2018	2018	2018	2018	2019	2019
Federal Funds Rate	1.16	1.16	1.16	1.16	1.16	1.15	1.16	1.16	1.5	1.7	1.9	2.0	2.2	2.4
Prime Rate	4.25	4.25	4.25	4.25	4.25	4.25	4.25	4.25	4.5	4.7	4.9	5.1	5.3	5.5
LIBOR, 3-mo.	1.59	1.53	1.48	1.46	1.42	1.36	1.33	1.45	1.7	1.9	2.1	2.3	2.5	2.7
Commercial Paper, 1-mo.	1.35	1.26	1.18	1.16	1.15	1.13	1.12	1.20	1.5	1.7	1.9	2.1	2.3	2.5
Treasury bill, 3-mo.	1.32	1.29	1.28	1.30	1.23	1.09	1.06	1.21	1.4	1.6	1.8	2.0	2.2	2.3
Treasury bill, 6-mo.	1.48	1.47	1.44	1.45	1.37	1.25	1.19	1.37	1.6	1.7	2.0	2.1	2.3	2.5
Treasury bill, 1 yr.	1.70	1.66	1.62	1.62	1.54	1.40	1.31	1.54	1.7	1.9	2.1	2.3	2.5	2.6
Treasury note, 2 yr.	1.82	1.80	1.77	1.76	1.68	1.54	1.46	1.68	1.9	2.1	2.2	2.4	2.6	2.7
Treasury note, 5 yr.	2.15	2.14	2.10	2.08	2.04	1.98	1.89	2.06	2.3	2.4	2.5	2.7	2.8	2.9
Treasury note, 10 yr.	2.37	2.36	2.36	2.35	2.36	2.36	2.28	2.36	2.6	2.7	2.8	2.9	3.1	3.2
Treasury note, 30 yr.	2.74	2.75	2.79	2.76	2.81	2.88	2.83	2.81	3.0	3.1	3.3	3.4	3.5	3.6
Corporate Aaa bond	3.60	3.63	3.68	3.67	3.70	3.75	3.75	3.69	3.8	4.0	4.2	4.4	4.5	4.6
Corporate Baa bond	4.18	4.21	4.26	4.25	4.29	4.32	4.32	4.27	4.5	4.7	4.9	5.1	5.2	5.4
State & Local bonds	3.44	3.43	3.51	3.45	3.41	3.37	3.34	3.41	3.6	3.8	3.9	4.1	4.2	4.3
Home mortgage rate	3.94	3.93	3.94	3.92	3.92	3.90	3.82	3.92	4.1	4.3	4.4	4.6	4.7	4.8

Key Assumptions	History								Consensus Forecasts-Quarterly					
	1Q 2016	2Q 2016	3Q 2016	4Q 2016	1Q 2017	2Q 2017	3Q 2017	4Q 2017*	1Q 2018	2Q 2018	3Q 2018	4Q 2018	1Q 2019	2Q 2019
Major Currency Index	93.3	89.6	90.3	93.7	94.4	93.0	88.3	89.1	89.1	89.5	89.2	89.0	88.6	88.6
Real GDP	0.6	2.2	2.8	1.8	1.2	3.1	3.2	2.8	2.5	2.6	2.5	2.4	2.2	2.2
GDP Price Index	0.3	2.4	1.4	2.0	2.0	1.0	2.1	2.2	2.0	1.9	2.0	2.1	2.2	2.0
Consumer Price Index	0.1	2.3	1.8	3.0	3.1	-0.3	2.0	3.1	2.1	1.9	2.2	2.2	2.3	2.2

Forecasts for interest rates and the Federal Reserve's Major Currency Index represent averages for the quarter. Forecasts for Real GDP, GDP Price Index and Consumer Price Index are seasonally-adjusted annual rates of change (saar). Individual panel members' forecasts are on pages 4 through 9. Historical data: Treasury rates from the Federal Reserve Board's H.15; AAA-AA and A-BBB corporate bond yields from Bank of America-Merrill Lynch and are 15+ years, yield to maturity; State and local bond yields from Bank of America-Merrill Lynch, A-rated, yield to maturity; Mortgage rates from Freddie Mac, 30-year, fixed; LIBOR quotes from Intercontinental Exchange. All interest rate data is sourced from Haver Analytics. Historical data for Fed's Major Currency Index is from FRSR H.10. Historical data for Real GDP and GDP Chained Price Index are from the Bureau of Economic Analysis (BEA). Consumer Price Index (CPI) history is from the Department of Labor's Bureau of Labor Statistics (BLS). *Interest rate data for 4Q 2017 based on historical data through the week ended December 15th. *Data for 4Q 2017 Major Currency Index is based on data through week ended December 15th. Figures for 4Q 2017 Real GDP, GDP Chained Price Index and Consumer Price Index are consensus forecasts based on a special question asked of the panelists' this month.*

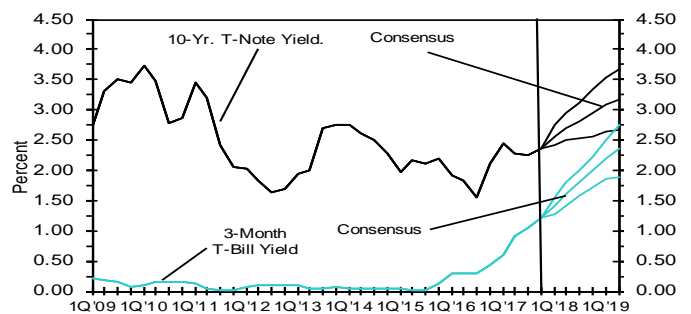
U.S. Treasury Yield Curve

Week ended December 15, 2017 and Year Ago v.s. 1Q 2018 and 2Q 2019 Consensus Forecasts



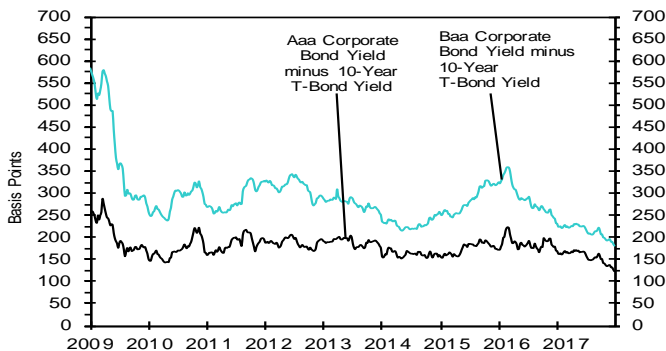
U.S. 3-Mo. T-Bills & 10-Yr. T-Note Yield

(Quarterly Average) Forecast



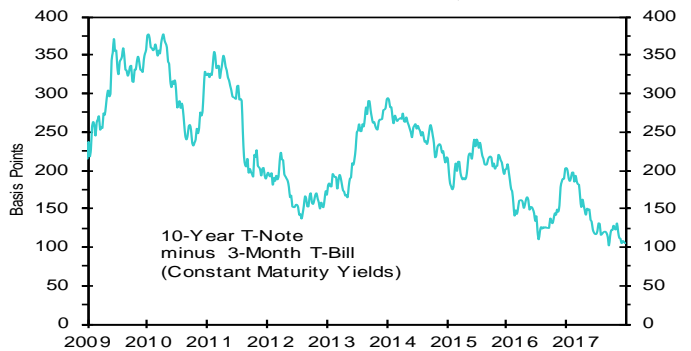
Corporate Bond Spreads

As of week ended December 15, 2017



U.S. Treasury Yield Curve

As of week December 15, 2017



-----3-Month Interest Rates¹-----

	History			Consensus Forecasts		
	Month	Year	Months From Now:			
Latest:	Ago:	Ago:	3	6	12	
U.S.	1.61	1.45	1.00	1.81	2.06	2.24
Japan	-0.02	-0.04	-0.03	0.03	0.03	0.05
U.K.	0.44	0.44	0.38	0.54	0.56	0.76
Switzerland	-0.76	-0.75	-0.74	-0.70	-0.70	-0.60
Canada	1.41	1.35	0.87	1.70	1.80	1.92
Australia	2.43	1.98	2.25	1.90	1.90	2.15
Eurozone	-0.33	-0.33	-0.31	-0.33	-0.31	-0.26

-----10-Yr. Government Bond Yields²-----

	History			Consensus Forecasts		
	Month	Year	Months From Now:			
Latest:	Ago:	Ago:	3	6	12	
U.S.	2.42	2.36	2.56	2.61	2.72	2.93
Germany	0.31	0.35	0.25	0.52	0.64	0.88
Japan	0.04	0.03	0.08	0.07	0.09	0.08
U.K.	1.23	1.33	1.55	1.48	1.57	1.73
France	0.63	0.66	0.77	0.91	1.03	1.28
Italy	1.80	1.77	1.84	2.07	2.15	2.40
Switzerland	-0.14	-0.09	-0.02	-0.02	0.07	0.23
Canada	1.86	1.90	1.78	2.21	2.36	2.63
Australia	2.53	2.53	2.86	2.73	2.79	2.88
Spain	1.46	1.48	1.45	1.72	1.84	2.11

-----Foreign Exchange Rates¹-----

	History			Consensus Forecasts		
	Month	Year	Months From Now:			
Latest:	Ago:	Ago:	3	6	12	
U.S.	89.122	88.916	2.56	89.3	89.6	88.6
Japan	112.68	111.98	0.25	113.9	115.0	115.8
U.K.	1.3346	1.3222	0.08	1.34	1.35	1.37
Switzerland	0.9903	0.9882	1.55	0.99	0.99	0.99
Canada	1.2846	1.2785	0.77	1.28	1.27	1.26
Australia	0.7646	0.7563	1.84	0.77	0.77	0.78
Euro	1.1778	1.1799	-0.02	1.19	1.21	1.24

Consensus
3-Month Rates
vs. U.S. Rate

	Now	In 12 Mo.
Japan	-1.63	-2.19
U.K.	-1.17	-1.48
Switzerland	-2.37	-2.84
Canada	-0.20	-0.32
Australia	0.82	-0.09
Eurozone	-1.94	-2.50

Consensus
10-Year Gov't
Yields vs. U.S. Yield

	Now	In 12
Germany	-2.06	-2.05
Japan	-2.33	-2.85
U.K.	-1.14	-1.20
France	-1.74	-1.65
Italy	-0.57	-0.53
Switzerland	-2.51	-2.70
Canada	-0.51	-0.30
Australia	0.16	-0.05
Spain	-0.91	-0.82

International Commentary Not only did global economic growth surprise to the upside in 2017, it did so in the most synchronized fashion in a decade. Inflation, however, remained tamer in most nations than expected. This factor, combined with the persistence of extreme monetary accommodation by the European Central Bank (ECB) and the Bank of Japan (BoJ), served to hold down global bond yields. While a few major central banks - the Federal Reserve, Bank of Canada (BoC), and Bank of England (BoE) - began or continued a gradual reversal of the tremendous monetary accommodation put in place over the past several years, global financial conditions actually grew easier in 2017 given surging global equity markets.

The consensus predicts that in 2018 global economic growth will slow only slightly and remain above its trend rate, closing output gaps in nations where they have not already closed, pushing unemployment to or below its noninflationary level, and gradually exerting upward pressure on inflation. If borne out, that could/should test the patience of both central bank policymakers and bond investors.

The consensus predicts the Fed will raise interest rates by a further 75 basis points in 2018, duplicating the increases enacted in 2017. Moreover, the Fed's balance sheet normalization program that began last fall will become increasingly more powerful over time, shrinking its balance sheet by an estimated \$400 billion in 2018. The BoC and BoE, too, are expected to raise rates in 2018, but while the BoC may match the Fed's total increases, the BoE will likely raise rates by less given slower GDP growth, due in part to Brexit uncertainties.

The ECB and BoJ are not expected to begin raising interest rates until early 2019. However, the ECB announced last October that it would cut the size of its asset purchase program from €60 billion to €30 billion per month beginning in January and set a tentative end date of September 2018 for the purchase program. While the BoJ's official JGB purchase program target remains ¥80 trillion per year, its actual annual pace of purchases has fallen to around ¥61 trillion and most analysts believe it will continue to fall in size during 2018.

At its December meetings, the ECB left rates unchanged, but raised its forecast of real GDP growth in 2018 by 0.5 of a percentage point to 2.3%. Growth in 2017 is expected to hit 2.4%, the best performance since 2007. The bank's forecasts of economic growth in 2019 and 2020 were also upped. While the ECB also raised its forecasts of future inflation the bank still expects it to remain below its target of just under 2.0% in both years. ECB president Mario Draghi noted at the meeting that "the incoming information indicates a strong pace of economic expansion and a significant improvement in the growth outlook", but repeated that interest rates would "remain at their present level for an extended period of time". The Swiss National Bank and the Norges Bank also left policy rates unchanged in December. However, the Norges Bank said its first hike in rates may come in the fall 2018 rather than its previous prediction of a move in 2019.

The BoE's Monetary Policy Committee (MPC) also left rates unchanged in December after raising them by 25 basis points in November, the first increase in a decade. While economic growth has slowed in the U.K., inflation is running in excess of 3.0% versus the bank's 2.0% target, pressuring the MPC to act. Many analysts look for the next rate increase from the MPC to come in late-Q1/early-Q2 of 2018.

The BoC left rates unchanged in December after enacting two 25 basis point increases earlier in the year. While real GDP growth appears to have slowed to about 2.0% in the second half of 2017; that followed a blistering pace of about 4.0% in the first half. Consumer price inflation jumped to 2.1% y/y in November, likely giving the BoC a green light for another hike in rates in Q1 2018.

The BoJ left policy unchanged at its December 21st meeting. GDP growth remains healthy, but inflation remains well below the bank's target. While no short-term rates hikes are in store this year, the BoJ may lift its target for 10-yr. JGB yields from 0% to 0%-0.25% by late 2018. Governor Kuroda is widely expected to be reappointed sometime early 2018 (see pages 10-11 for individual panelists' forecasts).

