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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Consensus Still Looking For At Least Two Rate Hikes From Fed This Year

Domestic Commentary There were relatively minor changes over the past month in consensus forecasts of U.S. economic growth, inflation and interest rates during the next year and a half, according to our January 23rd-24th survey. Annual real GDP growth this year still is forecast to exceed that witnessed in 2016, but be little different than that seen in 2014 and 2015. Job growth will slow this year, but remain sufficiently strong enough to further lower the unemployment rate at the time when it has already dropped to what many analysts estimate is its natural rate. Above-trend economic growth and additional tightening of labor market conditions are forecast to help produce the largest annual change in consumer price inflation since 2011. The Federal Reserve is predicted to step up the pace at which it normalizes interest rates. After hiking rates only once in both 2015 and 2016, the Federal Open Market Committee (FOMC) is forecast to enact two to three 25-basis -point increases in 2017 and probably two to three more in 2018. A significant majority of our panelists also believe that the Fed will begin to shrink the size of its balance sheet by the end of 2018. The trade-weighted value of the U.S. dollar is forecast to creep a little higher over the course of this year before beginning to fall back in early 2018.

On a fundamental basis, 2017 appears to have started solid footing. Real GDP growth picked up noticeably in the second half of last year, comfortably exceeding its trend rate and displaying particularly good domestic demand. Job growth remains solid, albeit slower than a year ago, and wage gains have accelerated. Flash purchasing manager surveys for both the manufacturing and service sectors increased in January to their highest level in more than a year. Consumer and business confidence has risen to their highest level in years. And lastly, equity markets have recently hit record highs.

Nonetheless, our panelists admit that there is considerable uncertainty surrounding the economic outlook given the aggressive legislative agenda of the Trump administration and the Republican-controlled Congress, coupled with how the Federal Reserve would react to faster than expected economic growth and inflation that results from meaningful fiscal stimulus. This is particularly true of policy areas that are most important to the economic outlook—taxes, foreign trade, infrastructure spending and regulatory reform. House Speaker Paul Ryan is reportedly pushing to repeal and replace the Affordable Care Act (ACA) by April, fund President Trump's border wall with Mexico shortly thereafter, and approve sweeping tax reform legislation by August. However, specifics on many of these policies remains elusive. President Trump already has issued several executive orders dealing with the Keystone XL and Dakota Access oil pipelines, withdrawal of the U.S. from the Trans Pacific Partnership trade deal, the Mexico border wall, and enacted a temporary freeze on new regulations and government hiring. However, while the President has considerable executive power on trade policy and regulatory reform, action on tax reform, infrastructure spending, and elimination and replacement of the ACA must work its way through Congress where the chances of disagreement is high between Republicans and Democrats and among Republicans themselves.

On tax reform, for example, the House Republican plan calls for a 20% border tax on imports. Revenues from the tax would be used to offset planned cuts to taxes on individuals and corporations, in addition to funding plans for increased defense and infrastructure spending. It would also encourage increased domestic production and the relocation of production facilities from abroad. However, the border tax is vehemently opposed by retailers, oil refiners, automakers and others. Indeed, almost 80% of our panelists said in response to a special question this month that they do not expect to see a border tax component adopted as part of the tax reform legislation approved by Congress this year. Without it to offset other priorities of Republicans, however, federal deficits would balloon at a time when the Congressional Budget Office (CBO) already is warning of massive shortfalls beginning in 2019.

Even if we see less fiscal stimulus this year than markets now seem to be discounting, the Federal Reserve is likely to step up the pace of its rate hikes if, as expected, the economy grows at an above-trend rate, labor markets continue to tighten, and the rate of inflation picks up. The FOMC's December "dot plot" projected three 25-basis-point increases this year and more in 2018. Fedspeak since the December meeting has remained on the hawkish side with Fed Chair Yellen recently saying that "the economy is near maximum employment and inflation is moving towards (the Committee's) goal." She also warned that "allowing the economy to run markedly and persistently hot would be risky and unwise."

However, none of our panelists think the FOMC will announce any policy change at its January 31st-February 1st meeting. The policy statement will likely acknowledge the acceleration in economic growth during the second half of last year. While it will likely continue to characterize inflation trends as steady, it might also acknowledge that the personal consumption expenditures price index could soon reach 2.0% instead of saying it was likely to do so "over the medium term". The balance of risk assessment is likely to remain unchanged. The statement may leave out any specific reference to fiscal policy given all the uncertainty at the moment.

As for specifics of when the panelists do think the FOMC will next raise rates, 24.4% said in response to a special question that they believe the first rate hike from the FOMC in 2017 to come at its March 14th-15th meeting, 8.9% look for the first hike to come at the May 2nd-3rd meeting, and 57.8% said the FOMC would hold off until its June 13th-14th meeting. We had one panelist predict the first hike would occur at the July 25th-26th meeting and 6.7% of the panelists said the FOMC would hold off until its September 19th-20th meeting. Also in response to a special question, a bit more than half of the panelists expect only two 25 basis point rate increases from the FOMC in 2017, while almost 30% anticipate three quarter-point increases. Two panelists forecast only one 25 basis point increase in 2017, while 13.3 of the panelists foresee four quarter-point increases. Asked when the Fed would begin to allow its balance sheet to shrink, 14.3% of our panelists said during the 2nd half of this year, 31.3% predicted in the 1st half of 2018, 33.3% forecast the 2nd half of 2018, 11.9% chose the 1st half of 2019, and the rest said sometime later.

The consensus forecast of real GDP's growth rate in the current quarter slipped 0.1 of a percentage point to 2.2% (saar), but estimates of its rate of growth in Q2 through Q4 of this year went unchanged at 2.3%, 2.4% and 2.4%, respectively. The consensus forecast of real GDP growth in Q1 2018 also fell 0.1 of a percentage point to 2.4% (saar), but the forecast of Q2 2018 growth stayed at 2.5%. The GDP price index still is predicted by the consensus to register average quarterly increases of 2.1% (saar) over the next six quarters, while the Consumer Price Index is forecast to post average quarterly increases of 2.3% (saar) over the next year and a half.

Consensus Forecast Real GDP will grow at a slightly above-trend rate over the next year and a half and inflation will increase. In reaction, the FOMC will raise rates at least twice this year and perhaps by more if meaningful fiscal stimulus is approved by Congress. Interest rates are expected to increase with perhaps the largest increases in the middle of the yield curve. The foreign exchange value of the U.S. dollar will continue to strengthen until late this year *(see page 2)*.

Special Questions The consensus puts the odds of a U.S. recession this year at 16.1% and at 20.6% in 2018. It predicts that Congress will ultimately cut the federal corporate income tax rate to about 22% from its current level of 35%. The CPI is predicted to rise 2.4% December-over-December in 2017 and the core CPI 2.3% *(see page 14)*

Consensus Forecasts Of U.S. Interest Rates And Key Assumptions[1]

| | ------History------ | | | | ----Average For Month--- | | | Latest Qtr | Consensus Forecasts-Quarterly Avg. | | | | | |
| | ------Average For Week Ending------ | | | | | | | | 1Q | 2Q | 3Q | 4Q | 1Q | 2Q |
Interest Rates	Jan. 20	Jan. 13	Jan. 6	Dec. 31	Dec	Nov	Oct	4Q 2016*	2017	2017	2017	2017	2018	2018
Federal Funds Rate	0.66	0.66	0.60	0.66	0.54	0.41	0.39	0.45	0.7	0.8	1.0	1.1	1.3	1.6
Prime Rate	3.75	3.75	3.75	3.73	3.63	3.50	3.50	3.54	3.8	3.9	4.1	4.3	4.4	4.6
LIBOR, 3-mo.	1.03	1.02	1.01	1.00	0.97	0.90	0.88	0.92	1.0	1.2	1.3	1.5	1.7	1.9
Commercial Paper, 1-mo.	0.66	0.63	0.62	0.65	0.56	0.43	0.43	0.47	0.7	0.8	1.0	1.2	1.4	1.6
Treasury bill, 3-mo.	0.53	0.52	0.53	0.51	0.51	0.45	0.33	0.43	0.6	0.7	0.9	1.1	1.3	1.5
Treasury bill, 6-mo.	0.62	0.60	0.63	0.63	0.63	0.58	0.47	0.56	0.7	0.8	1.1	1.2	1.4	1.6
Treasury bill, 1 yr.	0.82	0.82	0.86	0.87	0.86	0.74	0.66	0.75	0.9	1.0	1.3	1.4	1.6	1.8
Treasury note, 2 yr.	1.21	1.20	1.21	1.24	1.19	0.98	0.84	1.00	1.2	1.4	1.5	1.7	1.9	2.0
Treasury note, 5 yr.	1.92	1.89	1.92	2.00	1.94	1.60	1.27	1.60	1.9	2.1	2.2	2.4	2.5	2.6
Treasury note, 10 yr.	2.43	2.38	2.43	2.51	2.47	2.14	1.76	2.12	2.5	2.6	2.7	2.9	3.0	3.1
Treasury note, 30 yr.	3.01	2.98	3.01	3.09	3.10	2.86	2.50	2.82	3.1	3.2	3.4	3.5	3.6	3.7
Corporate Aaa bond	4.04	4.02	4.05	4.14	4.18	4.00	3.69	3.96	4.1	4.2	4.4	4.5	4.6	4.8
Corporate Baa bond	4.64	4.63	4.67	4.75	4.81	4.66	4.34	4.60	4.9	5.0	5.2	5.3	5.4	5.6
State & Local bonds	3.67	3.67	3.73	3.75	3.78	3.51	3.35	3.55	3.7	3.8	3.9	4.1	4.2	4.3
Home mortgage rate	4.09	4.12	4.20	4.32	4.20	3.77	3.47	3.81	4.2	4.3	4.4	4.6	4.7	4.8

| | ------History------ | | | | | | | | Consensus Forecasts-Quarterly | | | | | |
| | 1Q | 2Q | 3Q | 4Q | 1Q | 2Q | 3Q | 4Q | 1Q | 2Q | 3Q | 4Q | 1Q | 2Q |
Key Assumptions	2015	2015	2015	2015	2016	2016	2016	2016*	2017	2017	2017	2017	2018	2018
Major Currency Index	89.4	89.9	91.8	93.1	93.3	89.6	90.3	93.7	94.8	95.3	95.6	95.7	95.5	95.1
Real GDP	2.0	2.6	2.0	0.9	0.8	1.4	3.5	1.9	2.2	2.3	2.4	2.4	2.4	2.5
GDP Price Index	-0.1	2.3	1.3	0.8	0.5	2.3	1.4	2.1	2.0	2.1	2.0	2.1	2.1	2.2
Consumer Price Index	-2.9	2.4	1.4	0.8	-0.3	2.5	1.6	3.4	2.5	2.3	2.4	2.4	2.3	2.3

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).

U.S. Treasury Yield Curve
Week ended January 20, 2017 and Year Ago vs.
1Q 2017 and 2Q 2018 Consensus Forecasts
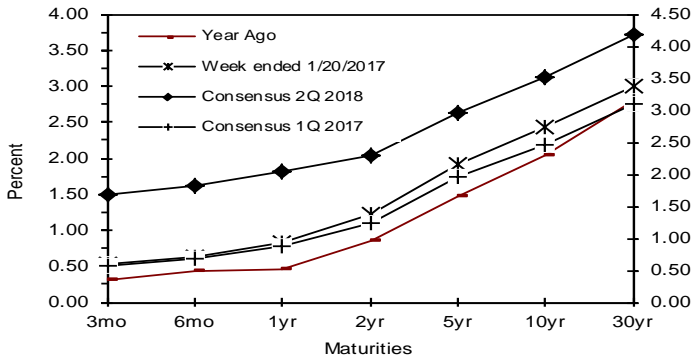
U.S. 3-Mo. T-Bills & 10-Yr. T-Note Yield
(Quarterly Average)
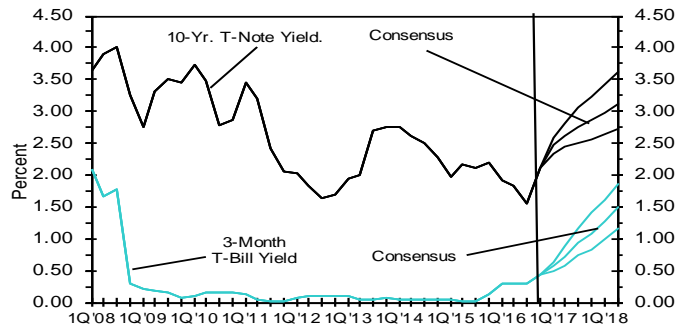
Corporate Bond Spreads
As of week ended January 20, 2017
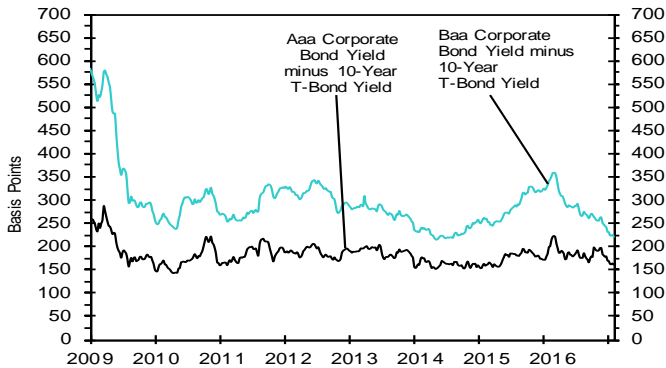
U.S. Treasury Yield Curve
As of week January 20, 2017
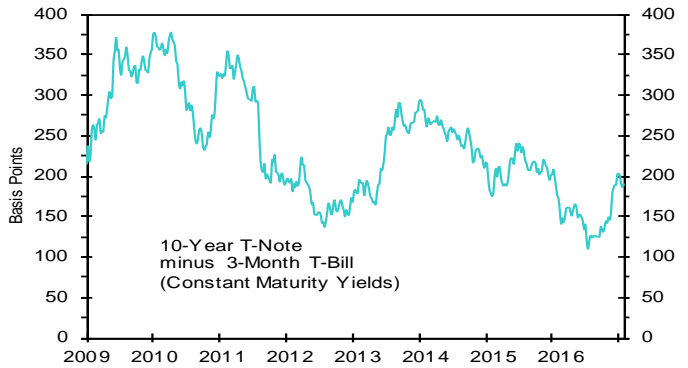
-------------3-Month Interest Rates[1]----------------

| | ----------History---------- | | | Consensus Forecasts Months From Now: | | |
	Latest:	Month Ago:	Year Ago:	3	6	12
U.S.	1.03	1.00	0.62	1.14	1.22	1.46
Japan	-0.01	-0.03	0.08	0.01	0.01	-0.11
U.K.	0.34	0.38	0.57	0.40	0.40	0.41
Switzerland	-0.73	-0.74	-0.75	-0.75	-0.75	-0.75
Canada	0.91	0.87	0.80	0.75	0.75	0.93
Australia	2.11	2.25	2.34	1.60	1.60	1.70
Eurozone	-0.33	-0.31	-0.14	-0.31	-0.30	-0.28