Forecasts of panel members are on pages 10 and 11. Definitions of variables are as follows: ¹Three month rate on interest-earning money market deposits denominated in selected currencies. ²Government bonds are yields to maturity. Foreign exchange rate forecasts for U.K., Australia and the Euro are U.S. dollars per currency unit. For the U.S. dollar, forecasts are of the U.S. Federal Reserve Board's Major Currency Index.

First Quarter 2018

Interest Rate Forecasts

Key Assumptions

Blue Chip Financial Forecasts Panel Members	-----Percent Per Annum-- Average For Quarter-----															Avg. For ---Qtr.---	-----((Q-Q % Change))-----			
	-----Short-Term-----					-----Intermediate-Term-----					-----Long-Term-----						Fed's Major Currency \$ Index	B. Real GDP	C. Price Index	D. Cons. Price Index
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15					
	Federal Funds Rate	Prime Bank Rate	LIBOR Rate 3-Mo.	Com. Paper 1-Mo.	Treas. Bills 3-Mo.	Treas. Bills 6-Mo.	Treas. Bills 1-Yr.	Treas. Notes 2-Yr.	Treas. Notes 5-Yr.	Treas. Notes 10-Yr.	Treas. Bonds 30-Yr.	Aaa Corp. Bond	Baa Corp. Bond	State & Local Bonds	Home Mg. Rate					
Nomura Securities, Inc.	1.7 H	4.8 H	1.7	na	na	na	na	2.0	2.3	2.7	3.0	4.0	4.5	na	4.0	na	2.7	1.7	1.7	
Chase Wealth Management	1.7 H	4.8 H	1.9 H	1.7 H	1.7 H	1.8 H	2.0 H	2.2	2.5	2.8	3.1	4.0	4.6	3.8	4.4	88.8	2.2	2.0	2.1	
RBC Capital Markets	1.6	na	na	na	na	na	na	2.1	2.5	2.9	3.3	na	na	na	na	na	2.1	1.4	1.8	
Bank of America Merrill Lynch	1.6	na	1.8	na	1.6	na	na	1.9	2.6	2.9	3.4	na	na	na	na	na	2.0	1.9	1.9	
J.P. Morgan Chase	1.6	na	1.7	na	na	na	na	1.8	2.2	2.5	2.9	na	na	na	na	na	2.5	2.2	2.2	
Barclays Capital	1.6	4.8 H	na	na	1.7 H	na	na	1.9	2.1	2.4	2.9	na	na	na	na	na	2.0	1.9	1.5	
BNP Paribas Americas	1.6	na	1.5 L	na	na	na	na	1.6	2.0 L	2.3 L	na	na	na	na	na	na	2.0	na	1.6	
ACIMA Private Wealth	1.6	4.6	1.8	1.6	1.6	1.8 H	1.9	2.0	2.2	2.5	2.8 L	3.6	4.3	3.4 L	4.0	88.8	2.8	2.0	2.2	
Scotiabank Group	1.5	4.5 L	na	na	1.4	na	na	1.9	2.2	2.5	2.9	na	na	na	na	na	2.3	1.8	1.9	
Goldman Sachs & Co.	1.5	na	1.8	na	1.4	na	na	1.9	2.4	2.7	3.1	na	na	na	4.2	na	2.3	1.9	2.1	
Daiwa Capital Markets America	1.5	4.7	1.7	1.5	1.5	1.6	1.8	1.9	2.3	2.6	2.9	3.8	4.5	na	4.2	89.0	2.7	2.0	2.1	
Cycledata Corp.	1.5	4.5 L	1.6	1.4	1.3	1.5	1.7	1.9	2.3	2.6	3.0	3.9	4.6	3.6	4.1	88.0	2.5	2.1	2.3	
Swiss Re	1.5	4.5 L	1.6	1.5	1.4	1.5	1.6	1.8	2.2	2.6	3.2	4.2	5.0	na	4.4	na	1.7 L	3.8 H	3.8 H	
NatWest Markets	1.5	4.6	1.8	1.5	1.5	1.7	1.9	1.9	2.2	2.4	2.9	3.7	4.3	3.5	4.1	90.0 H	3.0	2.2	2.5	
MacroFin Analytics	1.5	4.6	1.7	1.5	1.5	1.6	1.8	1.9	2.3	2.5	3.0	3.8	4.5	3.6	4.0	89.8	1.9	2.0	1.9	
DePrince & Assoc.	1.5	4.5 L	1.6	1.6	1.5	1.6	1.8	2.0	2.3	2.5	2.8 L	3.8	4.6	3.7	4.1	89.4	2.7	1.8	1.9	
AI&G	1.5	na	na	na	1.4	1.6	1.7	1.9	2.2	2.5	3.0	na	4.5	na	4.1	na	2.2	1.7	1.7	
Wells Capital Management	1.5	4.6	1.6	1.4	1.4	1.6	1.9	1.9	2.2	2.5	2.8 L	3.6	4.4	3.6	4.1	89.0	2.6	1.9	2.3	
Wells Fargo	1.5	4.5 L	1.6	1.6	1.5	1.6	1.7	1.9	2.3	2.6	3.0	3.9	4.4	3.5	4.0	89.0	2.6	2.3	2.5	
BMO Capital Markets	1.5	4.6	1.7	na	1.4	1.6	1.8	2.0	2.3	2.5	2.8 L	na	na	na	4.1	89.8	2.5	2.3	2.6	
Amherst Pierpont Securities	1.5	4.6	1.8	1.5	1.5	1.7	1.9	2.0	2.4	2.7	3.1	3.8	4.5	3.8	4.2	89.6	2.9	2.4	2.7	
Economist Intelligence Unit	1.5	4.5 L	1.5 L	1.5	1.4	1.6	1.8	1.9	2.3	2.6	2.9	na	na	na	4.1	na	2.0	na	2.2	
Regions Financial Corporation	1.4	4.5 L	1.7	1.6	1.5	1.6	1.8	1.9	2.4	2.6	3.0	3.9	4.5	3.7	4.1	89.6	2.3	2.0	2.9	
Via Nova Investment Mgt.	1.4	4.5 L	1.6	1.3	1.2 L	1.4 L	1.5 L	1.7	2.2	2.6	3.1	4.0	4.6	3.7	4.2	90.0	3.0	2.0	2.0	
High Frequency Economics	1.4	4.5 L	na	na	1.5	1.6	na	2.4 H	2.6 H	3.0 H	na	na	na	na	na	na	2.3	1.9	1.9	
Oxford Economics	1.4	4.5 L	1.7	na	1.3	1.5	1.7	1.8	2.1	2.5	3.1	na	na	na	4.0	88.4	3.1 H	1.6	2.0	
Naroff Economic Advisors	1.4	4.5 L	1.6	1.5	1.4	1.5	1.7	1.9	2.3	2.5	2.9	3.8	4.6	3.5	4.1	89.0	2.6	2.3	2.8	
Moody's Analytics	1.4	4.5 L	1.6	1.4	1.2 L	1.4 L	1.7	2.0	2.5	2.9	3.7 H	4.4 H	5.3 H	3.6	4.5 H	na	2.6	2.8	1.9	
Chmura Economics & Analytics	1.4	4.5 L	1.6	1.4	1.4	1.5	1.7	1.8	2.2	2.5	2.9	3.8	na	na	4.0	89.5	2.7	1.6	2.0	
RDQ Economics	1.4	4.5 L	1.6	1.5	1.5	1.7	1.9	2.0	2.3	2.6	3.1	3.9	4.9	3.7	4.1	89.4	2.8	2.2	1.7	
Societe Generale	1.4	4.5 L	na	na	na	na	na	1.8	2.2	2.6	3.0	na	na	na	na	na	2.2	2.2	1.9	
Natl Assn. of Realtors	1.4	4.5 L	1.6	1.4	1.3	1.5	1.7	1.8	2.2	2.4	2.8 L	3.7	4.6	na	4.0	na	2.6	2.1	2.5	
MJFG Union Bank	1.4	4.5 L	1.7	1.5	1.4	1.5	1.8	1.8	2.3	2.6	3.0	3.7	4.3	3.9 H	4.3	88.0	2.9	1.8	2.9	
Loomis, Sayles & Company	1.4	4.5 L	1.6	1.4	1.3	1.5	1.6	1.8	2.1	2.4	2.9	3.7	4.4	3.5	4.0	89.0	2.5	1.4	2.5	
Moody's Capital Markets Group	1.4	4.5 L	1.7	1.4	1.4	1.5	1.7	1.9	2.3	2.5	2.9	3.7	4.3	3.6	4.1	89.0	3.0	1.9	0.8 L	
Fannie Mae	1.4	4.5 L	na	na	1.6	1.7	1.8	1.9	2.3	2.5	2.8 L	na	na	na	4.0	na	2.2	1.1 L	1.2	
S&P Global	1.4	4.5 L	1.6	na	1.3	1.5	1.5	1.6	2.1	2.5	3.1	3.2 L	4.0 L	na	4.0	89.9	2.2	1.4	1.5	
DS Economics	1.4	4.5 L	na	na	1.3	1.5	1.7	1.8	2.2	2.5	3.0	3.8	4.5	3.7	4.1	na	2.2	1.4	1.6	
The Northern Trust Company	1.4	4.5 L	1.8	1.4	1.5	1.6	1.7	1.9	2.3	2.6	3.2	3.9	4.6	3.8	4.2	na	3.1 H	1.8	1.9	
PNC Financial Services Corp.	1.4	4.5 L	1.7	na	1.4	1.6	1.7	1.9	2.2	2.5	3.1	na	4.5	3.6	4.1	87.6 L	2.3	1.2	2.1	
Comerica Bank	1.4	4.5 L	1.7	na	1.4	1.5	1.7	1.9	2.2	2.4	2.8 L	na	na	na	4.0	na	2.4	2.0	2.1	
Georgia State University	1.4	4.5 L	na	na	1.4	1.6	1.8	1.9	2.2	2.8	3.5	4.4	5.1	na	4.3	na	2.3	2.6	2.3	
GLC Financial Economics	1.4	4.5 L	1.6	1.4	1.3	1.4 L	1.5 L	1.6 L	2.0 L	2.5	2.9	3.8	4.4	3.5	4.1	88.9	3.0	1.7	2.4	
Stone Harbor Investment Partners	1.4	4.5 L	1.5 L	1.5	1.3	1.4 L	1.5 L	1.9	2.2	2.5	2.9	3.9	4.5	na	4.2	90.0	2.6	1.8	2.2	
Action Economics	1.2 L	4.5 L	1.5 L	1.2 L	1.3	1.4 L	1.5 L	1.7	2.1	2.4	2.9	3.7	4.4	3.6	3.9 L	88.3	2.5	2.5	3.7	
January Consensus	1.5	4.5	1.7	1.5	1.4	1.6	1.7	1.9	2.3	2.6	3.0	3.8	4.5	3.6	4.1	89.1	2.5	2.0	2.1	
Top 10 Avg.	1.6	4.6	1.8	1.6	1.6	1.7	1.9	2.1	2.4	2.8	3.3	4.1	4.8	3.7	4.3	89.8	3.0	2.5	2.9	
Bottom 10 Avg.	1.4	4.5	1.6	1.4	1.3	1.4	1.6	1.7	2.1	2.4	2.8	3.6	4.3	3.5	4.0	88.5	2.0	1.4	1.5	
December Consensus	1.4	4.5	1.6	1.4	1.4	1.5	1.7	1.8	2.2	2.6	3.1	4.0	4.6	3.7	4.2	89.0	2.4	2.0	2.2	
<u>Number of Forecasts Changed From A Month Ago:</u>																				
Down	3	4	7	4	9	7	6	6	10	17	27	17	18	12	22	8	10	11	16	
Same	30	26	17	13	17	14	7	14	16	16	11	5	5	5	8	6	19	22	20	
Up	12	9	12	9	13	15	22	25	19	12	5	5	5	5	7	11	16	10	9	
Diffusion Index	60%	56%	57%	60%	55%	61%	73%	71%	60%	44%	24%	28%	27%	34%	30%	56%	57%	49%	42%	

Second Quarter 2018

Interest Rate Forecasts

Key Assumptions

Blue Chip Financial Forecasts Panel Members	Percent Per Annum -- Average For Quarter--															Avg. For ---Qtr.---	----(Q-Q % Change)----				
	-----Short-Term-----					-----Intermediate-Term-----					-----Long-Term-----						A. Fed's Major Currency \$ Index	------(SAAR)-----			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15			B.	C.	D.	
	Federal Funds Rate	Prime Bank Rate	LIBOR Rate 3-Mo.	Com. Paper 1-Mo.	Treas. Bills 3-Mo.	Treas. Bills 6-Mo.	Treas. Bills 1-Yr.	Treas. Notes 2-Yr.	Treas. Notes 5-Yr.	Treas. Notes 10-Yr.	Treas. Bonds 30-Yr.	Aaa Corp. Bond	Baa Corp. Bond	State & Local Bonds	Home Mtg. Rate			Real GDP	GDP Price Index	Cons. Price Index	
Nomura Securities, Inc.	1.9 H	5.0	2.0	na	na	na	na	2.1	2.5	3.0	3.2	4.2	4.7	na	4.1	na	2.5	1.7	1.3		
Chase Wealth Management	1.9 H	5.0	2.2 H	2.0 H	2.0 H	2.1 H	2.3 H	2.5	2.8 H	3.1	3.4	4.3	4.9	4.1 H	4.7	na	2.3	2.0	2.1		
ACIMA Private Wealth	1.9 H	4.9	2.1	1.9	1.9	2.1 H	2.2	2.2	2.3	2.4 L	2.6 L	3.7	4.4	3.5 L	3.8 L	na	2.8	2.1	2.5		
Bank of America Merrill Lynch	1.9 H	na	2.1	na	1.8	na	na	2.1	2.6	2.9	3.4	na	na	na	na	na	2.8	1.8	1.4		
RBC Capital Markets	1.9 H	na	na	na	na	na	na	2.4	2.7	3.0	3.5	na	na	na	na	na	3.0	1.6	2.1		
J.P. Morgan Chase	1.9 H	na	2.0	na	na	na	na	2.0	2.3	2.5	2.9	na	na	na	na	na	2.0	2.1	2.2		
BNP Paribas Americas	1.9 H	na	1.7	na	na	na	na	1.7	2.1	2.5	na	na	na	na	na	na	4.0 H	na	1.3		
Barclays	1.9 H	5.0 H	na	na	1.8	na	na	2.0	2.2	2.5	2.9	na	na	na	na	na	2.0	1.8	1.6		
Goldman Sachs & Co.	1.8	na	2.1	na	1.7	na	na	2.1	2.5	2.8	3.1	na	na	na	4.3	na	3.0	1.7	1.8		
Scotiabank Group	1.8	4.8	na	na	1.6	na	na	2.0	2.3	2.6	2.9	na	na	na	na	na	2.0	1.8	2.2		
Daiwa Capital Markets America	1.8	4.9	2.0	1.7	1.7	1.9	2.0	2.2	2.5	2.7	3.1	3.9	4.6	na	4.3	na	2.6	2.2	2.2		
NatWest Markets	1.7	4.8	2.1	1.8	1.8	2.0	2.2	2.1	2.4	2.6	3.1	3.9	4.5	3.7	4.4	na	3.3	1.5	0.7		
MacroFin Analytics	1.7	4.8	1.9	1.8	1.7	1.8	2.0	2.1	2.5	2.8	3.3	4.0	4.7	3.8	4.2	na	2.0	2.2	2.0		
Moody's Analytics	1.7	4.8	1.9	1.7	1.5	1.6	2.0	2.3	2.8 H	3.2 H	4.0 H	4.8 H	5.7 H	3.8	4.7 H	na	3.2	2.7 H	2.4		
Regions Financial Corporation	1.7	4.7	2.0	1.7	1.6	1.7	2.0	2.2	2.5	2.7	3.2	4.0	4.7	3.8	4.3	na	2.6	2.1	2.6		
BMO Capital Markets	1.7	4.8	2.0	na	1.7	1.8	2.0	2.1	2.4	2.6	3.0	na	na	na	4.2	na	2.5	1.9	2.1		
DePrince & Assoc.	1.7	4.7	2.0	1.8	1.7	1.9	2.1	2.2	2.5	2.7	3.0	4.2	5.2	4.0	4.4	na	2.8	2.0	2.1		
RDQ Economics	1.7	4.8	1.9	1.8	1.8	2.0	2.2	2.3	2.5	2.7	3.2	4.1	5.0	3.8	4.3	na	2.5	2.2	2.2		
Natl Assn. of Realtors	1.7	4.7	1.9	1.7	1.6	1.8	2.0	2.1	2.4	2.7	3.1	3.9	4.8	na	4.1	na	2.9	2.2	2.6		
AIG	1.7	na	na	na	1.6	1.9	2.0	2.1	2.4	2.6	3.1	na	4.5	na	4.2	na	2.7	1.8	1.9		
Amherst Pierpont Securities	1.7	4.8	2.1	1.8	1.7	1.9	2.1	2.2	2.6	2.9	3.4	4.1	4.8	4.1 H	4.5	na	3.2	2.3	2.7 H		
Societe Generale	1.7	4.8	na	na	na	na	na	2.0	2.2	2.6	3.1	na	na	na	na	na	1.9 L	1.7	0.5 L		
Wells Fargo	1.7	4.7	1.8	1.8	1.7	1.8	1.9	2.1	2.4	2.6	3.1	4.0	4.5	3.6	4.1	na	2.5	2.3	2.1		
Oxford Economics	1.7	4.8	1.9	na	1.6	1.7	1.9	2.0	2.3	2.6	3.2	na	na	na	4.1	na	2.5	1.6	1.7		
High Frequency Economics	1.7	4.8	na	na	1.7	1.9	na	2.6 H	2.8	3.2 H	na	na	na	na	na	na	2.8	2.0	2.0		
Economist Intelligence Unit	1.7	4.7	1.7	1.7	1.6	1.8	2.0	2.1	2.5	2.8	3.1	na	na	na	4.3	na	2.8	na	2.2		
Chmura Economics & Analytics	1.7	4.8	1.9	1.7	1.6	1.8	1.9	2.1	2.4	2.8	3.1	4.0	na	na	4.3	na	3.3	1.9	2.4		
Via Nova Investment Mgt.	1.7	4.7	1.8	1.6	1.5	1.6	1.7	2.0	2.4	2.8	3.4	4.2	4.8	3.8	4.4	na	2.4	2.1	2.0		
Naroff Economic Advisors	1.7	4.8	1.8	1.8	1.7	1.8	1.9	2.2	2.5	2.7	3.1	4.1	4.9	3.7	4.3	na	2.7	2.6	2.5		
MUFG Union Bank	1.7	4.8	2.0	1.7	1.6	1.7	2.1	2.0	2.4	2.7	3.2	3.9	4.5	4.0	4.4	na	3.0	2.5	2.6		
Swiss Re	1.6	4.6	1.8	1.6	1.5	1.6	1.7	1.9	2.3	2.7	3.4	4.4	5.2	na	4.6	na	2.0	-0.4 L	0.6		
Wells Capital Management	1.6	4.8	1.8	1.6	1.6	1.8	2.1	2.2	2.4	2.6	2.9	3.8	4.5	3.7	4.3	na	2.4	1.8	1.8		
Stone Harbor Investment Partners	1.6	4.8	1.8	1.6	1.5	1.6	1.8	1.9	2.3	2.7	3.1	4.1	4.7	na	4.5	na	2.6	2.1	2.3		
Cycledata Corp.	1.6	4.7	1.7	1.1 L	1.5	1.6	1.8	2.0	2.4	2.8	3.3	4.2	4.9	3.9	4.4	na	2.8	2.2	2.4		
Action Economics	1.5	4.6	1.6 L	1.5	1.5	1.6	1.8	1.9	2.3	2.6	3.0	3.8	4.5	3.7	4.0	na	3.0	1.7	2.5		
S&P Global	1.4 L	4.6	1.7	na	1.4	1.5	1.5	1.7	2.2	2.6	3.2	3.3 L	4.2 L	na	4.0	na	2.4	1.7	1.2		
DS Economics	1.4 L	4.5 L	na	na	1.4	1.7	2.0	2.2	2.5	2.8	3.3	3.9	4.7	3.8	4.3	na	2.6	1.7	0.5 L		
The Northern Trust Company	1.4 L	4.6	1.8	1.4	1.6	1.7	1.8	2.1	2.4	2.8	3.5	4.2	5.0	4.1 H	4.4	na	2.5	1.8	1.9		
Moody's Capital Markets Group	1.4 L	4.5 L	1.7	1.5	1.5	1.6	1.8	2.0	2.4	2.6	2.9	3.8	4.4	3.6	4.2	na	2.5	1.8	1.4		
Comerica Bank	1.4 L	4.5 L	1.7	na	1.3 L	1.5	1.7	1.8	2.2	2.5	2.9	na	na	na	4.1	na	2.8	2.0	1.8		
PNC Financial Services Corp.	1.4 L	4.5 L	1.8	na	1.5	1.7	1.8	2.0	2.2	2.6	3.1	na	4.6	3.6	4.1	na	2.5	1.3	1.9		
Loomis, Sayles & Company	1.4 L	4.5 L	1.8	1.5	1.4	1.6	1.8	1.9	2.2	2.5	3.0	3.8	4.6	3.6	4.1	na	2.5	1.7	2.0		
Fannie Mae	1.4 L	4.5 L	na	na	1.8	1.9	1.9	2.0	2.3	2.5	2.9	na	na	na	4.1	na	2.2	2.1	2.5		
GLC Financial Economics	1.4 L	4.5 L	1.6 L	1.4	1.3 L	1.4 L	1.5 L	1.6 L	2.0 L	2.6	3.0	4.0	4.6	3.6	4.2	na	2.6	2.0	2.4		
Georgia State University	1.4 L	4.5 L	na	na	1.4	1.6	1.8	1.9	2.2	2.8	3.5	4.4	5.1	na	4.5	na	2.0	2.6	2.2		
January Consensus	1.7	4.7	1.9	1.7	1.6	1.7	1.9	2.1	2.4	2.7	3.1	4.0	4.7	3.8	4.3	89.5	2.6	1.9	1.9		
Top 10 Avg.	1.9	4.9	2.1	1.8	1.8	1.9	2.1	2.3	2.6	3.0	3.5	4.3	5.1	3.9	4.5	90.9	3.2	2.4	2.5		
Bottom 10 Avg.	1.4	4.5	1.7	1.5	1.4	1.6	1.7	1.8	2.2	2.5	2.9	3.8	4.4	3.6	4.0	88.1	2.1	1.4	1.1		
December Consensus	1.6	4.7	1.8	1.6	1.6	1.7	1.9	2.0	2.4	2.7	3.3	4.2	4.9	3.9	4.4	89.1	2.6	1.9	1.9		
Number of Forecasts Changed From A Month Ago:																					
Down	3	5	4	4	10	9	4	7	11	15	19	14	17	13	20	7	8	9	9		
Same	30	24	15	11	17	13	10	15	20	20	17	6	6	7	10	6	17	23	23		
Up	12	10	17	11	12	14	21	23	14	10	7	7	4	2	7	12	20	11	13		
Diffusion Index	60 %	56 %	68 %	63 %	53 %	57 %	74 %	68 %	53 %	44 %	36 %	37 %	26 %	25 %	32 %	60 %	63 %	52 %	54 %		