-----------10-Yr. Government Bond Yields[2]------

| | ----------History---------- | | | Consensus Forecasts Months From Now: | | |
	Latest:	Month Ago:	Year Ago:	3	6	12
U.S.	2.48	2.56	2.04	2.48	2.50	2.69
Germany	0.47	0.25	0.49	0.34	0.42	0.58
Japan	0.05	0.08	0.22	0.04	0.05	0.08
U.K.	1.42	1.55	1.80	1.42	1.51	1.63
France	0.90	0.77	0.87	0.78	0.79	0.90
Italy	2.13	1.84	1.65	1.85	1.96	2.13
Switzerland	-0.07	-0.02	-0.23	-0.09	-0.03	0.13
Canada	1.82	1.78	1.16	1.70	1.77	1.96
Australia	2.70	2.86	2.66	2.54	2.54	2.57
Spain	1.47	1.45	1.80	1.49	1.56	1.74

----------------Foreign Exchange Rates[1]-----------

| | ----------History---------- | | | Consensus Forecasts Months From Now: | | |
	Latest:	Month Ago:	Year Ago:	3	6	12
U.S.	94.963	96.022	95.411	96.8	96.8	96.9
Japan	115.30	117.74	118.37	116.2	116.8	119.4
U.K.	1.2319	1.2478	1.4308	1.21	1.21	1.21
Switzerland	1.0094	1.0258	1.0148	1.05	1.05	1.05
Canada	1.3327	1.3339	1.4153	1.34	1.35	1.32
Australia	0.7545	0.7298	0.7014	0.73	0.73	0.73
Euro	1.0630	1.0456	1.0814	1.03	1.03	1.04

| | Consensus 3-Month Rates vs. U.S. Rate | | | Consensus 10-Year Gov't Yields vs. U.S. Yield | |
	Now	In 12 Mo.		Now	In 12
Japan	-1.04	-1.57	Germany	-1.97	-2.11
U.K.	-0.69	-1.05	Japan	-2.39	-2.61
Switzerland	-1.76	-2.21	U.K.	-1.02	-1.06
Canada	-0.12	-0.54	France	-1.54	-1.78
Australia	1.08	0.24	Italy	-0.31	-0.56
Eurozone	-1.36	-1.74	Switzerland	-2.51	-2.56
			Canada	-0.62	-0.73
			Australia	0.26	-0.11
			Spain	-0.97	-0.95

Forecasts of panel members are on pages 10 and 11. Definitions of variables are as follows: [1]Three month rate on interest-earning money market deposits denominated in selected currencies. [2]Government 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.

International Commentary Following a pause from mid-December through mid-January, the risk-on reflation trade has reignited, lifting global equity markets to the detriment of prices for sovereign and other forms of debt. In part, this trade has been driven by the fundamentals of improved prospects for global growth and higher inflation. Real GDP growth in major developed markets like the U.S., U.K., Japan and the Eurozone exhibited better-than-expected strength in the second half of 2016. Moreover, recent purchasing manager survey data continue to indicate improvement as 2017 began. Inflation also has turned higher in developed economies, although not yet in emerging markets. To a degree the rise in headline inflation is simply due to fading base effects. Core inflation has crept up much more modestly. However, some of the rebound in inflation is likely attributable to a narrowing of output gaps in some nations.

Whatever the case, improving GDP growth and higher inflation also have begun to reshape central bank thinking. The Federal Reserve hiked rates at its December meeting and its updated "dot plot" implied three more quarter point increases were in store for this year. Fedspeak since December meeting has remained on the hawkish side with Fed Chair Yellen recently saying that "allowing the economy to run markedly and persistently hot would be risky and unwise." The potential of significant fiscal stimulus resulting from the Trump Administration's plans for tax reform, and increased infrastructure and defense spending, could add impetus to Yellen's concerns.

Despite earlier worries that the June Brexit vote might result in a recession, U.K. GDP growth in the second half of last year exceeded most all analysts' expectations, primarily on the back of robust consumer spending. However, inflation has turned noticeably upward, due to higher import prices resulting from the sharp decline in the foreign exchange value of the pound since the Brexit vote and a narrowing output gap. Indeed, inflation may soon exceed the Bank of England's 2.0% target on the way to 3.0% by the end of this year. That would put the squeeze on real incomes and consumer spending, forcing the Bank of England to walk a delicate tightrope between fighting inflation and preserving GDP growth and job gains. Adding to Carney's woes will be maneuvering monetary policy amid the Brexit negotiations with the European Union. The U.K.'s Supreme Court recently ruled that Prime Minister Theresa May's government must allow Parliament to vote on triggering Article 50 of the Lisbon Treaty that would kick off Brexit negotiations, a development that may delay May's plan to invoke Article 50 by March 31st.

For its part, the European Central Bank in December announced an extension of its bond buying program from March of 2017 to December of this year, but said it would cut the size of its monthly purchases from 80 billion to 60 billion euros. While ECB President Mario Draghi recently said the issue of tapering, or winding down, the size of the ECB's quantitative easing program had not yet been discussed, Sabine Lautenschlager, who sits on the ECB's six-member executive board, later said that the bank "must get ready for better times" and that she was "optimistic that we can soon turn to the question of an exit" from the QE program. Although improved, GDP growth has been slower and more halting in the Eurozone than in the U.S and U.K, thus output gaps remain wider. Moreover, while harmonized inflation has turned higher it still remains lower than in the U.S. or U.K. As a result, talk but no action on beginning to wind down the ECB's QE program will likely be the story for much of this year. However, last quarter investors in the Eurozone have turned into net sellers of foreign bonds for the first time in four years, lifting yilds across the Eurozone. More selling is likely in store.

Economic growth in Japan has also picked up and a weaker yen and better global growth holds the promise of stronger export demand, prompting the Bank of Japan to up its forecasts for GDP growth this year. Analysts no longer look for additional easing by the BoJ and if 10-year JGB yields creep higher the bank may raise its current 0% target for them *(see pages 10-11 for individual panelists' forecasts).*

First Quarter 2017
Interest Rate Forecasts
Key Assumptions

Blue Chip Financial Forecasts Panel Members	1 Federal Funds Rate	2 Prime Bank Rate	3 LIBOR Rate 3-Mo.	4 Com. Paper 1-Mo.	5 Treas. Bills 3-Mo.	6 Treas. Bills 6-Mo.	7 Treas. Bills 1-Yr.	8 Treas. Notes 2-Yr.	9 Treas. Notes 5-Yr.	10 Treas. Notes 10-Yr.	11 Treas. Bond 30-Yr.	12 Aaa Corp. Bond	13 Baa Corp. Bond	14 State & Local Bonds	15 Home Mtg. Rate	A. Fed's Major Currency $ Index	B. Real GDP	C. GDP Price Index	D. Cons. Price Index
Cycledata Corp.	0.9 H	4.0 H	1.4 H	0.9 H	0.7 H	0.9 H	1.0	1.3	2.0	2.5	3.1	4.1	5.0	3.7	4.2	94.0	2.7	2.2	2.6
J.P. Morgan Chase	0.8	na	0.9 L	na	na	na	na	1.2	2.0	2.5	3.1	na	na	na	na	na	2.0	2.0	2.5
High Frequency Economics	0.8	3.8 L	na	na	0.7 H	0.9 H	0.9	1.3	1.9	2.5	3.1	na	na	na	na	na	2.3	2.5	2.5
IHS Markit	0.8	3.8 L	1.1	na	0.6	0.7	1.1	1.3	2.1 H	2.6	3.1	4.1	5.0	3.9	4.0	na	2.4	3.0 H	2.7
Scotiabank Group	0.8	3.8 L	na	na	0.6	na	na	1.3	2.0	2.5	3.1	na	na	na	na	na	2.0	2.0	2.7
Moody's Analytics	0.8	3.9	1.1	0.7	0.3 L	0.4 L	0.7 L	1.1	2.1 H	2.7 H	3.4 H	4.5 H	5.6 H	3.7	4.2	na	2.9	1.1	3.6 H
MacroFin Analytics	0.7	3.8 L	1.1	0.7	0.6	0.7	0.9	1.3	2.0	2.6	3.1	4.1	5.0	3.4	4.2	95.8	2.0	2.0	2.4
Chase Wealth Management	0.7	3.8 L	1.1	0.8	0.6	0.7	0.9	1.3	1.9	2.6	3.2	4.1	4.7	3.7	4.2	94.8	2.1	2.0	2.1
Nat'l Assn. of Realtors	0.7	3.8 L	1.1	0.8	0.6	0.7	0.8	1.3	2.0	2.5	3.1	4.1	4.7	3.8	4.2	na	2.5	1.9	2.2
Wells Fargo	0.7	3.8 L	1.0	0.7	0.6	0.6	0.8	1.2	1.9	2.4	3.0	4.1	4.9	3.7	4.2	94.5	2.2	2.1	2.5
RDQ Economics	0.7	3.8 L	1.1	0.7	0.6	0.7	1.0	1.2	1.9	2.5	3.1	4.0	4.7	3.8	4.2	95.3	2.2	2.1	2.5
Naroff Economic Advisors	0.7	3.8 L	1.1	0.7	0.6	0.7	0.9	1.3	2.0	2.6	3.1	4.3	4.9	4.0 H	4.3 H	95.5	2.6	2.7	2.9
Amherst Pierpont Securities	0.7	3.8 L	1.1	0.8	0.7 H	0.9 H	1.1 H	1.3	2.1 H	2.6	3.2	4.1	4.9	3.9	4.3 H	95.5	2.3	2.2	3.1
Chmura Economics & Analytics	0.7	3.8 L	1.0	0.7	0.6	0.6	0.9	1.2	1.9	2.4	3.0	na	na	na	4.1	92.1 L	2.2	1.9	2.0
Regions Financial Corporation	0.7	3.8 L	1.1	0.8	0.6	0.7	0.9	1.2	2.0	2.5	3.1	4.1	4.9	3.7	4.2	95.2	1.8	1.9	2.9
DePrince & Associates	0.7	3.8 L	1.0	0.7	0.6	0.7	0.8	1.3	2.0	2.5	3.1	3.2 L	4.6	3.7	4.2	95.3	2.4	2.1	2.3
Nomura Securities, Inc.	0.7	na	1.1	na	na	na	na	1.1	1.7 L	2.2	2.7 L	4.3	5.0	na	4.1	na	2.1	1.6	2.3
GLC Financial Economics	0.7	3.8 L	1.0	0.7	0.6	0.7	0.8	1.1	1.9	2.5	3.1	3.8	4.5 L	3.7	4.2	94.6	3.0 H	1.9	2.4
AIG	0.7	na	na	na	0.5	0.6	0.9	1.3	2.0	2.5	3.1	na	4.8	na	4.2	na	2.7	1.9	2.7
MUFG Union Bank	0.7	3.8 L	1.0	0.7	0.6	0.7	0.9	1.3	2.0	2.4	3.0	4.0	4.8	3.0	4.1	95.0	2.5	0.7 L	3.1
Wells Capital Management	0.6 L	3.8 L	1.0	0.6 L	0.5	0.6	1.0	1.2	2.0	2.5	3.1	4.0	4.7	3.9	4.3	94.7	2.0	1.7	2.3
Loomis, Sayles & Company	0.6 L	3.8 L	1.1	0.6 L	0.6	0.7	0.9	1.2	1.9	2.5	3.1	4.1	4.9	3.7	4.1	95.2	2.2	1.7	2.4
S&P Global	0.6 L	3.8 L	1.1	na	0.6	0.7	0.8	1.2	1.9	2.4	3.0	4.1	4.6	na	4.1	94.7	1.8	1.9	1.5 L
Moody's Capital Markets Group	0.6 L	3.8 L	1.0	0.7	0.5	0.7	0.8	1.2	2.1 H	2.4	3.1	4.1	4.7	3.7	4.1	95.5	2.2	1.9	1.7
Georgia State University	0.6 L	3.8 L	na	na	0.5	0.7	0.9	1.3	2.0	2.6	3.1	4.0	5.0	na	4.2	na	2.7	2.0	1.8
RBC Capital Markets	0.6 L	na	na	na	na	na	na	1.2	1.9	2.4	3.0	na	na	na	na	na	2.7	1.4	1.9
Economist Intelligence Unit	0.6 L	3.8 L	1.0	0.7	0.6	0.7	0.9	1.2	2.0	2.6	3.1	na	na	na	4.2	na	2.0	na	2.1
PNC Financial Services Corp.	0.6 L	3.8 L	1.1	na	0.6	0.7	0.9	1.3	2.0	2.5	3.2	na	4.8	3.8	4.2	94.2	2.0	1.9	2.2
Daiwa Capital Markets America	0.6 L	3.8 L	1.0	0.7	0.6	0.7	0.9	1.2	2.0	2.5	3.1	4.1	4.8	3.9	4.1	94.0	2.3	1.9	2.2
BNP Paribas Americas	0.6 L	na	0.9 L	na	na	na	na	1.3	2.1 H	2.6	na	na	na	na	na	na	2.1	na	2.3
The Northern Trust Company	0.6 L	3.8 L	1.0	0.6 L	0.6	0.7	0.9	1.2	1.9	2.5	3.2	4.1	4.8	3.9	4.2	na	1.9	2.3	2.4
Fannie Mae	0.6 L	3.8 L	na	na	0.6	0.7	0.9	1.2	1.9	2.4	3.0	na	na	na	4.1	na	2.2	1.4	2.7
DS Economics	0.6 L	3.8 L	1.0	0.7	0.5	0.7	0.9	1.2	2.0	2.5	3.1	4.1	4.8	2.9 L	4.2	94.5	2.6	1.7	2.7
NatWest Markets	0.6 L	3.8 L	1.1	0.6 L	0.6	0.7	0.9	1.0 L	1.7 L	2.3	3.1	4.0	4.7	3.8	4.1	95.0	2.1	2.1	2.8
Oxford Economics	0.6 L	3.8 L	1.1	na	0.6	0.7	1.0	1.3	2.0	2.5	3.1	na	na	na	4.2	96.5 H	2.4	1.7	2.9
Swiss Re	0.6 L	3.8 L	1.0	0.6 L	0.5	0.6	0.9	1.2	1.9	2.5	3.3	4.2	5.0	na	4.3 H	na	1.2 L	3.0 H	3.0
Comerica Bank	0.6 L	3.8 L	1.0	na	0.6	0.7	0.9	1.2	2.0	2.5	3.2	na	na	na	4.3 H	na	2.6	1.9	3.2
Action Economics	0.6 L	3.8 L	1.0	0.7	0.6	0.7	0.9	1.3	2.0	2.5	3.4 H	4.4	5.3	3.4	3.8 L	93.7	2.3	2.4	3.3
BMO Capital Markets	0.6 L	3.8 L	1.1	na	0.5	0.6	0.9	1.3	2.0	2.5	3.1	na	na	na	4.2	96.1	2.2	2.2	3.5
Goldman Sachs	0.6 L	na	1.0	na	0.5	na	na	1.3	2.0	2.5	3.1	na	na	na	3.8 L	na	2.0	2.5	3.5
Barclays Capital	0.6 L	3.8 L	1.0	na	na	na	na	1.2	1.7 L	2.3	3.0	na	na	na	na	na	2.0	2.3	2.5
RidgeWorth Investments	0.6 L	3.8 L	1.0	0.7	0.5	0.6	0.8	1.0	1.7 L	2.2 L	2.9	4.1	4.9	3.8	4.0	95.0	2.5	2.0	2.2
Societe Generale	0.6 L	3.8 L	na	na	na	na	na	1.2	1.8	2.4	3.2	na	na	na	na	na	2.5	2.0	2.2
Stone Harbor Investment Partners	0.6 L	3.8 L	1.0	0.7	0.6	0.7	0.8	1.3	1.9	2.5	3.1	4.2	5.5	na	4.3 H	94.0	2.0	1.6	2.3
Bank of America Merrill Lynch	0.6 L	na	1.1	na	na	na	na	1.4 H	2.1 H	2.6	3.3	na	na	na	na	na	1.5	2.1	3.2
February Consensus	**0.7**	**3.8**	**1.0**	**0.7**	**0.6**	**0.7**	**0.9**	**1.2**	**1.9**	**2.5**	**3.1**	**4.1**	**4.9**	**3.7**	**4.2**	**94.8**	**2.2**	**2.0**	**2.5**
Top 10 Avg.	0.7	3.8	1.1	0.8	0.6	0.8	1.0	1.3	2.1	2.6	3.2	4.2	5.1	3.9	4.3	95.6	2.7	2.5	3.2
Bottom 10 Avg.	0.6	3.8	1.0	0.6	0.5	0.6	0.8	1.1	1.8	2.3	3.0	3.9	4.7	3.5	4.0	94.0	1.8	1.5	2.0
January Consensus	0.7	3.8	1.1	0.7	0.6	0.7	0.9	1.2	1.9	2.4	3.1	4.1	5.0	3.7	4.2	95.2	2.3	2.0	2.3
Number of Forecasts Changed From A Month Ago:																			
Down	4	2	10	7	19	24	24	18	15	18	18	16	18	10	16	10	10	8	5
Same	35	32	22	12	16	10	7	17	15	13	13	6	5	6	12	9	27	23	20
Up	6	4	6	6	3	2	5	10	15	14	13	5	5	8	9	7	8	12	20
Diffusion Index	52 %	53 %	45 %	48 %	29 %	19 %	24 %	41 %	50 %	46 %	44 %	30 %	27 %	46 %	41 %	44 %	48 %	55 %	67 %