Third Quarter 2018

Interest Rate Forecasts

Key Assumptions

Blue Chip Financial Forecasts Panel Members	Percent Per Annum -- Average For Quarter--															Avg. For ---Qtr.--- Fed's Major Currency \$ Index	----(Q-Q % Change)---- ----(SAAR)----			
	Short-Term					Intermediate-Term					Long-Term						A. B. C. D.	Real GDP	Price Index	Cons. Price Index
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15					
	Federal Funds Rate	Prime Bank Rate	LIBOR Rate 3-Mo.	Com. Paper 1-Mo.	Treas. Bills 3-Mo.	Treas. Bills 6-Mo.	Treas. Bills 1-Yr.	Treas. Notes 2-Yr.	Treas. Notes 5-Yr.	Treas. Notes 10-Yr.	Treas. Bonds 30-Yr.	Aaa Corp. Bond	Baa Corp. Bond	State & Local Bonds	Home Mtg. Rate					
ACIMA Private Wealth	2.3 H	5.3 H	2.5 H	2.3 H	2.3 H	2.4 H	2.4	2.3	2.3	2.2 L	2.5 L	3.7	4.5	3.5 L	3.7 L	85.3 L	2.3	2.3	2.5	
Bank of America Merrill Lynch	2.1	na	2.4	na	2.1	na	na	2.1	2.6	2.9	3.4	na	na	na	na	na	2.3	1.8	1.8	
J.P. Morgan Chase	2.1	na	2.2	na	na	na	na	2.2	2.4	2.6	2.9	na	na	na	na	na	2.0	2.1	2.2	
RBC Capital Markets	2.1	na	na	na	na	na	na	2.6	2.9	3.2	3.6	na	na	na	na	na	2.8	2.4	2.2	
BNP Paribas Americas	2.1	na	1.8	na	na	na	na	1.8 L	2.2 L	2.6	na	na	na	na	na	na	3.3	na	2.4	
Goldman Sachs	2.0	na	2.3	na	1.9	na	na	2.4	2.7	2.9	3.2	na	na	na	4.4	na	2.8	1.7	1.8	
Daiwa Capital Markets America	2.0	5.2	2.2	2.0	2.0	2.1	2.3	2.3	2.7	2.9	3.2	4.1	4.8	na	4.5	90.0	2.4	2.3	2.3	
NatWest Markets	2.0	5.1	2.5 H	2.0	2.1	2.3	2.5 H	2.4	2.5	2.7	3.3	4.0	4.6	3.8	4.5	92.0	3.2	2.1	1.9	
Moody's Analytics	2.0	5.1	2.1	2.0	1.8	1.9	2.3	2.6	3.1 H	3.4 H	4.2 H	5.0 H	5.9 H	4.0	4.9 H	na	2.6	2.7 H	2.3	
DePrince & Associates	1.9	4.9	2.2	2.1	1.9	2.1	2.3	2.4	2.7	2.9	3.2	4.5	5.6	4.3 H	4.6	90.0	2.8	2.0	2.2	
MacroFin Analytics	1.9	5.0	2.2	2.0	1.9	2.0	2.2	2.4	2.8	3.0	3.5	4.3	5.0	4.0	4.5	93.5 H	2.2	2.2	2.3	
Amherst Pierpont Securities	1.9	5.1	2.3	2.0	2.0	2.1	2.3	2.5	2.9	3.2	3.7	4.4	5.1	4.3 H	4.8	91.5	3.0	2.4	2.9	
Oxford Economics	1.9	5.0	2.2	na	1.8	2.0	2.1	2.1	2.4	2.7	3.3	na	na	na	4.2	88.4	2.5	1.6	1.6	
High Frequency Economics	1.9	5.0	na	na	2.0	2.1	na	2.7 H	2.9	3.3	na	na	na	na	na	na	2.4	2.5	2.5	
Regions Financial Corporation	1.9	4.9	2.1	2.0	1.8	2.0	2.1	2.4	2.6	2.9	3.3	4.2	4.9	4.0	4.4	90.2	2.5	2.1	2.6	
Chmura Economics & Analytics	1.9	5.0	2.2	1.9	1.8	2.0	2.2	2.3	2.7	3.0	3.4	4.3	na	na	4.6	89.7	3.5 H	2.0	2.3	
Nomura Securities, Inc.	1.9	5.0	2.1	na	na	na	na	2.1	2.5	3.0	3.2	4.3	4.7	na	4.1	na	2.4	1.8	2.4	
Chase Wealth Management	1.9	5.0	2.2	2.0	2.0	2.1	2.3	2.5	2.8	3.1	3.4	4.3	4.9	4.1	4.7	88.2	2.2	2.2	2.2	
RDQ Economics	1.9	5.0	2.2	2.0	2.0	2.2	2.4	2.5	2.7	2.8	3.3	4.2	5.2	4.0	4.4	90.6	2.4	2.2	2.3	
Nat'l Assn. of Realtors	1.9	4.9	2.1	1.9	1.8	2.0	2.2	2.3	2.6	3.0	3.4	4.2	5.0	na	4.2	na	3.0	2.2	2.5	
MJFG Union Bank	1.9	5.0	2.2	1.9	1.9	2.0	2.3	2.2	2.6	2.9	3.4	4.0	4.7	4.1	4.6	87.0	3.1	2.1	2.7	
BMO Capital Markets	1.9	5.0	2.1	na	1.8	1.9	2.1	2.3	2.6	2.7	3.1	na	na	na	4.3	89.0	2.2	2.1	2.2	
Wells Fargo	1.9	4.9	2.0	2.0	1.9	2.0	2.1	2.3	2.6	2.7	3.2	4.1	4.7	3.7	4.2	87.0	2.6	2.0	2.4	
Swiss Re	1.9	4.9	2.0	1.8	1.8	1.9	2.0	2.2	2.5	2.9	3.6	4.6	5.5	na	4.7	na	1.9 L	1.5	2.5	
Barclays	1.9	5.0	na	na	1.9	na	na	2.1	2.3	2.5	2.9	na	na	na	na	na	2.0	2.0	2.1	
Naroff Economic Advisors	1.9	5.0	2.0	2.0	1.9	2.1	2.3	2.4	2.7	3.0	3.3	4.3	5.2	4.0	4.5	86.3	3.2	2.4	2.7	
Societe Generale	1.9	5.0	na	na	na	na	na	2.2	2.4	2.8	3.2	na	na	na	na	na	2.0	1.9	1.3	
Via Nova Investment Mgt.	1.8	4.8	2.0	1.7	1.6	1.8	1.9	2.1	2.6	3.0	3.5	4.4	5.0	4.1	4.6	92.0	2.4	2.2	2.0	
Cycledata Corp.	1.8	4.9	1.9	1.7	1.7	1.9	2.0	2.1	2.5	2.9	3.3	4.2	4.9	3.9	4.4	88.0	2.8	2.3	2.5	
Scotiabank Group	1.8	4.8	na	na	1.7	na	na	2.0	2.3	2.7	3.0	na	na	na	na	na	2.0	1.8	2.2	
Wells Capital Management	1.7	4.8	1.9	1.8	1.7	1.9	2.3	2.3	2.6	2.8	3.2	4.0	4.8	3.9	4.4	89.7	2.3	1.5	1.3	
Action Economics	1.7	4.8	1.9	1.7	1.8	1.9	1.9	2.1	2.4	2.8	3.2	4.0	4.6	3.8	4.2	89.0	3.5 H	2.5	1.9	
S&P Global	1.7	4.8	2.0	na	1.7	1.7	1.8	2.0	2.3	2.6	3.3	3.5 L	4.3 L	na	4.2	91.4	2.5	1.5	1.1 L	
AIG	1.7	na	na	na	1.6	2.0	2.2	2.4	2.5	2.7	3.2	na	4.6	na	4.2	na	2.9	1.8	1.9	
Economist Intelligence Unit	1.7	4.7	1.8	1.8	1.7	1.8	2.1	2.2	2.5	2.9	3.2	na	na	na	4.3	na	2.2	na	2.3	
The Northern Trust Company	1.7	4.8	2.1	1.7	1.8	1.9	2.0	2.3	2.6	3.0	3.8	4.5	5.4	4.3 H	4.6	na	2.3	1.8	1.9	
Georgia State University	1.7	4.7	na	na	1.6	1.8	2.1	2.2	2.4	3.0	3.6	4.5	5.3	na	4.7	na	2.2	2.2	2.0	
PNC Financial Services Corp.	1.7	4.8	2.0	na	1.7	1.8	1.9	2.1	2.3	2.6	3.2	na	4.7	3.6	4.2	87.9	2.2	1.3 L	2.1	
Moody's Capital Markets Group	1.6 L	4.8	1.9	1.7	1.7	1.8	1.9	2.1	2.3	2.6	2.9	3.8	4.4	3.5	4.2	91.0	2.1	1.8	1.9	
Comerica Bank	1.6 L	4.7	1.9	na	1.5 L	1.7	1.8	2.0	2.3	2.6	3.1	na	na	na	4.3	na	2.3	2.0	2.0	
Loomis, Sayles & Company	1.6 L	4.7	1.9	1.6 L	1.6	1.7	1.9	2.0	2.3	2.5	3.0	3.9	4.6	3.6	4.1	89.0	2.5	2.0	2.1	
DS Economics	1.6 L	4.7	na	na	1.5 L	2.1	2.4	2.7	2.9	3.1	3.5	4.1	4.9	3.9	4.6	na	2.2	2.2	2.1	
Fannie Mae	1.6 L	4.8	na	na	1.9	2.0	2.0	2.1	2.4	2.5	2.9	na	na	na	4.1	na	2.0	2.2	2.5	
GLC Financial Economics	1.6 L	4.6 L	1.9	1.7	1.6	1.6 L	1.7 L	1.8 L	2.2 L	2.7	3.1	4.2	4.9	3.8	4.5	88.5	2.6	2.3	3.0 H	
Stone Harbor Investment Partners	1.6 L	4.8	1.7 L	1.7	1.6	1.7	1.8	2.0	2.4	2.7	3.2	4.1	4.7	na	4.5	93.0	2.5	2.0	2.0	
January Consensus	1.9	4.9	2.1	1.9	1.8	2.0	2.1	2.2	2.5	2.8	3.3	4.2	4.9	3.9	4.4	89.5	2.5	2.0	2.2	
Top 10 Avg.	2.1	5.1	2.3	2.0	2.0	2.2	2.3	2.5	2.8	3.1	3.6	4.5	5.3	4.1	4.7	91.5	3.2	2.4	2.6	
Bottom 10 Avg.	1.6	4.7	1.9	1.7	1.6	1.7	1.9	2.0	2.3	2.5	2.9	3.9	4.6	3.7	4.1	87.6	2.1	1.6	1.7	
December Consensus	1.8	4.9	2.0	1.8	1.7	1.9	2.0	2.2	2.5	2.8	3.4	4.3	5.1	4.0	4.5	89.1	2.3	2.1	2.2	
Number of Forecasts Changed From A Month Ago:																				
Down	3	4	4	5	7	9	5	8	10	14	18	13	16	11	16	5	2	9	8	
Same	29	26	13	9	16	12	8	18	17	18	17	7	7	6	12	7	23	24	24	
Up	13	9	19	11	16	15	22	19	18	13	8	6	4	5	9	14	20	10	13	
Diffusion Index	61 %	56 %	71 %	62 %	62 %	58 %	74 %	62 %	59 %	49 %	38 %	37 %	28 %	36 %	41 %	67 %	70 %	51 %	56 %	

Fourth Quarter 2018

Interest Rate Forecasts

Key Assumptions

Blue Chip Financial Forecasts Panel Members	-----Percent Per Annum----- Average For Quarter-----															Avg. For ---Qtr--- Fed's Major Currency \$ Index	------(Q-Q % Change)----- ------(SAAR)-----			
	Short-Term					Intermediate-Term					Long-Term						A. Real GDP	B. Price Index	C. Price Index	D. Price Index
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15					
	Federal Funds Rate	Prime Bank Rate	LIBOR Rate 3-Mo.	Com. Paper 1-Mo.	Treas. Bills 3-Mo.	Treas. Bills 6-Mo.	Treas. Bills 1-Yr.	Treas. Notes 2-Yr.	Treas. Notes 5-Yr.	Treas. Notes 10-Yr.	Treas. Bond 30-Yr.	Aaa Corp. Bond	Baa Corp. Bond	State & Local Bonds	Home Mg. Rate					
Moody's Analytics	2.5 H	5.6 H	2.6	2.4	2.2	2.3	2.7 H	2.9 H	3.4 H	3.7 H	4.4 H	5.3 H	6.2 H	4.2	5.2 H	na	2.6	3.1 H	2.5	
RBC Capital Markets	2.4	na	na	na	na	na	na	2.7	3.0	3.4	3.8	na	na	na	na	na	2.7	1.9	1.8	
J.P. Morgan Chase	2.4	na	2.5	na	na	na	na	2.4	2.5	2.7	2.9	na	na	na	na	na	1.8 L	2.1	2.2	
ACIMA Private Wealth	2.3	5.3	2.6	2.5 H	2.3 H	2.3	2.3	2.2	2.1 L	2.1 L	2.5 L	3.8	4.6	3.6	3.7 L	84.0 L	1.9	2.1	2.3	
Goldman Sachs & Co.	2.3	na	2.6	na	2.2	na	na	2.6	2.8	3.0	3.3	na	na	na	4.6	na	2.5	1.7	1.8	
NatWest Markets	2.2	5.3	2.7 H	2.3	2.3 H	2.5 H	2.7 H	2.5	2.7	2.8	3.4	4.1	4.8	4.0	4.6	90.0	3.1	2.1	2.1	
MacroFin Analytics	2.2	5.3	2.4	2.3	2.2	2.3	2.5	2.6	3.0	3.3	3.8	4.5	5.2	4.3	4.7	94.0 H	2.3	2.2	2.3	
RDQ Economics	2.2	5.3	2.5	2.3	2.3	2.5 H	2.6	2.7	2.9	3.1	3.6	4.6	5.5	4.3	4.7	91.7	2.4	2.3	2.3	
Naroff Economic Advisors	2.2	5.3	2.3	2.3	2.2	2.4	2.6	2.7	3.0	3.2	3.6	4.6	5.3	4.3	4.9	85.0	3.1	2.3	2.6	
Amherst Pierpont Securities	2.2	5.3	2.4	2.2	2.2	2.4	2.6	2.7	3.1	3.4	3.9	4.6	5.4	4.6 H	5.1	92.3	2.9	2.4	3.0	
High Frequency Economics	2.2	5.3	na	na	2.2	2.4	na	2.8	3.0	3.4	na	na	na	na	na	na	2.4	2.5	2.5	
Regions Financial Corporation	2.2	5.2	2.3	2.1	2.0	2.2	2.3	2.5	2.8	3.0	3.5	4.4	5.1	4.1	4.6	90.0	2.3	1.9	2.4	
Nomura Securities, Inc.	2.2	5.3	2.2	na	na	na	na	2.2	2.6	2.8	3.1	4.2	4.7	na	4.2	na	2.3	1.8	2.6	
Chmura Economics & Analytics	2.2	5.3	2.4	2.2	2.1	2.2	2.4	2.5	2.9	3.2	3.7	4.6	na	na	4.8	89.4	3.3	2.3	2.6	
Chase Wealth Management	2.2	5.3	2.5	2.3	2.2	2.4	2.6	2.7	3.1	3.3	3.7	4.6	5.1	4.4	4.9	88.0	2.0	2.1	2.1	
Daiwa Capital Markets America	2.2	5.3	2.4	2.1	2.1	2.3	2.4	2.5	2.9	3.1	3.4	4.3	5.0	na	4.8	90.0	2.3	2.3	2.3	
MUFG Union Bank	2.2	5.3	2.5	2.2	2.2	2.3	2.6	2.5	2.8	3.0	3.5	4.1	4.8	4.2	4.7	86.0	3.3 H	2.1	2.8	
Wells Fargo	2.1	5.1	2.3	2.2	2.1	2.2	2.3	2.5	2.7	2.8	3.4	4.2	4.8	3.8	4.3	85.5	2.5	1.7	1.2 L	
Bank of America Merrill Lynch	2.1	na	2.4	na	2.1	na	na	2.1	2.6	2.9	3.4	na	na	na	na	na	2.3	1.7	2.0	
Oxford Economics	2.1	5.2	2.4	na	2.0	2.2	2.3	2.4	2.6	2.8	3.4	na	na	na	4.4	88.4	2.3	2.0	2.0	
Swiss Re	2.1	5.1	2.3	2.1	2.0	2.1	2.2	2.4	2.7	3.0	3.8	4.7	5.6	na	4.8	na	2.0	2.4	3.4 H	
Barclays Capital	2.1	5.3	na	na	2.2	na	na	2.1	2.3	2.5	2.9	na	na	na	na	na	2.0	2.1	2.0	
BNP Paribas Americas	2.1	na	1.8 L	na	na	na	na	1.9 L	2.3	2.7	na	na	na	na	na	na	2.6	na	2.7	
DePrince & Assoc.	2.1	5.1	2.4	2.2	2.1	2.3	2.5	2.6	2.9	3.1	3.3	4.8	5.9	4.6	4.8	90.2	2.8	2.2	2.3	
Via Nova Investment Mgt.	2.1	5.1	2.2	2.0	1.9	2.0	2.1	2.4	2.8	3.2	3.8	4.6	5.2	4.2	4.8	93.0	2.5	2.2	2.4	
Scotiabank Group	2.0	5.0	na	na	2.0	na	na	2.1	2.4	2.7	3.0	na	na	na	na	na	1.8 L	1.8	2.2	
Natl Assn. of Realtors	2.0	5.0	2.2	2.0	1.9	2.1	2.3	2.4	2.7	3.1	3.5	4.3	5.1	na	4.4	na	3.0	2.3	2.4	
Action Economics	2.0	5.1	2.1	2.0	2.0	2.1	2.1	2.2	2.5	2.8	3.2	4.0	4.7	3.9	4.2	89.1	3.0	2.1	1.9	
Wells Capital Management	2.0	5.1	2.1	2.0	2.0	2.2	2.5	2.5	2.8	2.9	3.3	4.2	5.0	4.0	4.5	89.9	2.2	2.1	2.2	
Economist Intelligence Unit	2.0	5.0	2.0	2.0	1.9	2.0	2.2	2.3	2.7	3.0	3.4	na	na	na	4.5	na	2.1	na	2.2	
BMO Capital Markets	2.0	5.1	2.2	na	1.9	2.0	2.3	2.5	2.7	2.8	3.1	na	na	na	4.4	88.0	2.0	2.1	2.3	
AIG	1.9	na	na	na	1.8	2.2	2.4	2.6	2.7	2.8	3.4	na	4.7	na	4.3	na	2.8	1.8	1.5	
S&P Global	1.9	5.0	2.2	na	1.9	2.0	2.2	2.3	2.5	2.7	3.3	3.6 L	4.4	na	4.3	91.5	2.4	1.9	1.8	
The Northern Trust Company	1.9	5.1	2.3	1.9	2.1	2.2	2.3	2.5	2.9	3.2	4.0	4.8	5.7	4.5	4.8	na	2.2	1.9	2.0	
PNC Financial Services Corp.	1.9	5.1	2.2	na	1.9	2.1	2.1	2.3	2.5	2.8	3.3	na	4.8	3.6	4.3	87.8	2.3	1.3 L	2.2	
Georgia State University	1.9	4.9	na	na	1.8	2.0	2.2	2.3	2.6	3.2	3.8	4.7	5.7	na	5.1	na	2.4	2.0	1.9	
Stone Harbor Investment Partners	1.9	5.0	2.0	2.0	1.8	1.9	2.0	2.2	2.5	2.8	3.2	4.2	4.8	na	4.6	91.0	2.2	2.3	2.3	
Societe Generale	1.8	5.0	na	na	na	na	na	2.3	2.5	2.7	3.1	na	na	na	na	na	1.8 L	2.0	2.0	
Cycledata Corp.	1.8	4.9	1.8 L	1.6 L	1.7	1.9	2.0	2.1	2.5	2.9	3.3	4.2	4.9	3.9	4.4	88.0	2.8	2.3	2.5	
GLC Financial Economics	1.8	4.8	2.0	1.8	1.7	1.7 L	1.8 L	2.0	2.4	2.9	3.3	4.4	5.1	3.9	4.8	88.5	3.2	2.4	2.8	
Comerica Bank	1.7 L	4.8	1.9	na	1.6 L	1.7 L	1.8 L	2.0	2.4	2.7	3.1	na	na	na	4.4	na	2.4	2.0	2.0	
Loomis, Sayles & Company	1.7 L	4.8	2.0	1.7	1.7	1.8	2.0	2.2	2.3	2.7	3.0	4.0	4.8	3.7	4.3	89.0	2.4	2.1	2.0	
Fannie Mae	1.7 L	4.8	na	na	2.0	2.0	2.0	2.1	2.4	2.6	2.9	na	na	na	4.2	na	2.0	2.2	2.0	
Moody's Capital Markets Group	1.7 L	4.8	2.0	1.7	1.7	1.9	2.0	2.1	2.3	2.5	2.8	3.7	4.3 L	3.5 L	4.2	90.5	2.0	1.8	1.4	
DS Economics	1.7 L	4.7 L	na	na	1.6 L	2.1	2.4	2.7	3.0	3.1	3.7	4.2	5.1	3.9	4.6	na	2.0	2.2	1.8	
January Consensus	2.0	5.1	2.3	2.1	2.0	2.1	2.3	2.4	2.7	2.9	3.4	4.4	5.1	4.1	4.6	89.2	2.4	2.1	2.2	
Top 10 Avg.	2.3	5.3	2.5	2.3	2.2	2.4	2.6	2.7	3.0	3.3	3.9	4.7	5.6	4.3	4.9	91.4	3.0	2.4	2.8	
Bottom 10 Avg.	1.7	4.8	2.0	1.9	1.7	1.9	2.0	2.1	2.3	2.6	2.9	4.0	4.6	3.8	4.2	86.9	1.9	1.7	1.7	
December Consensus	2.0	5.1	2.2	2.0	2.0	2.1	2.3	2.3	2.7	3.0	3.5	4.5	5.2	4.2	4.6	88.9	2.3	2.1	2.2	
Number of Forecasts Changed From A Month Ago:																				
Down	2	5	5	4	8	8	5	7	12	15	20	15	14	12	17	8	7	9	15	
Same	29	24	14	13	17	11	10	17	18	18	13	5	8	7	10	9	20	25	24	
Up	13	10	16	9	14	17	20	19	13	10	8	7	5	3	10	9	18	9	6	
Diffusion Index	63 %	56 %	66 %	60 %	58 %	63 %	71 %	64 %	51 %	44 %	35 %	35 %	33 %	30 %	41 %	52 %	62 %	50 %	40 %	

First Quarter 2019

Interest Rate Forecasts

Key Assumptions

Blue Chip Financial Forecasts Panel Members	-----Percent Per Annum -- Average For Quarter-----															Avg. For ---Qtr.---	------(Q-Q % Change)-----			
	-----Short-Term-----					-----Intermediate-Term-----					-----Long-Term-----						A. Fed's Major Currency \$ Index	B. Real GDP	C. GDP Price Index	D. Cons. Price Index
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15					
	Federal Funds Rate	Prime Bank Rate	LIBOR Rate 3-Mo.	Com. Paper 1-Mo.	Treas. Bills 3-Mo.	Treas. Bills 6-Mo.	Treas. Bills 1-Yr.	Treas. Notes 2-Yr.	Treas. Notes 5-Yr.	Treas. Notes 10-Yr.	Treas. Bonds 30-Yr.	Aaa Corp. Bond	Baa Corp. Bond	State & Local Bonds	Home Mtg. Rate					
Moody's Analytics	3.0 H	6.1 H	3.1 H	2.9 H	2.6 H	2.8 H	3.1 H	3.3 H	3.7 H	4.0 H	4.7 H	5.5 H	6.5 H	4.4	5.4 H	na	2.4	3.3 H	2.8	
J.P. Morgan Chase	2.6	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	1.8	2.2	2.3	
MacroFin Analytics	2.6	5.7	2.8	2.6	2.6 H	2.7	2.9	3.0	3.4	3.7	4.2	4.9	5.6	4.7	5.1	94.5 H	2.0	2.1	2.2	
Goldman Sachs & Co.	2.5	na	2.8	na	2.4	na	na	2.8	3.0	3.1	3.4	na	na	na	4.7	na	1.9	1.8	1.9	
NatWest Markets	2.5	5.6	2.9	2.5	2.6 H	2.8 H	3.0	2.7	2.9	3.0	3.5	4.3	5.0	4.0	4.8	89.0	2.5	2.3	2.5	
Naroff Economic Advisors	2.5	5.5	2.6	2.6	2.5	2.8 H	3.0	3.0	3.3	3.5	3.8	4.7	5.5	4.5	5.1	84.1	2.6	2.5	2.4	
Amherst Pierpont Securities	2.4	5.6	2.7	2.5	2.5	2.6	2.8	2.9	3.3	3.6	4.1	4.8	5.7	4.8 H	5.3	93.0	2.5	2.4	3.2	
High Frequency Economics	2.4	5.5	na	na	2.5	2.6	na	2.9	3.1	3.4	na	na	na	na	na	na	2.0	2.7	2.7	
Chmura Economics & Analytics	2.4	5.5	2.7	2.5	2.3	2.5	2.7	2.7	3.1	3.4	4.0	4.8	na	na	4.9	88.8	3.5 H	2.2	2.6	
Chase Wealth Management	2.4	5.5	2.7	2.5	2.5	2.6	2.8	3.0	3.3	3.6	3.9	4.8	5.4	4.6	5.2	88.0	1.8	2.2	2.0	
RDQ Economics	2.4	5.5	2.7	2.5	2.6	2.8 H	2.9	2.9	3.1	3.2	3.7	4.7	5.6	4.4	4.8	91.7	2.4	2.3	2.3	
MUFG Union Bank	2.4	5.5	2.7	2.4	2.4	2.5	2.9	2.7	2.9	3.1	3.5	4.2	4.9	4.2	4.8	85.0	2.9	2.3	3.0	
Bank of America Merrill Lynch	2.4	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	1.8	1.8	1.9	
Swiss Re	2.4	5.4	2.5	2.3	2.2	2.4	2.5	2.6	2.8	3.1	3.9	4.8	5.7	na	5.0	na	2.3	3.3 H	3.3 H	
Barclays	2.4	5.5	na	na	na	na	na	na	na	na	na	na	na	na	na	na	2.0	2.2	2.3	
DePrince & Assoc.	2.3	5.3	2.6	2.5	2.3	2.4	2.6	2.8	3.1	3.3	3.5	5.1	6.1	4.8 H	5.0	90.4	2.7	2.2	2.4	
Via Nova Investment Mgt.	2.3	5.3	2.5	2.2	2.1	2.3	2.4	2.6	3.1	3.5	4.0	4.9	5.5	4.4	5.1	94.0	2.5	2.2	2.4	
Oxford Economics	2.3	5.4	2.6	na	2.2	2.4	2.5	2.6	2.7	2.9	3.4	na	na	na	4.5	88.4	1.9	1.7	1.8	
GLC Financial Economics	2.3	5.0	2.3	2.0	2.0	2.1	2.2	2.3	2.8	3.3	3.7	4.9	5.6	4.4	5.4 H	88.8	2.6	2.4	2.6	
Regions Financial Corporation	2.3	5.3	2.4	2.3	2.2	2.3	2.4	2.6	2.9	3.2	3.7	4.6	5.3	4.3	4.7	89.6	2.1	2.2	2.2	
Daiwa Capital Markets America	2.3	5.4	2.5	2.2	2.2	2.4	2.5	2.7	3.0	3.2	3.4	4.5	5.2	na	4.9	90.0	2.2	2.4	2.4	
Wells Capital Management	2.2	5.3	2.4	2.3	2.3	2.4	2.7	2.7	2.9	3.1	3.4	4.3	5.1	4.1	4.6	90.0	2.4	2.0	2.3	
BMO Capital Markets	2.2	5.3	2.5	na	2.1	2.2	2.5	2.6	2.8	3.0	3.3	na	na	na	4.6	87.4	1.9	2.2	2.4	
ACIMA Private Wealth	2.2	5.2	2.7	2.6	2.2	2.2	2.1	2.1 L	2.0 L	2.0 L	2.4 L	3.8	4.8	3.6	3.6 L	83.0 L	1.8	1.8	2.1	
Natl Assn. of Realtors	2.2	5.2	2.4	2.2	2.1	2.3	2.4	2.5	2.8	3.2	3.6	4.4	5.2	na	4.5	na	3.0	2.3	2.3	
Economist Intelligence Unit	2.2	5.3	2.3	2.3	2.1	2.2	2.4	2.6	2.9	3.2	3.6	na	na	na	4.7	na	2.1	na	2.3	
AIG	2.2	na	na	na	2.0	2.4	2.5	2.7	2.8	3.0	3.5	na	4.9	na	4.5	na	2.5	2.1	1.6 L	
S&P Global	2.2	5.2	2.4	na	2.2	2.3	2.3	2.5	2.6	2.8	3.3	3.7 L	4.6	na	4.4	91.1	1.6	1.9	1.9	
The Northern Trust Company	2.2	5.3	2.6	2.2	2.3	2.4	2.5	2.7	3.1	3.4	4.2	5.0	5.9	4.7	5.0	na	1.8	2.1	2.2	
PNC Financial Services Corp.	2.2	5.3	2.4	na	2.1	2.3	2.3	2.4	2.6	2.9	3.4	na	4.9	3.6	4.5	87.8	1.9	1.4 L	2.2	
Wells Fargo	2.2	5.2	2.3	2.3	2.2	2.3	2.4	2.6	2.8	2.9	3.4	4.3	4.9	3.9	4.4	84.0	2.7	2.4	2.3	
Nomura Securities, Inc.	2.2	5.3	2.3	na	na	na	na	2.3	2.6	2.8	3.1	4.2	4.7	na	4.2	na	2.2	1.8	2.2	
Action Economics	2.1	5.3	2.4	2.2	2.2	2.2	2.3	2.4	2.6	2.9	3.3	4.1	4.7	3.9	4.3	89.3	2.7	2.2	2.1	
Societe Generale	2.0	5.3	na	na	na	na	na	2.1 L	2.3	2.6	3.0	na	na	na	na	na	1.7	1.9	1.8	
Scotiabank Group	2.0	5.0	na	na	2.1	na	na	2.2	2.4	2.8	3.1	na	na	na	na	na	1.6	2.0	2.2	
Georgia State University	2.0	5.0	na	na	1.9	2.1	2.3	2.4	2.7	3.3	3.8	4.7	5.9	na	5.2	na	2.3	2.2	2.2	
Stone Harbor Investment Partners	2.0	5.1	2.2	2.1	1.9	2.0	2.1	2.3	2.6	2.9	3.3	4.3	4.9	na	4.7	89.0	2.2	2.5	2.4	
Loomis, Sayles & Company	1.9	5.0	2.2	1.9	1.8	2.0	2.2	2.3	2.5	2.8	3.0	4.1	4.9	3.8	4.4	89.0	2.3	2.4	2.1	
Fannie Mae	1.9	5.0	na	na	2.0	2.0	2.0 L	2.1 L	2.5	2.6	2.9	na	na	na	4.2	na	1.9	2.4	1.8	
DS Economics	1.9	5.0	na	na	1.7 L	2.2	2.4	2.6	2.9	3.2	3.8	4.2	5.1	3.9	4.7	na	2.0	2.4	1.9	
Comerica Bank	1.9	5.0	2.1	na	1.8	1.9 L	2.0 L	2.2	2.6	2.9	3.3	na	na	na	4.6	na	2.3	1.9	2.0	
Moody's Capital Markets Group	1.9	5.0	2.2	2.0	1.9	2.0	2.0 L	2.1 L	2.2	2.5	2.8	3.7 L	4.4 L	3.5 L	4.2	90.0	1.3 L	1.9	1.8	
Cycledata Corp.	1.8 L	4.9 L	1.8 L	1.6 L	1.7 L	1.9 L	2.0 L	2.1 L	2.5	2.9	3.3	4.2	4.9	3.9	4.4	88.0	2.8	2.3	2.5	
January Consensus	2.2	5.3	2.5	2.3	2.2	2.3	2.5	2.6	2.8	3.1	3.5	4.5	5.2	4.2	4.7	89.0	2.2	2.2	2.3	
Top 10 Avg.	2.5	5.6	2.8	2.6	2.5	2.7	2.9	2.9	3.2	3.5	4.1	5.0	5.8	4.6	5.2	91.4	2.8	2.6	2.8	
Bottom 10 Avg.	1.9	5.0	2.2	2.1	1.9	2.0	2.1	2.2	2.4	2.6	3.0	4.0	4.7	3.8	4.3	86.5	1.7	1.8	1.8	
December Consensus	2.2	5.2	2.4	2.2	2.1	2.2	2.4	2.5	2.8	3.1	3.6	4.6	5.3	4.3	4.8	88.5	2.1	2.2	2.3	
Number of Forecasts Changed From A Month Ago:																				
Down	3	3	4	4	5	4	4	8	14	16	17	14	16	9	17	6	5	7	7	
Same	28	27	16	14	19	16	13	17	17	15	16	7	9	9	11	10	21	24	28	
Up	13	10	13	8	14	16	18	16	10	10	7	6	3	4	9	9	18	12	9	
Diffusion Index	61 %	59 %	64 %	58 %	62 %	67 %	70 %	60 %	45 %	43 %	38 %	35 %	27 %	39 %	39 %	56 %	65 %	56 %	52 %	