Second Quarter 2017

Interest Rate Forecasts

Key Assumptions

Blue Chip Financial Forecasts Panel Members	1 Federal Funds Rate	2 Prime Bank Rate	3 LIBOR Rate 3-Mo.	4 Com. Paper 1-Mo.	5 Treas. Bills 3-Mo.	6 Treas. Bills 6-Mo.	7 Treas. Bills 1-Yr.	8 Treas. Notes 2-Yr.	9 Treas. Notes 5-Yr.	10 Treas. Notes 10-Yr.	11 Treas. Bond 30-Yr.	12 Aaa Corp. Bond	13 Baa Corp. Bond	14 State & Local Bonds	15 Home Mtg. Rate	A. Fed's Major Currency $ Index	B. Real GDP	C. GDP Price Index	D. Cons. Price Index
Chmura Economics & Analytics	1.1 H	4.1 H	1.4 H	1.1 H	1.0 H	1.1	1.4 H	1.7 H	2.4 H	2.9	3.6 H	na	na	na	4.5	91.8 L	2.8	1.8	2.1
IHS Markit	1.0	3.8	1.3	na	0.8	0.9	1.1	1.4	2.1	2.6	3.2	4.1	5.0	3.9	4.2	na	2.3	2.3	2.2
MacroFin Analytics	1.0	4.1 H	1.4 H	0.9	0.9	1.0	1.2	1.6	2.3	2.9	3.5	4.5	5.4	3.5	4.5	96.0	2.3	1.8	2.5
Scotiabank Group	1.0	4.1 H	na	na	0.8	na	na	1.4	2.1	2.6	3.2	na	na	na	na	na	2.1	2.0	2.6
High Frequency Economics	1.0	na	na	na	0.9	1.1	1.1	1.5	2.1	2.7	3.3	na	na	na	na	na	2.3	2.6 H	2.6
Amherst Pierpont Securities	0.9	4.1 H	1.4 H	1.0	1.0 H	1.2 H	1.4 H	1.6	2.3	2.9	3.6 H	4.5	5.2	4.2 H	4.6	96.5	2.6	2.1	3.1 H
Nomura Securities, Inc.	0.9	na	1.4 H	na	na	na	na	1.4	2.2	2.8	3.1	4.7 H	5.4	na	4.8 H	na	2.0	1.6	1.3 L
DePrince & Assoc.	0.9	3.9	1.3	1.0	0.9	0.9	1.1	1.5	2.3	2.6	3.1	3.7 L	5.0	3.8	4.4	95.1	2.8	2.3	2.5
Moody's Analytics	0.9	4.0	1.2	0.8	0.5 L	0.6 L	0.8 L	1.1 L	2.0	2.8	3.5	4.7 H	5.8 H	3.8	4.4	na	2.8	1.6	2.5
Chase Wealth Management	0.9	4.0	1.3	1.0	0.9	1.0	1.1	1.5	2.2	2.8	3.4	4.4	5.0	4.0	4.5	94.9	2.2	2.1	2.2
Nat'l Assn. of Realtors	0.9	4.0	1.2	1.0	0.8	0.9	1.1	1.4	2.1	2.6	3.3	4.2	4.9	3.9	4.3	na	2.2	2.3	2.3
RDQ Economics	0.9	3.9	1.3	0.9	0.9	1.1	1.3	1.5	2.1	2.6	3.2	4.1	4.7	3.9	4.3	96.3	2.0	2.2	2.5
Cycledata Corp.	0.9	4.0	1.4 H	1.0	0.9	1.0	1.2	1.4	2.0	2.6	3.2	4.2	5.1	3.8	4.3	94.0	2.9	2.3	2.7
MUFG Union Bank	0.9	4.0	1.3	1.0	0.8	0.9	1.1	1.6	2.5	3.1	4.2	5.0	3.1	4.2	92.0	2.5	2.5	3.1 H		
GLC Financial Economics	0.9	4.0	1.2	0.9	0.8	0.9	1.0	1.2	2.0	2.5	3.2	4.0	4.8	3.8	4.5	94.5	3.4 H	2.4	2.2
J.P. Morgan Chase	0.9	na	1.2	na	na	na	na	1.3	2.0	2.5	3.1	na	na	na	na	na	2.0	2.0	2.3
Naroff Economic Advisors	0.9	3.9	1.2	0.9	0.9	1.0	1.2	1.5	2.3	2.8	3.4	4.5	5.2	4.2 H	4.6	96.5	2.3	2.4	3.1 H
Regions Financial Corporation	0.8	3.8 L	1.1	0.9	0.7	0.8	1.0	1.4	2.1	2.6	3.2	4.2	5.0	3.9	4.3	95.7	2.3	1.6	2.4
Georgia State University	0.8	3.9	na	na	0.7	0.8	1.0	1.4	2.2	3.0 H	3.2	4.4	5.2	na	4.8 H	na	2.5	2.5	2.6
DS Economics	0.8	3.9	1.2	0.9	0.7	0.8	1.0	1.3	2.0	2.5	3.2	4.2	4.9	2.9 L	4.2	95.0	2.1	2.2	2.9
RBC Capital Markets	0.8	na	na	na	na	na	na	1.3	2.0	2.5	3.1	na	na	na	na	na	2.6	1.9	1.4
Swiss Re	0.8	3.9	1.0	0.7	0.6	0.7	1.0	1.3	2.0	2.5	3.5	4.3	5.3	na	4.3	na	2.0	0.9 L	1.9
Goldman Sachs & Co.	0.8	na	1.2	na	0.7	na	na	1.5	2.2	2.6	3.2	na	na	na	4.0	na	2.3	2.2	2.5
Action Economics	0.7	3.8 L	1.0	0.8	0.7	0.9	1.0	1.4	2.1	2.6	3.5	4.5	5.4	3.4	3.9 L	94.8	2.6	2.5	2.1
BMO Capital Markets	0.7	3.8 L	1.1	na	0.6	0.7	1.0	1.4	2.1	2.6	3.1	na	na	na	4.2	97.6 H	2.5	2.0	2.5
S&P Global	0.7	3.9	1.2	na	0.7	0.8	0.9	1.2	2.0	2.5	3.1	4.2	4.8	na	4.2	95.5	2.5	2.4	3.1 H
Wells Fargo	0.7	3.9	1.1	0.8	0.7	0.7	0.9	1.3	2.0	2.5	3.1	4.2	5.0	3.8	4.3	95.8	2.6	2.0	2.2
RidgeWorth Investments	0.7	3.8 L	1.1	0.7	0.6	0.7	0.9	1.1 L	1.8 L	2.3 L	3.1	4.2	4.9	4.0	4.1	94.0	2.5	2.2	2.2
Societe Generale	0.7	3.8 L	na	na	na	na	na	1.4	2.1	2.6	3.4	na	na	na	na	na	2.2	2.1	1.5
Loomis, Sayles & Company	0.7	3.8 L	1.1	0.7	0.6	0.8	1.1	1.4	2.0	2.5	3.2	4.2	4.9	3.7	4.1	96.4	1.9	2.2	2.3
The Northern Trust Company	0.7	3.8 L	1.1	0.7	0.7	0.8	1.0	1.2	1.9	2.5	3.2	4.1	4.8	3.9	4.2	na	1.9	2.3	2.4
Moody's Capital Markets Group	0.7	3.8 L	1.1	0.7	0.6	0.7	1.0	1.3	2.2	2.4	3.0 L	4.0	4.6 L	3.7	4.1	96.8	2.3	1.9	1.6
NatWest Markets	0.7	3.8 L	1.2	0.7	0.7	0.9	1.0	1.2	1.9	2.5	3.4	4.2	4.9	4.0	4.3	96.0	2.2	1.9	1.9
Oxford Economics	0.7	3.8 L	1.2	na	0.7	0.8	1.0	1.4	2.0	2.6	3.3	na	na	na	4.2	97.0	2.0	1.8	2.0
PNC Financial Services Corp.	0.7	3.8 L	1.2	na	0.7	0.9	1.1	1.4	2.0	2.6	3.3	na	4.9	3.9	4.3	94.5	2.3	2.0	2.2
Economist Intelligence Unit	0.7	3.8 L	1.1	0.8	0.7	0.8	0.9	1.3	2.1	2.6	3.2	na	na	na	4.3	na	2.4	na	2.2
Fannie Mae	0.7	3.8 L	na	na	0.7	0.9	1.1	1.4	2.0	2.5	3.0 L	na	na	na	4.2	na	2.1	2.0	2.9
Comerica Bank	0.7	3.8 L	1.1	na	0.7	0.8	1.0	1.3	2.2	2.6	3.4	na	na	na	4.4	na	3.0	2.0	2.9
Daiwa Capital Markets America	0.7	3.8 L	1.1	0.7	0.6	0.8	0.9	1.5	2.1	2.6	3.2	4.2	4.9	3.9	4.3	94.0	2.2	2.0	2.2
Stone Harbor Investment Partners	0.7	3.8 L	1.0	0.7	0.6	0.7	0.9	1.4	2.2	2.7	3.4	4.4	5.4	na	4.2	96.0	2.1	2.1	2.5
AIG	0.7	na	na	na	0.5 L	0.7	0.9	1.2	1.9	2.4	3.0 L	4.8	na	4.1	na	2.5	1.8	2.9		
BNP Paribas Americas	0.6 L	na	0.9 L	na	Treas.	Treas.	Treas.	1.5	2.2	2.7	Treas.	na	na	na	na	na	2.3	na	1.8
Wells Capital Management	0.6 L	3.8 L	1.0	0.6 L	0.5 L	0.7	1.1	1.3	2.1	2.6	3.2	4.1	4.9	4.0	4.4	94.8	2.8	1.9	2.3
Barclays Capital	0.6 L	3.8 L	1.1	na	na	na	na	1.3	1.8 L	2.4	3.2	na	na	na	na	na	1.5 L	2.2	2.0
Bank of America Merrill Lynch	0.6 L	na	1.3	na	na	na	na	1.5	2.2	2.6	3.3	na	na	na	na	na	1.5 L	1.7	1.4
February Consensus	**0.8**	**3.9**	**1.2**	**0.8**	**0.7**	**0.8**	**1.0**	**1.4**	**2.1**	**2.6**	**3.2**	**4.2**	**5.0**	**3.8**	**4.3**	**95.3**	**2.3**	**2.1**	**2.3**
Top 10 Avg.	1.0	4.0	1.3	1.0	0.9	1.0	1.2	1.6	2.3	2.8	3.5	4.5	5.3	4.0	4.5	96.5	2.8	2.4	2.9
Bottom 10 Avg.	0.6	3.8	1.0	0.7	0.6	0.7	0.9	1.2	1.9	2.4	3.1	4.0	4.8	3.5	4.1	93.9	1.9	1.6	1.7
January Consensus	0.8	3.9	1.2	0.9	0.8	0.9	1.1	1.4	2.1	2.6	3.2	4.3	5.1	3.8	4.3	95.6	2.3	2.1	2.4