International Interest Rate And Foreign Exchange Rate Forecasts

Blue Chip Forecasters	3 Mo. Interest Rate %		
	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	na	na	na
BMO Capital Markets	1.85	2.10	2.35
IHSMarkit	na	na	na
ING Financial Markets	1.60	1.90	2.10
Mizuho Research Institute	1.90	2.10	2.10
Moody's Analytics	na	na	na
Moody's Capital Markets	na	na	na
Nomura Securities	na	na	na
Oxford Economics	na	na	na
Scotiabank	na	na	na
Wells Fargo	1.90	2.15	2.40
January Consensus	1.81	2.06	2.24
High	1.90	2.15	2.40
Low	1.60	1.90	2.10
Last Months Avg.	1.66	1.91	2.14

Blue Chip Forecasters	3 Mo. Interest Rate %		
	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	na	na	na
BMO Capital Markets	0.00	0.00	0.00
IHSMarkit	na	na	na
ING Financial Markets	0.05	0.05	0.05
Mizuho Research Institute	0.06	0.06	0.06
Moody's Analytics	na	na	na
Moody's Capital Markets	na	na	na
Nomura Securities	na	na	na
Oxford Economics	na	na	na
Scotiabank	na	na	na
Wells Fargo	-0.01	-0.01	0.10
January Consensus	0.03	0.03	0.05
High	0.06	0.06	0.10
Low	-0.01	-0.01	0.00
Last Months Avg.	0.02	0.01	0.02

Blue Chip Forecasters	3 Mo. Interest Rate %		
	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	na	na	na
BMO Capital Markets	0.50	0.50	0.80
IHSMarkit	na	na	na
ING Financial Markets	0.60	0.60	0.60
Mizuho Research Institute	0.55	0.60	0.80
Moody's Analytics	na	na	na
Moody's Capital Markets	na	na	na
Nomura Securities	na	na	na
Oxford Economics	na	na	na
Scotiabank	na	na	na
Wells Fargo	0.52	0.55	0.85
January Consensus	0.54	0.56	0.76
High	0.60	0.60	0.85
Low	0.50	0.50	0.60
Last Months Avg.	0.60	0.63	0.81

Blue Chip Forecasters	3 Mo. Interest Rate %		
	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	na	na	na
BMO Capital Markets	na	na	na
IHSMarkit	na	na	na
ING Financial Markets	-0.70	-0.70	-0.60
Mizuho Research Institute	na	na	na
Moody's Analytics	na	na	na
Moody's Capital Markets	na	na	na
Nomura Securities	na	na	na
Oxford Economics	na	na	na
Scotiabank	na	na	na
Wells Fargo	na	na	na
January Consensus	-0.70	-0.70	-0.60
High	-0.70	-0.70	-0.60
Low	-0.70	-0.70	-0.60
Last Months Avg.	-0.70	-0.70	-0.60

Blue Chip Forecasters	3 Mo. Interest Rate %		
	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	na	na	na
BMO Capital Markets	1.55	1.65	2.15
IHSMarkit	na	na	na
ING Financial Markets	1.90	2.00	1.60
Mizuho Research Institute	na	na	na
Moody's Analytics	na	na	na
Moody's Capital Markets	na	na	na
Nomura Securities	na	na	na
Oxford Economics	na	na	na
Scotiabank	na	na	na
Wells Fargo	1.65	1.75	2.00
January Consensus	1.70	1.80	1.92
High	1.90	2.00	2.15
Low	1.55	1.65	1.60
Last Months Avg.	1.78	1.88	1.80

United States			
10 Yr. Gov't Bond Yield %			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
2.40	2.45	na	
2.50	2.65	2.80	
2.91	3.11	3.45	
2.70	2.80	2.90	
2.50	2.50	2.50	
2.86	3.15	3.74	
2.52	2.55	2.50	
na	na	na	
2.53	2.63	2.83	
2.50	2.60	2.70	
2.66	2.80	2.95	
2.61	2.72	2.93	
2.91	3.15	3.74	
2.40	2.45	2.50	
2.54	2.64	2.82	

Japan			
10 Yr. Gov't Bond Yield %			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
0.05	0.10	na	
0.05	0.10	0.10	
na	na	na	
0.10	0.10	0.10	
0.05	0.05	0.05	
0.06	0.10	0.09	
0.09	0.10	0.01	
na	na	na	
0.07	0.07	0.07	
na	na	na	
0.05	0.07	0.12	
0.07	0.09	0.08	
0.10	0.10	0.12	
0.05	0.05	0.01	
0.06	0.07	0.08	

United Kingdom			
10 Yr. Gilt Yields %			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
1.45	1.50	na	
1.60	1.70	1.85	
na	na	na	
1.40	1.45	1.50	
1.50	1.55	1.70	
1.55	1.67	1.95	
1.32	1.35	1.35	
na	na	na	
1.61	1.72	1.94	
na	na	na	
1.40	1.60	1.85	
1.48	1.57	1.73	
1.61	1.72	1.95	
1.32	1.35	1.35	
1.48	1.57	1.72	

Switzerland			
10 Yr. Gov't Bond Yield %			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
na	na	na	
na	na	na	
na	na	na	
-0.05	0.10	0.40	
na	na	na	
0.01	0.08	0.22	
-0.13	-0.10	-0.13	
na	na	na	
0.08	0.19	0.43	
na	na	na	
na	na	na	
-0.02	0.07	0.23	
0.08	0.19	0.43	
-0.13	-0.10	-0.13	
0.00	0.10	0.26	

Canada			
10 Yr. Gov't Bond Yield %			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
na	na	na	
2.00	2.20	2.45	
na	na	na	
2.30	2.40	2.70	
na	na	na	
2.56	2.86	3.55	
2.07	2.10	2.10	
n	na	na	
2.36	2.48	2.73	
2.10	2.25	2.45	
2.05	2.25	2.45	
2.21	2.36	2.63	
2.56	2.86	3.55	
2.00	2.10	2.10	
2.24	2.37	2.63	

Fed's Major Currency \$ Index			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
na	na	na	
90.2	90.1	88.0	
na	na	na	
na	na	na	
89.0	90.0	88.0	
na	na	na	
89.5	90.0	90.0	
na	na	na	
88.4	88.5	88.4	
na	na	na	
na	na	na	
89.3	89.6	88.6	
90.2	90.1	90.0	
88.4	88.5	88.0	
89.4	89.8	89.0	

USD/YEN			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
na	na	na	
114.0	115.0	116.0	
114.2	115.1	117.1	
114.0	114.0	115.0	
114.0	115.0	115.0	
113.1	113.1	113.1	
114.0	115.0	116.0	
115.0	120.0	120.0	
113.2	113.6	115.0	
114.0	114.0	115.0	
na	na	na	
113.9	115.0	115.8	
115.0	120.0	120.0	
113.1	113.1	113.1	
114.4	114.8	114.8	

GBP/USD			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
1.30	1.32	na	
1.34	1.34	1.37	
1.32	1.31	1.31	
1.36	1.39	1.48	
na	na	na	
1.30	1.29	1.26	
1.32	1.32	1.31	
1.38	1.43	1.48	
1.36	1.38	1.40	
1.35	1.35	1.37	
na	na	na	
1.34	1.35	1.37	
1.38	1.43	1.48	
1.30	1.29	1.26	
1.33	1.34	1.36	

USD/CHF			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
1.00	0.99	na	
na	na	na	
1.00	1.00	1.01	
0.97	0.97	0.98	
na	na	na	
1.00	1.01	1.02	
0.99	1.00	1.00	
0.98	0.98	0.94	
0.98	0.98	0.98	
na	na	na	
na	na	na	
0.99	0.99	0.99	
1.00	1.01	1.02	
0.97	0.97	0.94	
0.98	0.98	0.97	

USD/CAD			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
1.25	1.23	na	
1.30	1.30	1.27	
1.27	1.26	1.26	
1.27	1.22	1.20	
na	na	na	
1.27	1.26	1.25	
1.28	1.28	1.28	
1.32	1.30	1.26	
1.29	1.29	1.29	
1.28	1.27	1.25	
na	na	na	
1.28	1.27	1.26	
1.32	1.30	1.29	
1.25	1.22	1.20	
1.27	1.26	1.25	

International Interest Rate And Foreign Exchange Rate Forecasts

Blue Chip Forecasters	3 Mo. Interest Rate %		
	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	na	na	na
BMO Capital Markets	na	na	na
IHSMarkit	na	na	na
ING Financial Markets	1.90	1.90	2.15
Mizuho Research Institute	na	na	na
Moody's Analytics	na	na	na
Moody's Capital Markets	na	na	na
Nomura Securities	na	na	na
Oxford Economics	na	na	na
Scotiabank	na	na	na
Wells Fargo	na	na	na
January Consensus	1.90	1.90	2.15
High	1.90	1.90	2.15
Low	1.90	1.90	2.15
Last Months Avg.	1.90	1.90	2.15

Australia		
10 Yr. Gov't Bond Yield %		
In 3 Mo.	In 6 Mo.	In 12 Mo.
na	na	na
na	na	na
na	na	na
2.80	2.90	3.10
na	na	na
2.65	2.65	2.65
2.65	2.68	2.63
na	na	na
2.83	2.94	3.15
na	na	na
na	na	na
2.73	2.79	2.88
2.83	2.94	3.15
2.65	2.65	2.63
2.74	2.83	2.96

AUD/AUD		
In 3 Mo.	In 6 Mo.	In 12 Mo.
0.76	0.76	na
na	na	na
0.75	0.74	0.73
0.80	0.84	0.88
na	na	na
0.78	0.78	0.76
0.77	0.77	0.75
0.75	0.73	0.77
0.75	0.75	0.74
0.79	0.79	0.80
na	na	na
0.77	0.77	0.78
0.80	0.84	0.88
0.75	0.73	0.73
0.78	0.78	0.79

Blue Chip Forecasters	3 Mo. Interest Rate %		
	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	na	na	na
BMO Capital Markets	-0.35	-0.35	-0.35
IHSMarkit	na	na	na
ING Financial Markets	-0.33	-0.33	-0.33
Mizuho Research Institute	-0.30	-0.30	-0.30
Moody's Analytics	na	na	na
Moody's Capital Markets	na	na	na
Nomura Securities	na	na	na
Oxford Economics	na	na	na
Scotiabank	na	na	na
Wells Fargo	-0.35	-0.25	-0.05
January Consensus	-0.33	-0.31	-0.26
High	-0.30	-0.25	-0.05
Low	-0.35	-0.35	-0.35
Last Months Avg.	-0.35	-0.32	-0.25

Eurozone

USD/EUR		
In 3 Mo.	In 6 Mo.	In 12 Mo.
1.17	1.19	na
1.15	1.17	1.22
1.16	1.15	1.15
1.20	1.22	1.27
1.16	1.16	1.19
1.29	1.40	1.43
1.17	1.17	1.16
1.20	1.23	1.30
1.20	1.20	1.20
1.18	1.18	1.20
na	na	na
1.19	1.21	1.24
1.29	1.40	1.43
1.15	1.15	1.15
1.18	1.18	1.21

Blue Chip Forecasters	10 Yr. Gov't Bond Yields %											
	Germany			France			Italy			Spain		
	In 3 Mo.	In 6 Mo.	In 12 Mo.	In 3 Mo.	In 6 Mo.	In 12 Mo.	In 3 Mo.	In 6 Mo.	In 12 Mo.	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	0.55	0.60	na	na	na	na	na	na	na	na	na	na
BMO Capital Markets	0.50	0.70	1.00	na	na	na	na	na	na	na	na	na
ING Financial Markets	0.50	0.65	0.75	0.92	0.97	1.15	2.35	2.25	2.35	1.85	1.85	1.95
Mizuho Research Institute	0.45	0.45	0.50	na	na	na	na	na	na	na	na	na
Moody's Analytics	0.66	0.79	1.13	0.99	1.09	1.34	1.97	2.01	2.26	1.80	1.93	2.24
Moody's Capital Markets	0.52	0.65	0.88	0.84	1.00	1.28	2.02	2.20	2.48	1.57	1.76	2.03
Nomura Securities	na	na	na	na	na	na	na	na	na	na	na	na
Oxford Economics	0.50	0.62	0.90	0.90	1.04	1.36	1.95	2.12	2.50	1.65	1.82	2.20
Wells Fargo	0.50	0.65	1.00	na	na	na	na	na	na	na	na	na
January Consensus	0.52	0.64	0.88	0.91	1.03	1.28	2.07	2.15	2.40	1.72	1.84	2.11
High	0.66	0.79	1.13	0.99	1.09	1.36	2.35	2.25	2.50	1.85	1.93	2.24
Low	0.45	0.45	0.50	0.84	0.97	1.15	1.95	2.01	2.26	1.57	1.76	1.95
Last Months Avg.	0.56	0.66	0.83	0.93	1.02	1.19	2.09	2.13	2.28	1.78	1.86	2.01

	Consensus Forecasts			
	10-year Bond Yields vs U.S. Yield			
	Current	In 3 Mo.	In 6 Mo.	In 12 Mo.
Japan	-2.33	-2.54	-2.64	-2.85
United Kingdom	-1.14	-1.13	-1.16	-1.20
Switzerland	-2.51	-2.63	-2.66	-2.70
Canada	-0.51	-0.40	-0.36	-0.30
Australia	0.16	0.12	0.07	-0.05
Germany	-2.06	-2.09	-2.09	-2.05
France	-1.74	-1.70	-1.70	-1.65
Italy	-0.57	-0.54	-0.58	-0.53
Spain	-0.91	-0.89	-0.89	-0.82

	Consensus Forecasts			
	3 Mo. Deposit Rates vs U.S. Rate			
	Current	In 3 Mo.	In 6 Mo.	In 12 Mo.
Japan	-1.63	-1.79	-2.09	-2.19
United Kingdom	-1.17	-1.27	-1.50	-1.48
Switzerland	-2.37	-2.51	-2.76	-2.84
Canada	-0.20	-0.11	-0.26	-0.32
Australia	0.82	0.09	-0.16	-0.09
Eurozone	-1.94	-2.15	-2.37	-2.50

Viewpoints:

A Sampling of Views on the Economy, Financial Markets and Government Policy Excerpted from Recent Reports Issued by our Blue Chip Panel Members and Others

What Tax Cuts Giveth, Will Fed and Inflation Taketh Away?