Number of Forecasts Changed From A Month Ago:

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	A	B	C	D
Down	7	3	9	8	15	21	20	14	14	15	14	14	14	11	16	12	8	16	19
Same	34	29	21	14	20	15	13	20	20	20	15	7	8	8	12	9	26	24	16
Up	4	4	8	4	3	0	3	11	11	10	14	7	6	6	9	5	11	3	10
Diffusion Index	47 %	51 %	49 %	42 %	34 %	21 %	26 %	47 %	47 %	44 %	50 %	38 %	36 %	40 %	41 %	37 %	53 %	35 %	40 %

Third Quarter 2017
Interest Rate Forecasts

Key Assumptions

Blue Chip Financial Forecasts Panel Members	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 Mtg. Rate	Fed's Major Currency $ Index	Real GDP	GDP Price Index	Cons. Price Index
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	A.	B.	C.	D.
Chmura Economics & Analytics	1.4 H	4.4 H	1.8 H	1.5 H	1.3 H	1.5	1.8 H	2.1 H	2.8 H	3.3	4.0 H	na	na	na	4.9	90.7	2.4	1.9	2.4
IHS Markit	1.3	4.0	1.5	na	1.0	1.2	1.4	1.5	2.2	2.7	3.3	4.2	5.1	4.0	4.3	na	2.2	2.1	2.0
Scotiabank Group	1.3	4.4 H	na	na	1.1	na	na	1.5	2.2	2.7	3.2	na	na	na	na	na	2.3	2.0	2.7
MacroFin Analytics	1.2	4.3	1.6	1.2	1.1	1.2	1.5	1.9	2.6	3.1	3.8	4.7	5.6	3.7	4.7	97.0	2.2	1.9	2.2
RDQ	1.2	4.2	1.6	1.2	1.3 H	1.5 H	1.7	1.8	2.3	2.8	3.4	4.2	4.9	4.3	4.5	98.0	2.0	2.2	2.6
Amherst Pierpont Securities	1.2	4.3	1.6	1.3	1.2	1.5 H	1.7	1.9	2.5	3.1	3.8	4.7	5.5	4.4	4.9	97.5	2.9	2.2	3.4 H
MUFG Union Bank	1.2	4.3	1.5	1.2	1.1	1.2	1.5	1.8	2.3	2.7	3.2	4.4	5.2	3.2	4.4	90.0 L	2.4	1.8	2.6
High Frequency Economics	1.1	4.3	na	na	1.0	1.2	1.3	1.6	2.2	2.8	3.4	na	na	na	na	na	2.7	2.7 H	2.7
Naroff Economic Advisors	1.1	4.2	1.5	1.2	1.2	1.3	1.5	1.8	2.7	3.2	3.7	4.8	5.5	4.7 H	4.9	97.0	3.3 H	2.6	2.8
Nat'l Assn. of Realtors	1.1	4.2	1.3	1.1	1.0	1.1	1.3	1.6	2.3	2.8	3.3	4.4	5.0	4.0	4.5	na	2.3	2.2	2.4
Cycledata Corp.	1.1	4.3	1.5	1.2	1.1	1.2	1.4	1.6	2.2	2.8	3.4	4.4	5.3	4.0	4.5	95.0	2.9	2.3	2.7
DePrince & Assoc.	1.1	4.1	1.5	1.2	1.1	1.1	1.3	1.7	2.4	2.7	3.2	3.9 L	5.2	3.9	4.5	94.7	2.7	2.3	2.6
Moody's Analytics	1.1	4.2	1.3	0.9 L	0.5 L	0.7 L	0.9 L	1.2 L	2.2	3.1	3.8	5.1 H	6.1 H	4.1	4.6	na	2.6	2.0	2.5
GLC Financial Economics	1.1	4.2	1.3	1.1	1.0	1.0	1.1	1.3	2.1	2.6	3.3	4.2	5.0	3.9	4.5	94.0	3.2	2.1	2.6
Swiss Re	1.0	4.1	1.3	0.9 L	0.8	0.9	1.1	1.4	2.1	2.6	3.5	4.4	5.4	na	4.4	na	2.3	0.6 L	1.6 L
Goldman Sachs & Co.	1.0	na	1.4	na	0.9	na	na	1.7	2.4	2.8	3.3	na	na	na	4.1 L	na	2.3	2.1	2.3
J.P. Morgan Chase	1.0	na	1.3	na	na	na	na	1.5	2.2	2.7	3.2	na	na	na	na	na	1.8	2.0	2.4
Action Economics	1.0	4.1	1.1	1.1	1.0	1.0	1.2	1.5	2.1	2.6	3.6	4.6	5.5	3.5	4.1 L	94.7	2.6	1.9	2.4
Comerica Bank	0.9 L	4.1	1.4	na	0.9	1.0	1.2	1.6	2.5	2.9	3.7	na	na	na	4.7	na	2.6	2.2	2.9
Nomura Securities, Inc.	0.9 L	na	1.4	na	na	na	na	1.3	2.0	2.5	2.9 L	4.5	5.2	na	4.5	na	2.0	1.6	2.2
DS Economics	0.9 L	4.0	1.3	1.0	0.8	1.0	1.2	1.4	2.1	2.6	3.2	4.2	5.0	3.0 L	4.2	95.0	2.0	2.3	2.2
Regions Financial Corporation	0.9 L	4.0	1.2	0.9 L	0.8	1.0	1.1	1.5	2.2	2.8	3.3	4.3	5.1	4.0	4.4	96.0	2.1	1.7	2.1
AIG	0.9 L	na	na	na	0.8	0.9	1.0	1.2 L	1.9 L	2.4 L	3.1	na	4.9	na	4.1	na	2.4	2.0	2.2
Chase Wealth Management	0.9 L	4.0	1.3	1.1	0.9	1.0	1.2	1.5	2.2	2.9	3.5	4.4	5.0	4.0	4.5	95.0	2.5	2.1	2.2
Daiwa Capital Markets America	0.9 L	4.1	1.3	1.0	0.9	1.0	1.2	1.8	2.4	2.8	3.3	4.4	5.1	4.2	4.5	95.0	2.3	2.0	2.3
Wells Fargo	0.9 L	4.0	1.3	0.9 L	0.8	0.9	1.1	1.4	2.1	2.6	3.2	4.3	5.1	3.8	4.4	97.3	2.4	1.9	2.5
The Northern Trust Company	0.9 L	4.0	1.3	0.9 L	0.9	1.1	1.3	1.7	2.2	2.8	3.6	4.3	5.3	4.1	4.4	na	2.0	2.0	2.1
Fannie Mae	0.9 L	4.0	na	na	1.0	1.1	1.3	1.5	2.2	2.6	3.1	na	na	na	4.2	na	1.9	2.1	2.2
Societe Generale	0.9 L	4.0	na	na	na	na	na	1.5	2.2	2.7	3.5	na	na	na	na	na	2.1	2.1	2.2
Loomis, Sayles & Company	0.9 L	4.0	1.3	0.9 L	0.8	1.0	1.4	1.6	2.1	2.6	3.2	4.3	5.0	3.7	4.2	97.1	2.2	2.2	2.2
Oxford Economics	0.9 L	4.0	1.4	na	0.9	1.0	1.2	1.6	2.1	2.7	3.4	na	na	na	4.3	97.5	2.7	1.8	2.2
Moody's Capital Markets Group	0.9 L	4.0	1.3	0.9 L	0.8	0.9	1.1	1.3	2.2	2.4 L	3.0	3.9	4.6 L	3.7	4.1 L	97.5	2.1	1.9	2.3
Georgia State University	0.9 L	4.1	na	na	0.8	0.9	1.1	1.4	2.5	3.5 H	3.7	4.6	5.4	na	5.0 H	na	1.2 L	2.0	2.3
PNC Financial Services Corp.	0.9 L	4.0	1.3	na	0.9	1.0	1.2	1.6	2.1	2.7	3.5	na	5.0	3.9	4.4	94.6	2.7	2.0	2.3
Economist Intelligence Unit	0.9 L	3.9 L	1.3	1.0	0.9	1.1	1.1	1.5	2.3	2.9	3.4	na	na	na	4.5	na	3.2	na	2.3
Wells Capital Management	0.9 L	4.0	1.3	1.0	0.9	1.0	1.4	1.7	2.3	2.7	3.3	4.2	5.0	4.1	4.5	95.3	2.4	1.9	2.4
S&P Global	0.9 L	4.0	1.3	na	0.7	0.9	1.0	1.3	2.1	2.6	3.2	4.4	4.9	na	4.3	95.6	2.6	2.2	2.4
RBC Capital Markets	0.9 L	na	na	na	na	na	na	1.5	2.2	2.7	3.3	na	na	na	na	na	2.6	2.0	2.5
BNP Paribas Americas	0.9 L	na	0.9 L	na	na	na	na	1.8	2.5	2.8	na	na	na	na	na	na	2.7	na	2.5
BMO Capital Markets	0.9 L	4.0	1.3	na	0.8	0.9	1.1	1.6	2.2	2.6	3.1	na	na	na	4.3	99.0 H	2.7	2.1	2.6
Barclays Capital	0.9 L	4.0	1.3	na	na	na	na	1.4	1.9 L	2.4 L	3.2	na	na	na	na	na	2.5	2.2	2.2
Bank of America Merrill Lynch	0.9 L	na	1.3	na	1.3 H	na	na	1.6	2.2	2.7	3.4	na	na	na	na	na	2.3	1.9	2.2
Stone Harbor Investment Partners	0.9 L	4.0	1.2	0.9 L	0.8	0.9	1.1	1.5	2.1	2.7	3.3	4.3	5.3	na	4.5	97.0	2.0	1.9	2.3
RidgeWorth Investments	0.9 L	4.0	1.3	0.9 L	0.7	0.9	1.1	1.3	1.9 L	2.5	3.2	4.3	5.0	4.2	4.2	93.0	2.5	2.2	2.3
NatWest Markets	0.9 L	4.0	1.3	0.9 L	0.9	1.1	1.3	1.3	2.1	2.8	3.6	4.3	4.9	4.2	4.5	97.0	2.4	2.0	2.4
February Consensus	**1.0**	**4.1**	**1.3**	**1.0**	**0.9**	**1.1**	**1.3**	**1.5**	**2.2**	**2.7**	**3.4**	**4.4**	**5.2**	**3.9**	**4.4**	**95.6**	**2.4**	**2.0**	**2.4**
Top 10 Avg.	1.2	4.3	1.5	1.2	1.2	1.3	1.5	1.8	2.5	3.1	3.7	4.6	5.5	4.2	4.7	97.5	2.9	2.3	2.8
Bottom 10 Avg.	0.9	4.0	1.2	0.9	0.7	0.9	1.1	1.3	2.0	2.5	3.1	4.2	4.9	3.6	4.2	93.7	1.9	1.7	2.1
January Consensus	1.0	4.1	1.4	1.1	1.0	1.1	1.3	1.6	2.2	2.7	3.3	4.4	5.2	3.9	4.4	95.9	2.4	2.1	2.4
Number of Forecasts Changed From A Month Ago:																			
Down	4	2	8	8	12	14	18	10	11	9	11	11	14	6	9	12	6	16	11
Same	39	33	25	15	23	21	17	25	23	26	23	11	8	8	15	7	31	24	22
Up	2	3	5	3	4	1	1	10	11	10	10	6	7	9	13	6	8	3	12
Diffusion Index	48 %	51 %	46 %	40 %	40 %	32 %	26 %	50 %	50 %	51 %	49 %	41 %	38 %	57 %	55 %	38 %	52 %	35 %	51 %