President Trump signed the Tax Cuts and Jobs Act of 2017 into law on December 22nd. When this bill first emerged from the House-Senate conference the prior Friday, it wasn't as anticipated. The difference wasn't so much in the size of the cumulative tax cut and deficit increase, since the latter was capped at \$1.5 trillion. The \$1.65 trillion in tax cuts over the coming decade ended up increasing the 10-year deficit by \$1.45 trillion, after accounting for spending reductions (mostly savings from not having to subsidize the previously mandated health insurance purchases of poor Americans). The difference was in the timing of the tax cuts, which were now more front-loaded.

According to CBO estimates from December 15, revenue will decrease by \$212 billion in calendar 2018 (1.1% of GDP) and by an additional \$56 billion to \$268 billion in 2019. The revenue reductions subsequently start ebbing, with a big jump in 2025 when the personal tax cuts expire. For 2018, this generates a 0.4 percentage point boost to real GDP (employing a 0.4 multiplier), leading us to raise our forecast for U.S. economic growth from 2.4% to 2.6% (annual average). Previously, we had incorporated up to 0.2 percentage points of fiscal stimulus. This also leads us to pull forward the timing of Fed rate hikes in 2018, and raise the net risk of more than three moves.

Previously, we looked for a quarterly rate hike cadence to resume in June 2018, following a six-month pause after December's rate hike (there was also a six-month pause after June 2017's rate hike). The downshifted cadence reflected increased Fed caution concerning: (1) running two policy normalization programs (rates and balance sheet) in tandem, particularly at the outset of the latter; and (2) uncertainty about inflation's recent underperformance and whether the idiosyncratic factors that dampened inflation this spring would wash out next spring. However, we now look for a March-June-December sequence, identical to 2017's pattern, with significant net risk of a September move. The more aggressive Fed posture reflects two factors.

First, the unintended consequences of balance sheet shrinkage seem to be less of a Fed concern with the economy and financial markets buoyed by tax cuts. Indeed, the FOMC removed all references to balance sheet normalization in the December 13 policy statement. We remain sceptical about a benign normalization process, particularly once assets start shrinking as much as \$50 billion per month by next October.

Second, upside inflation risks elicited by an economy growing at an even greater above-potential pace with no output gap (it closed in 2017 Q3 according to the CBO) and essentially at full employment, likely ameliorate some of the Fed's inflation uncertainties. Interestingly, in the latest Summary of Economic Projections, the FOMC's median forecast for real GDP growth in 2018 was revised up by a hefty 4/10s to 2.5% Q4/Q4, factoring in fiscal stimulus along with stronger momentum from this year. The out-years also saw upgrades of a tenth or two. However, the inflation profile remained unchanged. It appears the Fed is betting that current secular disinflationary trends (owing to the likes of technology-enabled disruption and globalization) can continue countering cyclical inflation pressures. And, perhaps, tax cuts will spur more capacity growth.

Again, we remain skeptical, judging that tax-cut-stoked demand will probably dominate tax-cut-incented supply and drive inflation moderately higher. One thing to keep in mind is that, even if tax cuts don't spur new investment plans, they should at least help augment and prolong the ones currently underway. Businesses have already begun to

ramp up capex, incented by the mix of sturdy sales and increasing capacity constraints. In the three months ending November, core capital goods orders rose at an 18.0% annual rate, a near five-year high.

The bond market might have become a bit more sceptical as well, when it comes to benign inflation and Fed policy prospects. This week, 10-year yields rose around 15 bps at one point to a nine-month high of 2.50%, and two year yields rose around 5 bps to just under 1.90%, which was their highest level since Lehman Brothers' bankruptcy in September 2008.

So, as 2018 begins, we'll be watching the inflation tug-of-war between competing inflation/Fed prospects. Lined up on one side (the "unfavourables"), we've got continued above-potential growth with no output gap remaining and the added demand pull from tax cuts. On the other side (the "favourables"), we've got capital spending incented by capacity constraints and tax cuts along with secular disinflationary trends. We expect the unfavourables to have the upper hand but stay well shy of victory, for the time being. However, should the unfavourables appear headed for victory, it should be noted that it will take only a couple extra Fed rate hikes to completely offset the positive economic impact of tax cuts.

Michael Gregory, BMO Capital Markets, Toronto, Canada

Tensions At The Turn

Inflation turns up. The Fed becomes more aggressive and shrinks the balance sheet. The dollar turns down. Economic growth picks up. The economic picture is turning and driving change in market interest rates.

Since mid-2016, there has been a distinct upswing in benchmark Treasury rates. The first fundamental behind this turn has been the upswing in the PCE deflator to 1.7 percent from 1.2 percent in 2016. Over that same period, the employment cost index rose to 2.5 percent from 2.2 percent and the Brent front contract rose to \$54.5 from \$45.1 per barrel. For the year ahead, the PCE is expected to rise due to the unwinding of several one-off factors from 2017. In addition, we expect that labor costs and energy costs will continue to rise. Finally, we anticipate that stronger global growth and a weaker dollar will provide a boost to import prices as well.

As inflation rises, and is expected to rise, so does the Fed. Two guideposts indicate upward pressure on our benchmark rate forecast. First, the dot-plot intimates that the Fed will pursue three increases in the Fed funds rate in 2018 and further increases in 2019. Investors in the two-year Treasury will have to discount these rises in the expected future funds rate. Our view is that the two-year rate will rise from 1.80 percent in the current quarter to 2.60 percent by the end of 2018.

A second guidepost is the Fed's intended path to shrink its balance sheet in the years ahead. We anticipate that the effect on the intermediate range of the Treasury yield curve (3 to 10 years) will start in mid-2018.

Our outlook is for the trade-weighted dollar to weaken to 84.8 in Q4-2018 from 89.3 in the current quarter. Expectations of a weaker dollar will incentivize foreign investors to seek a higher interest rate to compensate them for the exchange rate risk. There will likely also be a reduction of foreign capital flows into U.S. fixed income assets.

Economics Group, Wells Fargo Securities, Charlotte, NC

Viewpoints

A Sampling of Views on the Economy, Financial Markets and Government Policy Excerpted from Recent Reports Issued by our Blue Chip Panel Members and Others

Consumer Spending and Business Investment Strong; Inflation Tame, Housing Reviving, Personal Income, Consumption, Inflation.

The monthly report on income and consumption showed that households were active during November, with nominal outlays increasing 0.6 percent, which translated to a gain of 0.4 percent in real terms. The firm results put real expenditures on track to grow at an annual rate of 2¾ to 3.0 percent in Q4, one of the better performances in the past three years. The firm advance in November occurred despite a sharp decline in sales of motor vehicles, which merely represented a return to normal activity after a hurricane-related spurt in September. Spending on non-auto durables, nondurable goods, and services was brisk.

A strong job market and the confidence that inspires is no doubt a factor behind the firm pace of consumer spending, but the robust performance of the equity market seems to be a factor as well. That is, the surge in stock prices has fueled favorable perceptions of wealth, which has led individuals to spend more freely from current income than they might otherwise. In this regard, the growth in consumer spending in the past two years has been accompanied by a drop in the saving rate, easing from approximately six percent in 2015 to an average of 3.5 percent so far this year and a reading of only 2.9 percent in November.

The monthly report on income and consumption also includes the price index for personal consumption expenditures, the measure targeted by the Federal Reserve. Inflation remained tame in November, as the headline index rose only 0.2 percent despite a jump of 4.3 percent in the energy component. Food prices declined 0.1 percent and the core component rose modestly (reported at 0.1 percent, but rounding up to that total; 0.078 when calculated with more precision).

Although the monthly inflation rates in November were well contained, they were faster than those registered in November last year, and thus the year-over-year inflation rates inched higher. The headline index rose 1.8 percent in the past year, up from readings in the prior several months although still shy of rates slightly above two percent in the early months of the year. The annual change in the core index increased 0.1 percentage point to 1.5 percent, but the shift was more a rounding issue than a noticeable change in the inflation rate (1.482 percent versus 1.443 percent in October) and the recent rate was still in the low end of the range from the past few years.

The report on new orders for durable goods appeared weak at first blush, as the increase of 1.3 percent in the headline measure was shy of the expected gain of 2.0 percent. In addition, new orders excluding transportation fell 0.1 percent, noticeably softer than the expected increase of 0.5 percent. However, digging through the detail of the report reveals some offsetting considerations that lead us to view the latest data as mildly favorable.

Most important, results in the prior month were revised upward, with bookings in October 0.4 percent firmer than previously believed (orders ex-transportation also were revised by 0.4 percent). Taking account of the adjustments would leave the level of new orders only slightly below expectations. In addition, the soft spots in November that restrained the reported totals in many cases merely represented partial offsets to surges in the prior month or two. Accordingly, the underlying trend in the headline measure remained upward, and orders excluding transportation show a solid upward trend despite the dip in November.

We pay close attention in this report to orders for nondefense capital goods other than aircraft because of the insights they provide on capital spending by businesses. This series is especially important at this time

because capital expenditures seem to be stirring after a slow period. In addition, the tax reform legislation passed by Congress this week could provide a lift to investment spending next year and beyond.

Bookings for capital goods other than aircraft followed the same pattern as orders ex-transportation: they fell slightly in November, but results in the prior month were revised up from an already strong performance. As such, the dip in the latest month did little damage to the strong trend that has developed recently. Although new orders for capital goods dipped in November, shipments rose again and left the average in the past two months well above that in Q3, implying that the next report on GDP will show favorable results for equipment spending -- possibly double-digit growth.

The latest week brought several reports on the housing sector, and all of them were vigorous. Sales of new homes in November rose at a stunning rate of 17.5 percent (not annualized). The change occurred from downward revised results in prior months (total sales in the three months from August to October were 4.1 percent softer than previously believed), but the adjustments seemed insignificant in light of the latest monthly change. Sales in November jumped to a new cyclical high, well above other readings in the current expansion.

Housing contractors apparently took note of the jump in sales of new homes, as the sentiment index published by the National Association of Home Builders surged in the latest month (December), also moving to a new cyclical high. And builders acted on this favorable shift in sentiment, as single-family housing starts posted a solid advance in November and added to the upward trend.

The favorable results for new home sales were joined by strong results for sales of existing homes. Activity in this market slowed in the spring and summer, but sales picked up in October (up 2.4 percent) before surging 5.6 percent in November and moving above the firm readings earlier in the year.

The jump in housing activity has been striking, but we wonder if special factors might be involved. Tax reform legislation might have played a role, as talk of limiting the deductibility of mortgage interest payments might have motivated individuals to purchase a home and book their mortgage before the new tax law becomes effective.

Recent economic statistics suggest that growth in the fourth quarter is likely to be well maintained: consumer spending will be firm, and equipment spending and residential construction could be vigorous. Despite these encouraging developments, we are not looking for a breakout on GDP growth. An advance of more than three percent -- like that in the second and third quarters -- is possible, but we view an outcome in a range of 2¾ to 3.0 percent as more likely.

While activity in some sectors has been strong, other areas are lagging. Net exports, for example could constrain growth, as results for October (latest available) showed a noticeable widening in the trade deficit. In addition, although businesses are showing renewed interest in equipment spending, business-related construction has been slow, and firms are managing inventories cautiously. Government spending has shown little net change in the past one to two years, and available data do not show a change from this pattern.

We do not look for GDP growth to break out of its recent range, but the expected advance represents a solid performance for this stage of the business cycle. The pace is above the economy's underlying potential at a time when the labor market is at or close to full employment.

Michael Moran, Daiwa Capital Markets, New York, NY

Special Questions:

1. Please provide your forecasts of the Q4 2017 change (saar) in real GDP, the GDP Price Index and the Consumer Price Index.

	<u>Real GDP</u>	<u>Q1 2017 (saar) GDP Price Index</u>	<u>Consumer Price Index</u>
Consensus	2.8%	2.2%	3.1%
Top 10 Average	3.2%	2.8%	3.8%
Bottom 10 Average	2.4%	1.8%	2.1%

2. At which meeting will the Federal Reserve's Open Market Committee NEXT raise interest rates?

<u>(Percentage of those responding)</u>				
<u>Jan. 30-31</u>	<u>Mar. 20-21</u>	<u>May 1-2</u>	<u>Jun 12-13</u>	<u>Later</u>
2.3%	74.4%	0.0%	23.3%	0.0%

3. By how many basis points will the FOMC raise interest rates in 2018?

<u>Total basis point increase in interest rates by FOMC in 2018:</u>					
<u>(Percentage of those responding)</u>					
<u>0 b.p.</u>	<u>25 b.p.</u>	<u>50 b.p.</u>	<u>75 b.p.</u>	<u>100 b.p.</u>	<u>More than 100 b.p.</u>
0.0%	4.7%	23.3%	51.2%	20.9%	0.0%

4. What will be the December-over-December change in the PCE Price Index in 2018?

<u>2018 December-over-December change in the PCE Price Index:</u>	
Consensus	2.0%
Top 10 Average	2.4%
Bottom 10 Average	1.6%

5. A. Did you recently raise your forecast of 2018 real GDP growth due to the increased likelihood that tax reform legislation will soon be approved?