Fourth Quarter 2017

Interest Rate Forecasts   **Key Assumptions**

Blue Chip Financial Forecasts Panel Members	1 Federal Funds Rate	2 Prime Bank Rate	3 LIBOR Rate 3-Mo.	4 Com. Paper 1-Mo.	5 Treas. Bills 3-Mo.	6 Treas. Bills 6-Mo.	7 Treas. Bills 1-Yr.	8 Treas. Notes 2-Yr.	9 Treas. Notes 5-Yr.	10 Treas. Notes 10-Yr.	11 Treas. Bond 30-Yr.	12 Aaa Corp. Bond	13 Baa Corp. Bond	14 State & Local Bonds	15 Home Mtg. Rate	A. Fed's Major Currency $ Index	B. Real GDP	C. GDP Price Index	D. Cons. Price Index
Chmura Economics & Analytics	1.8 H	4.8 H	2.2 H	1.9 H	1.6 H	1.9 H	2.2 H	2.5 H	3.2 H	3.7 H	4.4 H	na	na	na	5.3 H	89.6 L	2.8	1.6	2.3
IHS Markit	1.5	4.3	1.7	na	1.2	1.4	1.6	1.7	2.3	2.8	3.5	4.4	5.4	4.1	4.6	na	2.2	2.1	1.9
Scotiabank Group	1.5	4.6	na	na	1.3	na	na	1.7	2.3	2.8	3.3	na	na	na	na	na	2.3	2.0	2.4
MacroFin Analytics	1.5	4.5	1.9	1.4	1.3	1.5	1.7	2.1	2.8	3.4	4.0	4.9	5.8	3.7	5.0	97.5	2.1	2.0	2.1
Amherst Pierpont Securities	1.4	4.6	1.9	1.5	1.5	1.8	2.0	2.1	2.7	3.3	4.1	5.0	5.8	4.6	5.1	98.5	3.2 H	2.3	3.4
RDQ Economics	1.4	4.4	1.9	1.5	1.6 H	1.8	2.0	2.1	2.6	3.1	3.7	4.5	5.1	4.7	4.8	99.8 H	2.0	2.3	2.6
MUFG Union Bank	1.4	4.5	1.7	1.5	1.4	1.5	1.8	2.0	2.4	2.8	3.4	4.6	5.5	3.4	4.5	90.0	2.4	1.8	2.7
Naroff Economic Advisors	1.4	4.5	1.7	1.5	1.5	1.6	1.8	2.2	3.2 H	3.5	4.1	5.2	5.9	5.0 H	5.3 H	96.5	2.5	2.8 H	2.9
GLC Financial Economics	1.4	4.5	1.6	1.4	1.3	1.4	1.4	1.7	2.4	3.0	3.6	4.7	5.6	4.3	5.0	93.8	3.1	2.3	2.7
DePrince & Associates	1.3	4.3	1.8	1.5	1.3	1.4	1.5	1.9	2.5	2.8	3.3	4.1	5.4	4.1	4.6	94.5	2.2	2.2	2.5
DS Economics	1.3	4.4	1.7	1.3	1.2	1.3	1.4	1.5	2.2	2.7	3.4	4.3	5.0	3.1 L	4.3	94.0	1.8	2.3	2.1
Goldman Sachs & Co.	1.3	na	1.7	na	1.2	na	na	1.8	2.5	3.0	3.4	na	na	na	4.2	na	2.3	2.0	2.1
High Frequency Economics	1.3	4.4	na	na	1.2	1.4	1.6	1.7	2.3	2.9	3.5	na	na	na	na	na	2.7	2.7	2.7
Swiss Re	1.3	4.4	1.6	1.0	0.9	1.0	1.2	1.4	2.2	2.7	3.6	4.5	5.4	na	4.5	na	2.2	2.5	3.5 H
Nat'l Assn. of Realtors	1.2	4.3	1.4	1.3	1.1	1.2	1.4	1.7	2.4	2.9	3.4	4.6	5.2	4.2	4.6	na	2.2	2.2	2.4
Moody's Analytics	1.2	4.3	1.4	1.1	0.7 L	0.8 L	1.0 L	1.3 L	2.2	3.2	3.9	5.3 H	6.4 H	4.2	4.7	na	3.1	2.3	2.7
Regions Financial Corporation	1.2	4.2	1.3	1.3	1.0	1.1	1.2	1.6	2.3	2.8	3.4	4.4	5.2	4.1	4.5	96.1	2.2	1.8	2.0
Comerica Bank	1.2	4.3	1.6	na	1.1	1.3	1.4	1.8	2.7	3.1	4.0	na	na	na	4.9	na	2.7	2.1	2.7
Nomura Securities, Inc.	1.2	na	1.6	na	na	na	na	1.5	2.3	2.8	3.2	4.8	5.5	na	4.8	na	2.0	1.6 L	2.1
AIG	1.2	na	na	na	1.0	1.2	1.3	1.4	2.0	2.6	3.3	na	4.9	na	4.2	na	2.1	2.1	2.1
Daiwa Capital Markets America	1.2	4.3	1.6	1.2	1.1	1.3	1.4	2.0	2.6	3.0	3.4	4.5	5.2	4.3	4.7	96.0	2.5	2.1	2.3
J.P. Morgan Chase	1.1	na	1.4	na	na	na	na	1.7	2.3	2.8	3.3	na	na	na	na	na	1.8	2.0	2.4
Action Economics	1.1	4.3	1.3	1.2	1.1	1.2	1.4	1.6	2.2	2.6	3.8	4.7	5.6	3.5	4.2	94.8	2.5	2.0	2.5
Wells Capital Management	1.1	4.3	1.5	1.2	1.1	1.3	1.6	2.0	2.5	2.9	3.4	4.4	5.2	4.1	4.6	95.5	2.7	2.0	2.5
BNP Paribas Americas	1.1	na	1.0 L	na	na	na	na	1.9	2.6	3.0	na	na	na	na	na	na	2.7	na	3.1
Barclays Capital	1.1	4.3	1.5	na	na	na	na	1.5	1.9 L	2.4 L	3.2	na	na	na	na	na	2.5	2.5	2.7
Chase Wealth Management	1.1	4.2	1.5	1.3	1.1	1.2	1.4	1.7	2.4	3.1	3.7	4.6	5.2	4.2	4.7	95.2	2.4	2.2	2.3
Wells Fargo	1.1	4.3	1.4	1.1	0.9	1.0	1.2	1.7	2.2	2.7	3.3	4.4	5.2	3.9	4.5	98.3	2.2	2.1	2.6
Cycledata Corp.	1.1	4.3	1.5	1.2	1.1	1.2	1.4	1.6	2.2	2.8	3.4	4.4	5.3	4.0	4.5	95.0	3.0	2.4	2.7
RBC Capital Markets	1.0	na	na	na	na	na	na	1.7	2.4	2.9	3.4	na	na	na	na	na	2.6	2.2	1.7
S&P Global	1.0	4.1	1.4	na	0.9	1.1	1.3	1.5	2.2	2.7	3.3	4.5	5.0	na	4.5	95.5	2.4	2.1	1.5 L
BMO Capital Markets	1.0	4.1	1.4	na	0.8	0.9	1.2	1.7	2.3	2.7	3.2	na	na	na	4.3	99.5	2.8	2.1	2.5
RidgeWorth Investments	1.0	4.1	1.4	1.0	0.8	1.0	1.2	1.4	2.0	2.6	3.3	4.3	5.1	4.3	4.3	92.0	2.5	2.2	2.3
Economist Intelligence Unit	0.9 L	4.0 L	1.4	1.1	1.0	1.1	1.2	1.6	2.4	3.0	3.5	na	na	na	4.6	na	2.4	na	2.2
Loomis, Sayles & Company	0.9 L	4.0 L	1.4	0.9 L	0.9	1.1	1.5	1.9	2.3	2.8	3.3	4.4	5.2	3.8	4.4	97.1	2.0	2.3	2.1
The Northern Trust Company	0.9 L	4.1	1.3	0.9 L	1.0	1.2	1.4	1.8	2.4	3.0	3.8	4.5	5.6	4.3	4.6	na	2.1	2.1	2.2
Moody's Capital Markets Group	0.9 L	4.0 L	1.4	1.0	0.9	1.0	1.1	1.3 L	2.2	2.4 L	2.9 L	3.9 L	4.5 L	3.5	4.0 L	98.3	2.0	1.9	1.5 L
Fannie Mae	0.9 L	4.1	na	na	1.2	1.3	1.4	1.7	2.3	2.6	3.1	na	na	na	4.2	na	1.7	2.2	2.1
Oxford Economics	0.9 L	4.1	1.4	na	0.9	1.0	1.3	1.6	2.2	2.7	3.4	na	na	na	4.3	97.9	2.8	2.0	2.2
PNC Financial Services Corp.	0.9 L	4.1	1.4	na	1.0	1.2	1.3	1.7	2.2	2.8	3.6	na	5.0	3.8	4.5	94.6	3.0	2.1	2.4
Societe Generale	0.9 L	4.1	na	na	na	na	na	1.8	2.4	2.9	3.7	na	na	na	na	na	2.2	2.1	2.5
NatWest Markets	0.9 L	4.1	1.4	0.9 L	1.0	1.2	1.4	1.5	2.3	2.8	3.7	4.2	4.9	4.3	4.5	98.0	2.5	2.1	2.7
Stone Harbor Investment Partners	0.9 L	4.0 L	1.2	0.9 L	0.9	1.0	1.2	1.5	2.0	2.6	3.2	4.3	5.3	na	4.4	95.0	2.3	1.9	2.7
Georgia State University	0.9 L	4.0 L	na	na	0.8	0.9	1.1	1.4	2.3	3.1	3.5	4.8	5.9	na	4.9	na	0.9 L	1.9	1.8
Bank of America Merrill Lynch	0.9 L	na	1.5	na	na	na	na	1.7	2.3	2.7	3.4	na	na	na	na	na	2.3	1.8	1.9
February Consensus	**1.1**	**4.3**	**1.5**	**1.2**	**1.1**	**1.2**	**1.4**	**1.7**	**2.4**	**2.9**	**3.5**	**4.5**	**5.3**	**4.1**	**4.6**	**95.7**	**2.4**	**2.1**	**2.4**
Top 10 Avg.	1.5	4.5	1.8	1.5	1.4	1.6	1.8	2.1	2.7	3.2	3.9	4.9	5.8	4.4	5.0	98.1	2.9	2.4	2.9
Bottom 10 Avg.	0.9	4.0	1.3	1.0	0.8	1.0	1.1	1.4	2.1	2.6	3.2	4.3	5.0	3.7	4.2	93.3	1.8	1.8	1.9
January Consensus	1.2	4.2	1.5	1.2	1.1	1.3	1.5	1.7	2.4	2.8	3.5	4.5	5.4	4.1	4.5	96.0	2.4	2.1	2.5

Number of Forecasts Changed From A Month Ago:

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	A.	B.	C.	D.
Down	4	1	6	8	12	13	13	9	9	8	12	10	11	5	9	10	3	7	13
Same	37	33	25	14	22	21	20	25	26	24	21	11	9	11	15	7	31	30	21
Up	4	4	6	3	4	2	3	11	10	13	11	7	8	8	13	6	11	6	9
Diffusion Index	50 %	54 %	50 %	40 %	39 %	35 %	36 %	52 %	51 %	56 %	49 %	45 %	45 %	56 %	55 %	41 %	59 %	49 %	45 %

First Quarter 2018
Interest Rate Forecasts

Key Assumptions

Blue Chip Financial Forecasts Panel Members	1 Federal Funds Rate	2 Prime Bank Rate	3 LIBOR Rate 3-Mo.	4 Com. Paper 1-Mo.	5 Treas. Bills 3-Mo.	6 Treas. Bills 6-Mo.	7 Treas. Bills 1-Yr.	8 Treas. Notes 2-Yr.	9 Treas. Notes 5-Yr.	10 Treas. Notes 10-Yr.	11 Treas. Bond 30-Yr.	12 Aaa Corp. Bond	13 Baa Corp. Bond	14 State & Local Bonds	15 Home Mtg. Rate	A. Avg. For Qtr. Fed's Major Currency $ Index	B. Real GDP	C. GDP Price Index	D. Cons. Price Index
Chmura Economics & Analytics	2.2 H	5.1 H	2.5 H	2.2 H	2.0 H	2.2 H	2.6 H	2.8 H	3.5 H	4.0 H	4.7 H	na	na	na	5.5 H	88.4	2.8	2.0	2.0
Naroff Economic Advisors	1.7	4.8	1.9	1.8	1.8	1.9	2.2	2.5	3.4	3.7	4.3	5.5 H	6.3	5.3 H	5.5 H	96.0	3.0	2.5	2.6
Amherst Pierpont Securities	1.7	4.8	2.1	1.8	1.8	2.0	2.3	2.4	2.8	3.5	4.3	5.2	6.1	4.7	5.3	99.0	2.8	2.4	3.3 H
MacroFin Analytics	1.6	4.7	2.0	1.5	1.5	1.6	1.8	2.2	2.9	3.5	4.1	5.1	6.0	3.9	5.1	98.0	2.0	2.0	2.2
RDQ Economics	1.6	4.6	2.1	1.7	1.7	1.9	2.1	2.3	2.9	3.5	4.1	4.9	5.5	5.3 H	5.2	100.9 H	2.4	2.3	2.5
MUFG Union Bank	1.6	4.8	2.0	1.7	1.6	1.7	2.1	2.2	2.6	3.0	3.6	4.7	5.7	3.5	4.6	88.0 L	2.6	1.8	2.6
IHS Markit	1.5	4.5	1.9	na	1.4	1.6	1.8	1.8	2.4	3.0	3.6	4.7	5.5	4.2	4.8	na	3.1	2.1	1.8
Goldman Sachs & Co.	1.5	na	1.9	na	1.4	na	na	2.0	2.7	3.1	3.5	na	na	na	4.3	na	2.3	2.0	2.1
Scotiabank Group	1.5	4.6	na	na	1.3	na	na	1.8	2.4	2.9	3.4	na	na	na	na	na	2.5	2.0	2.3
High Frequency Economics	1.5	4.4	na	na	1.5	1.6	1.8	1.7	2.3	3.0	3.6	na	na	na	na	na	2.6	2.9 H	2.9
Swiss Re	1.5	4.6	1.8	1.2	1.1	1.2	1.3	1.5	2.3	2.8	3.7	4.6	5.5	na	4.6	na	2.3	2.0	3.0
DePrince & Assoc.	1.4	4.4	1.9	1.6	1.4	1.5	1.6	2.0	2.6	2.9	3.4	4.3	5.5	4.2	4.6	94.2	2.6	2.2	2.5
Comerica Bank	1.4	4.5	1.8	na	1.4	1.5	1.7	2.0	2.9	3.3	4.2	na	na	na	5.2	na	2.4	2.0	2.3
GLC Financial Economics	1.4	4.5	1.7	1.5	1.3	1.4	1.5	1.7	2.4	3.0	3.7	4.9	5.9	4.5	5.0	93.4	2.6	2.0	2.8
Nomura Securities, Inc.	1.4	na	1.9	na	na	na	na	1.7	2.3	2.8	3.2	4.8	5.5	na	4.8	na	1.9	1.6	2.2
Moody's Analytics	1.4	4.5	1.6	1.3	0.8 L	0.9 L	1.2	1.4	2.4	3.4	4.0	5.5 H	6.6 H	4.3	4.9	na	3.4 H	2.6	2.5
AIG	1.4	na	na	na	1.3	1.4	1.5	1.7	2.2	2.7	3.4	na	5.0	na	4.3	na	2.0	2.3	1.9
DS Economics	1.4	4.5	1.8	1.4	1.3	1.5	1.6	1.7	2.3	2.8	3.5	4.4	5.1	3.2	4.4	93.5	1.7 L	2.5	1.9
Nat'l Assn. of Realtors	1.4	4.5	1.6	1.4	1.3	1.4	1.6	1.9	2.5	3.0	3.5	4.8	5.3	4.4	4.8	na	2.1	2.1	2.3
Daiwa Capital Markets America	1.4	4.6	1.9	1.6	1.5	1.6	1.8	2.3	2.8	3.1	3.6	4.6	5.3	4.5	4.9	96.0	2.8	2.2	2.4
BNP Paribas Americas	1.4	na	1.6	na	na	na	na	2.0	2.6	3.1	na	na	na	na	na	na	2.9	na	1.9
Societe Generale	1.4	4.5	na	na	na	na	na	2.0	2.6	3.1	3.8	na	na	na	na	na	2.0	1.8	2.4
Wells Capital Management	1.4	4.5	1.8	1.5	1.4	1.5	1.9	2.3	2.6	2.9	3.2	4.3	5.2	3.9	4.6	95.7	2.6	2.2	2.7
Cycledata Corp.	1.3	4.5	1.7	1.4	1.3	1.4	1.6	1.8	2.4	3.0	3.6	4.6	5.5	4.2	4.7	95.0	3.0	2.4	2.7
Regions Financial Corporation	1.3	4.3	1.4 L	1.4	1.2	1.3	1.4	1.7	2.4	2.9	3.5	4.5	5.3	4.3	4.5	96.0	1.9	2.2	2.2
Action Economics	1.3	4.4	1.4 L	1.4	1.3	1.4	1.6	1.8	2.2	2.6	3.6	4.8	5.7	3.6	4.4	94.9	2.5	2.0	2.6
RBC Capital Markets	1.3	na	na	na	na	na	na	1.9	2.6	3.1	3.6	na	na	na	na	na	3.2	1.5 L	1.5
J.P. Morgan Chase	1.3	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	1.8	2.1	2.4
Loomis, Sayles & Company	1.2	4.3	1.6	1.2	1.1	1.3	1.7	2.1	2.4	2.8	3.3	4.4	5.2	3.8	4.4	97.1	2.2	2.4	2.1
Wells Fargo	1.2	4.3	1.5	1.2	1.1	1.2	1.4	1.8	2.3	2.7	3.3	4.4	5.3	3.9	4.5	99.3	2.2	2.3	2.6
NatWest Markets	1.2	4.3	1.6	1.2	1.2	1.4	1.6	1.8	2.5	2.9	3.7	4.2	4.8	4.3	4.6	99.0	3.1	1.7	2.0
PNC Financial Services Corp.	1.2	4.3	1.5	na	1.2	1.3	1.5	1.8	2.3	2.9	3.7	na	5.1	3.8	4.5	94.5	2.6	2.1	2.4
Economist Intelligence Unit	1.2	4.2	1.5	1.3	1.2	1.3	1.4	1.8	2.7	3.2	3.7	na	na	na	4.8	na	2.0	na	2.4
Oxford Economics	1.2	4.3	1.7	na	1.2	1.3	1.5	1.8	2.3	2.8	3.5	na	na	na	4.4	97.9	2.7	2.4	2.5
Moody's Capital Markets Group	1.1	4.3	1.6	1.2	1.1	1.1	1.2	1.2 L	2.0 L	2.1 L	2.6 L	3.6 L	4.3 L	3.2 L	3.8 L	98.2	2.1	1.9	1.2 L
S&P Global	1.1	4.3	1.6	na	1.1	1.4	1.5	1.7	2.3	2.8	3.3	4.7	5.1	na	4.6	95.1	1.7 L	2.2	1.9
The Northern Trust Company	1.1	4.3	1.5	1.1 L	1.2	1.4	1.6	2.0	2.6	3.2	4.0	4.7	5.8	4.5	4.8	na	2.3	2.1	2.2
Fannie Mae	1.1	4.3	na	na	1.4	1.4	1.6	1.8	2.4	2.7	3.1	na	na	na	4.3	na	1.7 L	2.4	2.2
BMO Capital Markets	1.1	4.3	1.5	1.0	1.1	1.4	1.8	2.4	2.8	3.2	na	na	na	4.4	98.6		2.5	2.3	2.6
RidgeWorth Investments	1.1	4.3	1.5	1.2	1.0	1.1	1.3	1.4	2.2	2.7	3.5	4.3	5.1	4.5	4.4	91.0	3.0	2.2	2.2
Stone Harbor Investment Partners	1.1	4.3	1.4 L	1.1 L	1.1	1.2	1.3	1.7	2.1	2.8	3.3	4.4	5.4	na	4.6	93.0	2.4	2.3	2.8
Chase Wealth Management	1.1	4.2	1.5	1.3	1.1	1.2	1.4	1.7	2.4	3.1	3.7	4.6	5.2	4.2	4.7	95.4	2.0	2.3	2.4
Georgia State University	0.9 L	4.1 L	na	na	0.8 L	0.9 L	1.0 L	1.3	2.2	3.0	3.5	4.9	6.0	na	5.0	na	2.0	1.8	2.1
February Consensus	**1.3**	**4.4**	**1.7**	**1.4**	**1.3**	**1.4**	**1.6**	**1.9**	**2.5**	**3.0**	**3.6**	**4.6**	**5.4**	**4.2**	**4.7**	**95.5**	**2.4**	**2.1**	**2.3**
Top 10 Avg.	1.6	4.7	2.0	1.7	1.6	1.8	2.0	2.3	2.9	3.4	4.1	5.0	5.9	4.6	5.1	98.4	3.0	2.5	2.8
Bottom 10 Avg.	1.1	4.2	1.5	1.2	1.0	1.1	1.3	1.5	2.2	2.6	3.2	4.3	5.0	3.7	4.3	92.6	1.9	1.8	1.8
January Consensus	1.3	4.4	1.7	1.4	1.3	1.4	1.6	1.9	2.5	3.0	3.6	4.6	5.5	4.1	4.6	95.4	2.5	2.2	2.3

Number of Forecasts Changed From A Month Ago:

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	A	B	C	D
Down	4	4	8	6	11	14	15	9	8	9	12	10	12	6	9	7	11	8	10
Same	32	27	20	12	21	18	14	21	24	25	20	12	10	13	16	13	26	28	26
Up	7	6	7	9	6	4	7	12	10	8	9	6	7	6	12	6	6	5	7
Diffusion Index	53 %	53 %	49 %	56 %	43 %	36 %	39 %	54 %	52 %	49 %	46 %	43 %	41 %	50 %	54 %	48 %	44 %	46 %	47 %

Second Quarter 2018
Interest Rate Forecasts
Key Assumptions

Blue Chip Financial Forecasts Panel Members	1 Federal Funds Rate	2 Prime Bank Rate	3 LIBOR Rate 3-Mo.	4 Com. Paper 1-Mo.	5 Treas. Bills 3-Mo.	6 Treas. Bills 6-Mo.	7 Treas. Bills 1-Yr.	8 Treas. Notes 2-Yr.	9 Treas. Notes 5-Yr.	10 Treas. Notes 10-Yr.	11 Treas. Bond 30-Yr.	12 Aaa Corp. Bond	13 Baa Corp. Bond	14 State & Local Bonds	15 Home Mtg. Rate	A. Fed's Major Currency $ Index	B. Real GDP	C. GDP Price Index	D. Cons. Price Index
Chmura Economics & Analytics	2.4 H	5.4 H	2.8 H	2.5 H	2.2 H	2.5 H	2.8 H	3.1 H	3.7 H	4.1 H	4.8 H	na	na	na	5.7	87.2	2.6	2.0	2.2
Naroff Economic Advisors	2.1	5.1	2.3	2.1	2.1	2.3	2.5	2.8	3.7 H	4.0	4.5	5.6 H	6.5 H	5.7 H	5.8 H	94.0	3.0	2.4	2.3
Amherst Pierpont Securities	2.0	5.1	2.3	2.1	2.0	2.3	2.5	2.6	3.0	3.7	4.5	5.4	6.3	4.9	5.5	99.5	3.0	2.4	3.4 H
MUFG Union Bank	1.9	5.0	2.2	1.9	1.9	2.0	2.3	2.5	2.8	3.2	3.7	4.8	5.8	3.6	4.8	86.0 L	2.8	2.0	2.7
MacroFin Analytics	1.8	4.9	2.2	1.7	1.7	1.8	2.0	2.4	3.1	3.7	4.3	5.3	6.2	4.1	5.3	98.4	2.0	2.0	1.9
RDQ Economics	1.8	4.8	2.3	1.9	1.9	2.1	2.3	2.4	3.0	3.5	4.0	4.9	5.5	5.2	5.2	100.9 H	2.3	2.3	2.5
DS Economics	1.8	4.9	2.2	1.8	1.6	1.8	1.8	1.9	2.4	2.9	3.6	4.4	5.1	3.3	4.5	93.2	2.0	2.3	1.9
Swiss Re	1.8	4.9	2.1	1.4	1.4	1.5	1.6	1.8	2.5	2.9	3.8	4.7	5.6	na	4.8	na	2.2	0.8 L	1.8
Goldman Sachs & Co.	1.8	na	2.2	na	1.7	na	na	2.3	2.8	3.2	3.6	na	na	na	4.4	na	2.3	2.0	2.1
Scotiabank Group	1.8	4.9	na	1.6	na	na	1.9	2.5	2.9	3.4	na	na	na	na	na	na	2.5	2.0	2.3
IHS Markit	1.8	4.5	2.0	na	1.5	1.7	1.9	2.1	2.5	3.1	3.7	4.8	5.6	4.2	4.9	na	2.9	2.1	2.5
High Frequency Economics	1.8	4.9	na	na	1.7	1.9	2.0	1.4	2.2	3.1	3.7	na	na	na	na	na	2.3	2.9	2.9
Moody's Analytics	1.7	4.8	1.9	1.6	1.1	1.2	1.4	1.7	2.7	3.6	4.2	5.6 H	6.7 H	4.4	5.1	na	3.2	2.7	2.8
Wells Capital Management	1.7	4.8	2.0	1.9	1.8	1.8	2.1	2.5	2.8	3.1	3.4	4.4	5.4	4.0	4.8	95.8	2.7	2.3	2.8
DePrince & Assoc.	1.7	4.7	2.1	1.9	1.7	1.7	1.9	2.2	2.7	3.0	3.4	4.4	5.6	4.3	4.7	94.1	2.8	2.2	2.5
Daiwa Capital Markets America	1.7	4.9	2.2	1.8	1.7	1.9	2.0	2.3	3.0	3.3	3.8	4.8	5.5	4.7	5.1	96.0	2.9	2.2	2.5
Nomura Securities, Inc.	1.7	na	2.1	na	na	na	na	1.8	2.3	2.8	3.2	4.8	5.5	na	4.8	na	1.8	1.6	2.2
AIG	1.7	na	na	na	1.5	1.7	1.8	1.9	2.3	2.8	3.5	na	5.0	na	4.4	na	2.1	2.3	1.8
Comerica Bank	1.6	4.8	2.0	na	1.5	1.7	1.9	2.2	3.1	3.5	4.4	na	na	na	5.3	na	2.6	2.0	2.2
BNP Paribas Americas	1.6	na	1.8	na	na	na	2.1	2.6	3.1	na	na	na	na	na	na	na	2.9	na	2.6
GLC Financial Economics	1.6	4.6	1.9	1.7	1.6	1.6	1.7	1.9	2.7	3.2	3.9	5.3	6.3	4.7	5.4	93.2	3.3	2.1	3.0
Nat'l Assn. of Realtors	1.6	4.7	1.8	1.6	1.5	1.6	1.8	2.1	2.6	3.1	3.6	5.0	5.5	4.6	5.0	na	2.0	2.1	2.3
RBC Capital Markets	1.5	na	na	na	na	na	2.2	2.8	3.3	3.7	na	na	na	na	na	na	3.2	1.9	2.0
Action Economics	1.5	4.6	1.6	1.6	1.5	1.6	1.8	1.9	2.3	2.6	3.7	4.9	5.8	3.7	4.5	95.0	2.6	3.1 H	2.7
Loomis, Sayles & Company	1.5	4.6	1.9	1.5	1.4	1.6	2.0	2.3	2.6	2.9	3.3	4.6	5.3	3.9	4.5	97.1	2.2	2.3	2.1
NatWest Markets	1.4	4.6	1.8	1.4	1.5	1.7	1.9	2.0	2.7	3.0	3.8	4.3	4.9	4.4	4.6	100.0	3.4 H	1.5	1.6
Oxford Economics	1.4	4.5	1.9	na	1.4	1.5	1.7	2.0	2.4	2.9	3.5	na	na	na	4.5	97.6	2.3	2.4	2.3
Economist Intelligence Unit	1.4	4.5	1.8	1.6	1.5	1.6	1.7	2.0	2.9	3.4	3.9	na	na	na	5.1	na	3.0	na	2.3
PNC Financial Services Corp.	1.4	4.5	1.8	na	1.5	1.6	1.7	2.0	2.5	3.1	3.8	na	5.2	3.9	4.6	94.4	2.6	2.1	2.4
RidgeWorth Investments	1.4	4.5	1.8	1.5	1.3	1.4	1.5	1.7	2.4	3.3	3.7	4.9	5.7	5.5	5.0	90.0	3.0	2.2	2.2
Wells Fargo	1.4	4.4	1.6	1.4	1.2	1.3	1.5	1.9	2.4	2.8	3.3	4.5	5.4	4.0	4.6	99.3	2.2	2.4	2.8
Regions Financial Corporation	1.4	4.4	1.5 L	1.5	1.3	1.5	1.6	1.8	2.6	3.1	3.6	4.6	5.4	4.4	4.6	95.7	1.7 L	2.1	2.0
Societe Generale	1.4	4.5	na	na	na	na	na	2.2	2.7	3.3	3.9	na	na	na	na	na	2.2	2.0	2.2
J.P. Morgan Chase	1.4	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	1.8	2.1	2.4
S&P Global	1.4	4.6	1.9	na	1.3	1.5	1.6	1.8	2.4	2.8	3.4	4.8	5.2	na	4.7	94.5	2.5	2.2	2.5
Chase Wealth Management	1.3	4.4	1.7	1.5	1.3	1.4	1.6	1.9	2.6	3.3	3.9	4.8	5.4	4.4	4.9	95.7	2.2	2.3	2.4
Cycledata Corp.	1.3	4.5	1.7	1.4	1.3	1.4	1.6	1.8	2.4	3.0	3.6	4.6	5.5	4.2	4.7	95.0	3.0	2.4	2.8
Stone Harbor Investment Partners	1.3	4.4	1.6	1.3	1.2	1.3	1.5	1.8	2.2	2.9	3.5	4.6	5.6	na	4.7	90.0	2.3	2.7	2.6
BMO Capital Markets	1.2	4.3	1.6	na	1.1	1.2	1.5	2.0	2.5	2.9	3.3	na	na	na	4.5	97.2	2.5	2.1	2.3
The Northern Trust Company	1.2	4.3	1.6	1.2 L	1.2	1.4	1.6	2.0	2.7	3.3	4.1	4.8	5.9	4.6	4.9	na	2.3	2.1	2.2
Fannie Mae	1.2	4.3	na	1.5	1.6	1.7	1.9	2.4	2.7	3.2	na	na	na	na	4.3	na	1.9	2.3	2.3
Moody's Capital Markets Group	1.1	4.3	1.7	1.2 L	1.0	1.1 L	1.1 L	1.2 L	1.9 L	2.0 L	2.5 L	3.5 L	4.3 L	3.1 L	3.7 L	97.7	2.0	1.9	1.2 L
Georgia State University	1.0 L	4.0 L	na	na	0.9 L	1.1 L	1.3	1.6	2.4	3.2	3.6	5.0	6.2	na	5.2	na	2.3	1.8	2.0
February Consensus	**1.6**	**4.6**	**1.9**	**1.6**	**1.5**	**1.6**	**1.8**	**2.0**	**2.6**	**3.1**	**3.7**	**4.8**	**5.6**	**4.3**	**4.8**	**95.1**	**2.5**	**2.2**	**2.3**
Top 10 Avg.	1.9	5.0	2.3	2.0	1.9	2.0	2.2	2.5	3.1	3.6	4.3	5.2	6.1	4.9	5.3	98.4	3.1	2.6	2.9
Bottom 10 Avg.	1.2	4.3	1.6	1.4	1.2	1.3	1.4	1.6	2.3	2.7	3.2	4.4	5.1	3.8	4.4	91.7	1.9	1.8	1.8
January Consensus	1.5	4.6	1.9	1.6	1.5	1.6	1.8	2.0	2.6	3.1	3.7	4.7	5.6	4.3	4.8	95.2	2.5	2.2	2.4
Number of Forecasts Changed From A Month Ago:																			
Down	4	3	5	6	10	9	10	8	7	7	9	6	9	5	6	9	4	5	11
Same	33	30	26	14	24	24	21	24	25	23	21	15	6	10	20	13	29	30	27
Up	6	4	4	6	4	3	5	10	10	12	10	7	6	4	11	3	10	6	5
Diffusion Index	52 %	51 %	49 %	50 %	42 %	42 %	43 %	52 %	54 %	56 %	51 %	52 %	43 %	47 %	57 %	38 %	57 %	51 %	43 %