<u>(Percent of those responding)</u>	
<u>Yes</u>	<u>No</u>
70.7%	29.3%

B. If you said YES, how much do you think the legislation will add to real GDP's growth rate in 2018?

<u>(Tenths of a percentage point)</u>	
Consensus	0.29%
Top 10 Average	0.41%
Bottom 10 Average	0.18%

6. The tax reform package assumes that the economy will register average real GDP growth of 2.9% over the next ten years. What is your estimate of average annual real GDP growth over the next ten years?

<u>(Average annual real GDP growth over next ten years)</u>	
Consensus	2.17%
Top 10 Average	2.60%
Bottom 10 Average	1.81%

7. As of December 13th the spread between 2-year Treasury notes and 10-year Treasury notes was 57 basis points. Will this spread widen or narrow by the end of 2018?

<u>(Percent of those responding)</u>	
<u>Widen</u>	<u>Narrow</u>
33.3%	66.7%

8. What are the odds that a U.S. recession will begin in 2018? If not in 2018, what are the odds that a recession in begin in 2019?

<u>(Between 0% and 100%)</u>		
<u>Odds of a U.S. recession in:</u>		
	<u>2018</u>	<u>2019</u>
Consensus	18.4%	29.8%
Top 10 Average	29.5%	46.0%
Bottom 10 Average	10.8%	17.3%

2017 Historical Data

Monthly Indicator	Jan	Feb	Mar	Apr	May	Jun	Jly	Aug	Sep	Oct	Nov	Dec
Retail and Food Service Sales (a)	0.5	-0.2	0.1	0.3	0.0	-0.1	0.5	-0.1	2.0	0.5	0.8	
Auto & Light Truck Sales (b)	17.33	17.33	16.72	16.97	16.70	16.61	16.69	16.02	18.49	18.01	17.35	
Personal Income (a, current \$)	0.4	0.5	0.3	0.1	0.3	0.0	0.3	0.2	0.5	0.4	0.3	
Personal Consumption (a, current \$)	0.2	0.1	0.5	0.3	0.2	0.1	0.4	0.2	1.0	0.2	0.6	
Consumer Credit (e)	3.1	5.2	4.7	3.9	5.8	3.7	5.7	3.7	6.1	6.5		
Consumer Sentiment (U. of Mich.)	98.5	96.3	96.9	97.0	97.1	95.1	93.4	96.8	95.1	100.7	98.5	95.9
Household Employment (c)	-30	447	472	156	-233	245	345	-74	906	-484	57	
Non-farm Payroll Employment (c)	216	232	50	207	145	210	189	208	38	244	288	
Unemployment Rate (%)	4.8	4.7	4.5	4.4	4.3	4.4	4.3	4.4	4.2	4.1	4.1	
Average Hourly Earnings (All, cur. \$)	26.02	26.10	26.13	26.18	26.22	26.27	26.39	26.42	26.53	26.50	26.55	
Average Workweek (All, hrs.)	34.4	34.3	34.3	34.5	34.4	34.5	34.5	34.4	34.4	34.4	34.5	
Industrial Production (d)	0.0	0.4	1.4	2.0	2.2	2.1	1.8	1.5	1.8	2.8	3.4	
Capacity Utilization (%)	75.7	75.8	75.9	76.6	76.6	76.6	76.5	76.1	76.2	77.0	77.1	
ISM Manufacturing Index (g)	56.0	57.7	57.2	54.8	54.9	57.8	56.3	58.8	60.8	58.7	58.2	
ISM Non-Manufacturing Index (g)	56.5	57.6	55.2	57.5	56.9	57.4	53.9	55.3	59.8	60.1	57.4	
Housing Starts (b)	1.236	1.288	1.189	1.154	1.129	1.217	1.185	1.172	1.159	1.256	1.297	
Housing Permits (b)	1.300	1.219	1.260	1.228	1.168	1.275	1.230	1.272	1.225	1.316	1.298	
New Home Sales (1-family, c)	599	615	638	590	606	619	564	559	635	624	733	
Construction Expenditures (a)	0.8	1.9	0.3	-1.8	1.6	-0.8	-0.9	0.5	0.3	1.4		
Consumer Price Index (nsa., d)	2.5	2.7	2.4	2.2	1.9	1.6	1.7	1.9	2.2	2.0	2.2	
CPI ex. Food and Energy (nsa., d)	2.3	2.2	2.0	1.9	1.7	1.7	1.7	1.7	1.7	1.8	1.7	
Producer Price Index (n.s.a., d)	1.7	2.0	2.2	2.5	2.3	1.9	2.0	2.4	2.6	2.8	3.1	
Durable Goods Orders (a)	2.4	1.4	2.4	-0.8	0.0	6.4	-6.8	2.1	2.4	-0.4	1.3	
Leading Economic Indicators (g)	0.6	0.5	0.4	0.2	0.3	0.6	0.3	0.4	0.1	1.2	0.4	
Balance of Trade & Services (f)	-48.8	-44.5	-44.8	-48.2	-47.9	-45.7	-45.2	-44.3	-44.9	-48.7		
Federal Funds Rate (%)	0.65	0.66	0.76	0.90	0.90	1.03	1.15	1.15	1.16	1.15	1.15	
3-Mo. Treasury Bill Rate (%)	0.51	0.53	0.73	0.80	0.90	1.02	1.09	1.04	1.06	1.09	1.23	
10-Year Treasury Note Yield (%)	2.43	2.43	2.47	2.30	2.31	2.19	2.32	2.33	2.28	2.36	2.36	

2016 Historical Data

Monthly Indicator	Jan	Feb	Mar	Apr	May	Jun	Jly	Aug	Sep	Oct	Nov	Dec
Retail and Food Service Sales (a)	-1.0	0.7	0.0	0.8	0.3	0.8	0.0	-0.1	1.0	0.6	0.1	0.9
Auto & Light Truck Sales (b)	17.64	17.51	16.77	17.49	17.22	16.99	17.75	17.13	17.65	17.80	17.56	18.05
Personal Income (a, current \$)	0.0	-0.1	0.3	0.5	0.3	0.3	0.4	0.2	0.4	0.4	0.2	0.3
Personal Consumption (a, current \$)	0.1	0.2	0.0	1.1	0.3	0.5	0.4	0.1	0.7	0.5	0.3	0.6
Consumer Credit (e)	4.4	4.4	9.9	5.7	7.5	4.8	5.8	9.0	6.9	5.2	8.3	4.5
Consumer Sentiment (U. of Mich.)	92.0	91.7	91.0	89.0	94.7	93.5	90.0	89.8	91.2	87.2	93.8	98.2
Household Employment (c)	503	510	258	-273	30	32	456	109	271	-24	146	63
Non-Farm Payroll Employment (c)	126	237	225	153	43	297	291	176	249	124	164	155
Unemployment Rate (%)	4.9	4.9	5.0	5.0	4.7	4.9	4.9	4.9	4.9	4.8	4.6	4.7
Average Hourly Earnings (All, cur. \$)	25.37	25.38	25.46	25.54	25.59	25.62	25.71	25.74	25.81	25.90	25.91	25.97
Average Workweek (All, hrs.)	34.6	34.5	34.4	34.4	34.4	34.4	34.4	34.3	34.4	34.4	34.3	34.4
Industrial Production (d)	-2.0	-2.0	-2.5	-1.7	-1.4	-0.9	-1.2	-1.3	-1.2	-0.8	-0.5	0.9
Capacity Utilization (%)	76.1	75.9	75.4	75.6	75.6	75.8	75.9	75.8	75.6	75.7	75.5	76.0
ISM Manufacturing Index (g)	48.2	49.7	51.7	50.7	51.0	52.8	52.3	49.4	51.7	52.0	53.5	54.5
ISM Non-Manufacturing Index (g)	53.5	54.3	54.9	55.7	53.6	56.1	54.9	51.7	56.6	54.6	56.2	56.6
Housing Starts (b)	1.123	1.209	1.128	1.164	1.119	1.190	1.223	1.164	1.062	1.328	1.149	1.268
Housing Permits (b)	1.193	1.195	1.115	1.163	1.178	1.193	1.175	1.200	1.270	1.285	1.255	1.266
New Home Sales (1-family, c)	520	525	533	566	560	559	627	567	570	577	579	548
Construction Expenditures (a)	-0.3	1.4	1.6	-2.9	0.1	0.9	0.5	0.5	-0.2	0.8	1.5	-0.2
Consumer Price Index (s.a., d)	1.4	1.0	0.9	1.1	1.0	1.0	0.8	1.1	1.5	1.6	1.7	2.1
CPI ex. Food and Energy (s.a., d)	2.2	2.3	2.2	2.1	2.2	2.2	2.2	2.3	2.2	2.1	2.1	2.2
Producer Price Index (n.s.a., d)	0.0	0.1	-0.1	0.2	0.0	0.2	0.0	0.0	0.6	1.1	1.3	1.7
Durable Goods Orders (a)	4.3	-3.3	2.0	3.2	-2.9	-4.3	3.6	0.2	0.3	5.0	-4.7	-0.9
Leading Economic Indicators (g)	-0.2	0.1	0.1	0.5	-0.2	0.2	0.5	-0.2	0.3	0.2	0.2	0.6
Balance of Trade & Services (f)	-43.4	-45.3	-37.4	-38.4	-41.5	-43.8	-41.3	-41.1	-38.5	-43.1	-46.4	-44.6
Federal Funds Rate (%)	0.34	0.38	0.36	0.37	0.37	0.38	0.39	0.40	0.40	0.40	0.41	0.54
3-Mo. Treasury Bill Rate (%)	0.26	0.31	0.29	0.23	0.27	0.27	0.30	0.30	0.29	0.33	0.45	0.51
10-Year Treasury Note Yield (%)	2.09	1.78	1.89	1.81	1.81	1.64	1.50	1.56	1.63	1.76	2.14	2.49

(a) month-over-month % change; (b) millions, saar; (c) month-over-month change, thousands; (d) year-over-year % change; (e) annualized % change; (f) \$ billions; (g) level. Most series are subject to frequent government revisions. Use with care.

Calendar Of Upcoming Economic Data Releases

Monday	Tuesday	Wednesday	Thursday	Friday
December 25 Christmas Day Markets Closed	26 S&P/Case-Shiller Home Price Index (Oct) Consumer Confidence (Dec, Conference Board) Dallas Fed Manufacturing (Dec) Richmond Fed Surveys (Dec)	27 Pending Home Sales (Nov) Dallas Fed Services (Dec) EIA Crude Oil Stocks	28 Chicago PMI (Dec) Advance Economic Indicators (Nov) Weekly Jobless Claims Weekly Money Supply	29
January 1 New Year's Day Markets Closed	2 IHSMARKIT Manufacturing PMI (Dec, Final)	3 ISM Manufacturing (Dec) Construction Spending (Nov) Light Vehicle Sales (Dec) EIA Crude Oil Stocks FOMC Minutes	4 ADP Employment (Dec) IHSMARKIT Services PMI (Dec, Final) Weekly Jobless Claims Weekly Money Supply	5 Employment (Dec) International Trade (Nov) ISM Non-Manufacturing (Dec) Factory Orders (Nov)
8 Consumer Credit (Nov)	9 NFIB survey (Dec) JOLTS (Nov)	10 Import Prices (Dec) Wholesale Trade (Nov) EIA Crude Oil Stocks Mortgage Applications	11 Producer Price Index (Dec) Federal Budget (Dec) Weekly Jobless Claims Weekly Money Supply	12 Retail Sales (Dec) Consumer Price Index (Dec) Business Inventories (Nov)
15 Martin Luther King, Jr. Day U.S. Markets Closed	16 Empire State Manufacturing (Jan)	17 Industrial Production (Dec) Beige Book NAHB Survey (Jan) Business Leaders Survey (Jan) TIC Data (Nov) EIA Crude Oil Stocks Mortgage Applications	18 Philadelphia Fed Manufacturing Survey (Jan) Housing Starts (Dec) Weekly Jobless Claims Weekly Money Supply	19 Consumer Sentiment (Jan, preliminary, University of Michigan)
22	23 Philadelphia Fed Nonmanufacturing survey (Jan) Richmond Fed Surveys (Dec)	24 IHSMARKIT Manufacturing PMI (Jan< Flash) IHSMARKIT Services PMI (Jan, Flash) Existing Home Sales (Dec) FHFA Home Price Index (Nov) EIA Crude Oil Stocks	25 Advance Economic Indicators (Dec) New Home Sales (Dec) Kansas City Fed survey (Jan) Weekly Jobless Claims Weekly Money Supply	26 Real GDP (Q4, Advance) Durable Goods (Dec)
29 Personal Income (Dec) Dallas Fed Manufacturing (Jan)	30 FOMC Meeting S&P/Case-Shiller Home Price Index (Nov) Consumer Confidence (Conference Board, Jan) Dallas Fed Services (Jan)	31 FOMC Meeting Statement 2:00 pm ADP Employment (Jan) Chicago PMI (Jan) Employment Cost Index (Q4) Pending Home Sales (Dec) EIA Crude Oil Stocks	February 1 IHSMARKIT Manufacturing PMI (Jan, Final) ISM Manufacturing (Jan) Light Vehicle Sales (Jan) Construction spending (Dec) Productivity and Costs (Q4, Preliminary) Weekly Jobless Claims Weekly Money Supply	2 Employment (Jan) Consumer Sentiment (Jan, final, University of Michigan) Factory Orders (Dec)

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