International Interest Rate And Foreign Exchange Rate Forecasts

United States

Blue Chip Forecasters	3 Mo. Interest Rate % In 3 Mo.	In 6 Mo.	In 12 Mo.	10 Yr. Gov't Bond Yield % In 3 Mo.	In 6 Mo.	In 12 Mo.	Fed's Major Currency $ Index In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	na	na	na	2.30	2.40	na	na	na	na
BMO Capital Markets	1.05	1.25	1.50	2.50	2.55	2.70	97.1	98.6	99.1
IHSMarkit	na	na	na	2.57	2.66	2.85	na	na	na
ING Financial Markets	1.21	1.24	1.38	2.65	2.20	2.70	98.6	94.8	92.7
Mizuho Research Institute	1.10	1.20	1.50	2.40	2.45	2.55	95.0	96.0	97.0
Moody's Analytics	1.08	1.17	1.42	2.65	2.76	3.19	na	na	na
Moody's Capital Markets	na	na	na	2.42	2.40	2.25	96.2	97.2	98.0
Nomura Securities	na	na	na	na	na	na	na	na	na
Oxford Economics	na	na	na	2.63	2.70	2.84	97.0	97.5	97.9
Scotiabank	na	na	na	2.20	2.30	2.50	na	na	na
Wells Fargo	1.25	1.25	1.50	2.50	2.53	2.60	na	na	na
February Consensus	**1.14**	**1.22**	**1.46**	**2.48**	**2.50**	**2.69**	**96.8**	**96.8**	**96.9**
High	1.25	1.25	1.50	2.65	2.76	3.19	98.6	98.6	99.1
Low	1.05	1.17	1.38	2.20	2.20	2.25	95.0	94.8	92.7
Last Months Avg.	1.05	1.20	1.44	2.37	2.45	2.62	96.2	97.2	98.4

Japan

Blue Chip Forecasters	3 Mo. Interest Rate % In 3 Mo.	In 6 Mo.	In 12 Mo.	10 Yr. Gov't Bond Yield % In 3 Mo.	In 6 Mo.	In 12 Mo.	USD/YEN In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	na	na	na	0.08	0.13	na	na	na	na
BMO Capital Markets	-0.05	-0.05	-0.50	0.05	0.00	0.00	117.0	118.0	120.0
IHSMarkit	na	na	na	na	na	na	119.3	121.5	125.3
ING Financial Markets	0.05	0.05	0.05	0.00	0.00	0.00	118.0	115.0	120.0
Mizuho Research Institute	0.06	0.06	0.06	0.05	0.05	0.05	114.0	115.0	117.0
Moody's Analytics	na	na	na	0.01	0.03	0.14	118.0	118.0	117.0
Moody's Capital Markets	na	na	na	0.08	0.10	0.23	114.5	115.5	116.0
Nomura Securities	na	na	na	na	na	na	113.0	115.0	120.0
Oxford Economics	na	na	na	0.00	0.00	0.00	122.0	123.0	124.0
Scotiabank	na	na	na	na	na	na	110.0	110.0	115.0
Wells Fargo	-0.04	-0.04	-0.04	0.05	0.07	0.12	na	na	na
February Consensus	**0.01**	**0.01**	**-0.11**	**0.04**	**0.05**	**0.08**	**116.2**	**116.8**	**119.4**
High	0.06	0.06	0.06	0.08	0.13	0.23	122.0	123.0	125.3
Low	-0.05	-0.05	-0.50	0.00	0.00	0.00	110.0	110.0	115.0
Last Months Avg.	-0.01	-0.01	-0.02	0.00	0.01	0.04	112.9	113.8	116.5

United Kingdom

Blue Chip Forecasters	3 Mo. Interest Rate % In 3 Mo.	In 6 Mo.	In 12 Mo.	10 Yr. Gilt Yields % In 3 Mo.	In 6 Mo.	In 12 Mo.	GBP/USD In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	na	na	na	1.53	1.55	na	1.25	1.27	na
BMO Capital Markets	0.35	0.35	0.35	1.50	1.60	1.80	1.18	1.15	1.19
IHSMarkit	na	na	na	na	na	na	1.19	1.16	1.11
ING Financial Markets	0.50	0.50	0.50	1.10	1.40	1.60	1.17	1.22	1.27
Mizuho Research Institute	0.35	0.35	0.35	1.40	1.40	1.45	na	na	na
Moody's Analytics	na	na	na	1.35	1.41	1.62	1.20	1.20	1.20
Moody's Capital Markets	na	na	na	1.43	1.40	1.25	1.24	1.23	1.23
Nomura Securities	na	na	na	na	na	na	1.20	1.18	1.18
Oxford Economics	na	na	na	1.54	1.62	1.79	1.24	1.25	1.26
Scotiabank	na	na	na	na	na	na	1.20	1.20	1.25
Wells Fargo	0.38	0.38	0.45	1.50	1.70	1.90	na	na	na
February Consensus	**0.40**	**0.40**	**0.41**	**1.42**	**1.51**	**1.63**	**1.21**	**1.21**	**1.21**
High	0.50	0.50	0.50	1.54	1.70	1.90	1.25	1.27	1.27
Low	0.35	0.35	0.35	1.10	1.40	1.25	1.17	1.15	1.11
Last Months Avg.	0.38	0.35	0.35	1.40	1.44	1.58	1.22	1.21	1.21

Switzerland

Blue Chip Forecasters	3 Mo. Interest Rate % In 3 Mo.	In 6 Mo.	In 12 Mo.	10 Yr. Gov't Bond Yield % In 3 Mo.	In 6 Mo.	In 12 Mo.	USD/CHF In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	na	na	na	na	na	na	1.06	1.09	na
BMO Capital Markets	na	na	na	na	na	na	1.04	1.07	1.11
IHSMarkit	na	na	na	na	na	na	1.04	1.05	1.06
ING Financial Markets	-0.75	-0.75	-0.75	-0.10	-0.05	0.20	1.04	0.95	0.97
Mizuho Research Institute	na	na	na	na	na	na	na	na	na
Moody's Analytics	na	na	na	-0.16	-0.08	0.08	1.01	1.01	1.02
Moody's Capital Markets	na	na	na	-0.13	-0.10	-0.01	1.00	1.00	1.00
Nomura Securities	na	na	na	na	na	na	1.06	1.07	1.10
Oxford Economics	na	na	na	0.03	0.10	0.25	1.07	1.09	1.10
Scotiabank	na	na	na	na	na	na	1.09	1.09	1.02
Wells Fargo	na	na	na	na	na	na	na	na	na
February Consensus	**-0.75**	**-0.75**	**-0.75**	**-0.09**	**-0.03**	**0.13**	**1.05**	**1.05**	**1.05**
High	-0.75	-0.75	-0.75	0.03	0.10	0.25	1.09	1.09	1.11
Low	-0.75	-0.75	-0.75	-0.16	-0.10	-0.01	1.00	0.95	0.97
Last Months Avg.	-0.75	-0.75	-0.75	-0.08	-0.01	0.07	1.04	1.05	1.05

Canada

Blue Chip Forecasters	3 Mo. Interest Rate % In 3 Mo.	In 6 Mo.	In 12 Mo.	10 Yr. Gov't Bond Yield % In 3 Mo.	In 6 Mo.	In 12 Mo.	USD/CAD In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	na	na	na	na	na	na	1.40	1.41	na
BMO Capital Markets	na	na	na	1.75	1.80	1.90	1.35	1.37	1.36
IHSMarkit	na	na	na	na	na	na	1.33	1.32	1.29
ING Financial Markets	0.60	0.60	0.70	1.60	1.60	1.90	1.35	1.40	1.32
Mizuho Research Institute	na	na	na	na	na	na	na	na	na
Moody's Analytics	na	na	na	2.04	2.20	2.77	1.34	1.33	1.29
Moody's Capital Markets	na	na	na	1.70	1.65	1.55	1.32	1.33	1.33
Nomura Securities	na	na	na	na	na	na	1.28	1.30	1.32
Oxford Economics	na	na	na	1.69	1.74	1.85	1.32	1.32	1.31
Scotiabank	na	na	na	1.50	1.60	1.75	1.38	1.40	1.36
Wells Fargo	0.90	0.90	1.15	1.65	1.80	2.00	na	na	na
February Consensus	**0.75**	**0.75**	**0.93**	**1.70**	**1.77**	**1.96**	**1.34**	**1.35**	**1.32**
High	0.90	0.90	1.15	2.04	2.20	2.77	1.40	1.41	1.36
Low	0.60	0.60	0.70	1.50	1.60	1.55	1.28	1.30	1.29
Last Months Avg.	0.80	0.80	0.98	1.74	1.79	1.99	1.35	1.35	1.33

International Interest Rate And Foreign Exchange Rate Forecasts

Australia

Blue Chip Forecasters	3 Mo. Interest Rate %			10 Yr. Gov't Bond Yield %			AUD/AUD		
	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	na	na	na	na	na	na	0.74	0.73	na
BMO Capital Markets	na	na	na	na	na	na	0.74	0.73	0.73
IHSMarkit	na	na	na	na	na	na	0.71	0.69	0.69
ING Financial Markets	1.60	1.60	1.70	2.70	2.70	2.70	0.73	0.71	0.77
Mizuho Research Institute	na	na	na	na	na	na	na	na	na
Moody's Analytics	na	na	na	1.90	1.90	1.90	0.72	0.71	0.70
Moody's Capital Markets	na	na	na	2.70	2.62	2.50	0.75	0.76	0.76
Nomura Securities	na	na	na	na	na	na	0.74	0.73	0.70
Oxford Economics	na	na	na	2.85	2.95	3.19	0.72	0.72	0.71
Scotiabank	na	na	na	na	na	na	0.76	0.76	0.75
Wells Fargo	na	na	na	na	na	na	na	na	na
February Consensus	**1.60**	**1.60**	**1.70**	**2.54**	**2.54**	**2.57**	**0.73**	**0.73**	**0.73**
High	1.60	1.60	1.70	2.85	2.95	3.19	0.76	0.76	0.77
Low	1.60	1.60	1.70	1.90	1.90	1.90	0.71	0.69	0.69
Last Months Avg.	1.60	1.60	2.00	2.54	2.53	2.56	0.73	0.73	0.73

Eurozone

Blue Chip Forecasters	3 Mo. Interest Rate %			USD/EUR		
	In 3 Mo.	In 6 Mo.	In 12 Mo.	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	na	na	na	1.01	1.00	na
BMO Capital Markets	-0.30	-0.30	-0.30	1.04	1.02	1.01
IHSMarkit	na	na	na	1.02	1.01	1.00
ING Financial Markets	-0.32	-0.31	-0.31	1.02	1.10	1.12
Mizuho Research Institute	-0.30	-0.30	-0.30	1.04	1.02	1.03
Moody's Analytics	na	na	na	1.06	1.05	1.03
Moody's Capital Markets	na	na	na	1.06	1.04	1.02
Nomura Securities	na	na	na	1.04	1.03	1.00
Oxford Economics	na	na	na	1.03	1.01	1.01
Scotiabank	na	na	na	1.02	1.02	1.10
Wells Fargo	-0.33	-0.30	-0.20	na	na	na
February Consensus	**-0.31**	**-0.30**	**-0.28**	**1.03**	**1.03**	**1.04**
High	-0.30	-0.30	-0.20	1.06	1.10	1.12
Low	-0.33	-0.31	-0.31	1.01	1.00	1.00
Last Months Avg.	-0.31	-0.31	-0.29	1.04	1.03	1.04

10 Yr. Gov't Bond Yields %

Blue Chip Forecasters	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	0.40	0.48	na	na	na	na	na	na	na	na	na	na
BMO Capital Markets	0.40	0.50	0.70	na	na	na	na	na	na	na	na	na
ING Financial Markets	0.30	0.35	0.70	0.75	0.70	1.00	1.75	1.80	2.10	1.40	1.40	1.80
Mizuho Research Institute	0.25	0.35	0.35	na	na	na	na	na	na	na	na	na
Moody's Analytics	0.27	0.21	0.30	0.19	0.18	0.27	1.36	1.29	1.30	1.26	1.28	1.34
Moody's Capital Markets	0.40	0.50	0.60	0.97	1.10	1.14	2.00	2.17	2.25	1.50	1.60	1.60
Nomura Securities	0.20	0.35	0.50	na	na	na	na	na	na	na	na	na
Oxford Economics	0.43	0.50	0.64	1.19	1.16	1.20	2.30	2.59	2.86	1.79	1.96	2.20
Wells Fargo	0.45	0.55	0.85	na	na	na	na	na	na	na	na	na
February Consensus	**0.34**	**0.42**	**0.58**	**0.78**	**0.79**	**0.90**	**1.85**	**1.96**	**2.13**	**1.49**	**1.56**	**1.74**
High	0.45	0.55	0.85	1.19	1.16	1.20	2.30	2.59	2.86	1.79	1.96	2.20
Low	0.20	0.21	0.30	0.19	0.18	0.27	1.36	1.29	1.30	1.26	1.28	1.34
Last Months Avg.	0.32	0.38	0.50	0.63	0.67	0.82	1.79	1.80	1.95	1.35	1.43	1.56

Consensus Forecasts 10-year Bond Yields vs U.S. Yield

	Current	In 3 Mo.	In 6 Mo.	In 12 Mo.
Japan	-2.39	-2.44	-2.45	-2.61
United Kingdom	-1.02	-1.06	-0.99	-1.06
Switzerland	-2.51	-2.57	-2.53	-2.56
Canada	-0.62	-0.78	-0.73	-0.73
Australia	0.26	0.06	0.05	-0.11
Germany	-1.97	-2.14	-2.07	-2.11
France	-1.54	-1.71	-1.71	-1.78
Italy	-0.31	-0.63	-0.53	-0.56
Spain	-0.97	-0.99	-0.94	-0.95

Consensus Forecasts 3 Mo. Deposit Rates vs U.S. Rate

	Current	In 3 Mo.	In 6 Mo.	In 12 Mo.
Japan	-1.04	-1.13	-1.23	-1.57
United Kingdom	-0.69	-0.74	-0.83	-1.05
Switzerland	-1.76	-1.89	-1.97	-2.21
Canada	-0.12	-0.39	-0.47	-0.54
Australia	1.08	0.46	0.38	0.24
Eurozone	-1.36	-1.45	-1.52	-1.74

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

Clustering Consensus

Since the election, a broadly shared view is that a combination of tax cuts, infrastructure spending and lighter regulation will create above-trend growth. Moreover, even though these policies have not been enacted yet, they expect growth to immediately move to a higher growth plane as animal spirits kick in. The evidence for this "anticipation effect" is fairly compelling: in a piece called Animal spirits matter, we took a detailed look at the anecdotal and survey evidence of improved business and consumer confidence. Investors are also relatively bulled up as evidenced by the 6.2% rise in the S&P500 since the day before the election.

By contrast, our forecast has a down-up pattern. Expected growth dips to just 1.5% in the first half of this year, putting us in the unusual position of having the lowest first half forecast among the 71 contributors to the Bloomberg consensus. By contrast, in the second half we join the consensus with growth of 2.3%, and we are actually slightly above consensus in 2018: our 2.5% forecast is two tenths above the consensus. What gives?

In our view, many analysts are not placing enough weight on three near-term negatives: (1) passing comprehensive tax reform is likely to prove quite difficult and many tax cuts are unlikely to kick in until 2018, (2) House Republicans are unlikely to support significant infrastructure spending, and (3) trade tensions may undercut animal spirits in the coming months.

Many economists seem to view trade tensions as a "downside risk" rather than as part of the baseline forecast. And yet, since the election, the President-elect has continued to push for major changes in trade, with ongoing talk of tariffs and penalties on companies that move jobs overseas. Concerns about trade and about China feature heavily in his tweets. His proposed trade team-Trade Representative Lighthizer, head of the new National Trade Council Navarro, and Commerce Secretary Ross-have all strongly criticized current trade relations, with a particular focus on China.

In our view, one of the first rules of negotiation is to start with a very strong position and then grudgingly compromise. We also believe that both Trump and the Chinese leadership understand this. In exchanges since the election, such as comments on the "one China" policy, neither side has shown signs of backing down. Hence we expect a strong initial position from the Trump administration and a strong initial counter from China. It is hard to know exactly what the opening gambit will be, but the following all seem plausible:

1. Declare China a currency manipulator.
2. Begin anti-dumping actions against a broad range of industries, including steel, solar panels, tires, aluminum and shoes. These could be pursued both through US laws and the World Trade Organization.
3. Declare that a specific tariff will be forthcoming if negotiating goals are not met.
4. Demand stricter enforcement of intellectual property, labor and environmental rules.

As we have noted before, one of the challenges in these negotiations is that both sides have a lot of sticks, but not many carrots to offer. We also worry about a feedback loop where if strong positions don't trigger negative economic or market responses, both sides are emboldened to "stay tough." The negotiations could be similar to the brinkmanship moments we have seen in Washington in recent years. There have been three such confrontations-the debt ceiling crisis in 2011, the fiscal cliff in 2012 and the shutdown in 2013-and in each case, the crisis had to come to a head before it was resolved. US-China negotiations could be even more contentious.

Ultimately, we expect compromises to emerge as the cost of a "trade war" would be very high for both countries and the world. However, in our view, the road will be rocky. The fact that it is hard to quantify the impact on confidence and the economy is not a reason to ignore the likely shock. Our forecast of 1.5% GDP growth in the first half and the positioning of our forecast at the bottom of the consensus is an attempt to make a very rough estimate.

While trade is our main focus, we think some analysts also underappreciate some of the challenges for fiscal policy. A common view is that tax reform sails through and that there is also significant infrastructure spending. We are skeptical on both counts.

Historically, tax reform has been one of the hardest pieces of legislation to pass because it creates so many winners and losers. It took two years to go from proposal to enactment in the 1986 tax reform. The current proposal is particularly challenging because it includes both corporate and personal tax reform and it includes a new feature-border adjustment of corporate taxes. All three of these elements are likely to trigger a significant lobbying effort. Getting passage through is likely to require a very disciplined process because any attempt to preserve tax loopholes will make it harder to cut tax rates and may trigger attempts to preserve other loopholes. Hence we think it will take a number of months to enact a bill and we would not be surprised if some of the reform does not make it through. For example, in our forecast for growth and inflation we assume the border adjustment feature is not adopted.

Speaking of border adjustment, this week we wrote a report on the topic. Under this proposal imports are subject to corporate income taxes, but exports are exempt. Proponents of the change argue that it levels the playing field on international tax policy: if Value Added Taxes are border adjusted, why not corporate income taxes? In our piece, we argue that if enacted this would initially boost the dollar and cause a small improvement in the trade deficit, but would also create uncertainty for companies impacted by the law. Moreover, in the long-run, if the tax change sticks, US trading partners are very likely to adopt their own border adjustment for corporate taxes. The net result could be more or less a wash for the dollar and net exports but transition costs as resources move from losing to winning sectors and less efficient resource allocation.

Our final difference with many forecasters is that we don't expect major infrastructure spending. Fiscal conservatives still control the House of Representatives. They are likely to support tax cuts and reform because they believe such changes will trigger a sharp increase in investment and labor supply, boosting the tax base and preventing a surge in the budget deficit. On the other hand, they have been very reluctant to do the same for infrastructure spending. Once tax reform is complete, we expect little appetite for infrastructure. Our forecast assumes a relatively small public-private partnership program.

It is worth noting that this would not be the first time the markets and forecasters have gotten ahead of themselves in this economic recovery. Indeed, confidence shocks and soft patches seem to be an annual event, including the brinkmanship moments in Washington, crises in Europe, populist shocks like Brexit, oil shocks, and concerns about China.

It is also worth recalling that before the election, the markets appeared to be more focused on the risks from a Trump presidency (protectionism in particular) rather than the rewards (lighter regulation and fiscal stimulus). In the weeks prior to the election, events that increased the probability of a Trump victory caused the equity market to sell off. This concern was confirmed in our own surveys of clients. For example, in our Global Fund Manager survey last September, "Republican wins the White House" was judged as the second *(continued on next page)*

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**

highest "tail risk." Of course, on the night of the election the markets reassessed, rallied on the Trump victory (and a strong showing by Republicans in Congress) and continued to move higher through mid-December. Our point is not that the original sentiment in the market was right, but rather, the swing in sentiment may be a bit overdone.

The bottom-line is that we think some kind of soft patch is likely in the first half as investors and business people reassess the size and timing of the fiscal stimulus and worry about rising trade tensions. Absent such a soft patch, we would expect two Fed hikes this year-in June and December-but with the soft patch, we expect the next hike to be delayed to September. In our view, the biggest vulnerability in our forecast is that trade tensions increase, but do not impact confidence due to expectations of an eventual benign outcome.

Ethan Harris, Bank of America-Merrill Lynch, New York, NY (continued on next page)

Chair Yellen's Stanford Speech

We did not expect to be commenting much on monetary policy in the early months of this year, as we saw the focus of market participants shifting to possible changes in fiscal policy. In addition, the chances of the Fed altering interest rates before the new fiscal stance became clear seemed low. We still hold these views, but Chair Yellen's latest speech contained several interesting twists that observers should bear in mind. In a nutshell, she sees a strong case for proceeding with policy normalization, although she still believes that the Fed can move gradually.

The most notable aspect of Chair Yellen's latest speech was a shift in her view of the labor market. While noting the uncertainty in assessing full employment, she felt that the labor market is essentially there: "I judge labor utilization to be reasonably close to its normal longer-run level". This assessment stands in contrast to her view last year, when she saw an element of slack in the labor market despite a low unemployment rate. She also noted that the current degree of tightness in the economy could have inflation consequences: "slack in labor and product markets is no longer placing downward pressure on inflation".

Her broad view of little or no slack in the labor market also was evident in her analysis of various labor market indicators. She described the broad unemployment rate (the so-called U-6 measure) as having retraced nearly all of the run-up that occurred as a result of the recession. This measure is still noticeably above its pre-recession norm (chart, left), but Chair Yellen indicated that the normal level is now most likely higher than it was in the past because of a trend toward greater reliance on part-time workers. Last year, she frequently cited the possibility of part-time workers shifting to full-time status as a source of additional labor resources.

We also were struck by Chair Yellen's assessment of the labor force participation rate. The sharp downward movement in this measure over the past several years has been driven by a combination of structural (retiring baby boomers) and cyclical (discouraged workers) factors. The existence of a cyclical element was seen by many as evidence of slack in the labor market. However, Chair Yellen now believes that the cyclical component has "largely disappeared". The current low level of the participation rate, Ms. Yellen now believes, primarily reflects the aging of the population and other long-term trends. In other words, drop-outs are not likely to return to the labor force to a meaningful degree.

Perhaps the most notable passage in Ms. Yellen's talk was her assessment of the proper course of monetary policy at this stage of the business cycle: "I think that allowing the economy to run markedly and persistently 'hot' would be risky and unwise". This statement is markedly different from a view the Chair expressed in October when she wondered about possible benefits from running a "high-pressure" economy. We believed that market participants overreacted to the October

speech, as she was merely raising an issue and seeking insight. Now, she seems to have drawn a conclusion: running hot is unwise; the best course is to proceed with policy normalization.

While Chair Yellen's speech introduced several hawkish views, she also emphasized that the pace of tightening was likely to be gradual. She offered some of the same justifications for proceeding slowly as she has in the past: the current level of equilibrium or neutral interest rates is low and therefore the Fed is not far from a sustainable stance, and officials face asymmetric risks (more flexibility to respond to upside shocks than downside ones).

She introduced another justification that we found interesting. She sees the effect of the Fed's enlarged balance sheet on the level of long-term interest rates as diminishing over time, and the waning effect of the portfolio on interest rates represents a passive tightening in policy. Specifically, she argued that the average maturity of the Fed's balance sheet is declining and thus its effect on long-term interest rates is lessening. From another perspective, the Fed's portfolio has been steady in the past two years because officials are merely reinvesting maturing and pre-paid securities. A steady portfolio translates to a diminishing share of a growing fixed-income market and therefore a smaller influence on interest rates.

Chair Yellen suggested that the declining influence of the portfolio could push long-term interest rates 15 basis points higher this year. Given the typical relationship between policy changes and shifts in long-term interest rates, Chair Yellen views such changes in long rates as equivalent to two 25-basis-point increases in the federal funds rate.

Michael Moran, Daiwa Capital Markets, New York, NY

Inflation Cooperation

The rebound in oil prices since late 2015 has helped to lift inflation back toward the Fed's target. This week showed CPI inflation rising at the fastest pace since energy prices began to slide in mid-2014. Core CPI has been pretty steady over the past year, running a little over 2.0%, but the Fed-favorite core PCE deflator has moved up gradually.

Rather than questioning the "durability" of the pickup like early last year, the increase appears to be more sustainable in the eyes of Fed Chair Janet Yellen. In a speech last week, she stated, "It's fair to say the economy is near maximum employment and inflation is moving toward our goal."

Market participants have also bought into the idea that reflation is finally taking hold. Short-term inflation expectations, indicated by 5-year TIPS spreads, are at the highest levels since the summer of 2014, while longer-term measures, based on the 5-year five years forward, have recovered to August 2015 levels.

The rebound in market-based inflation compensation measures, in part, reflects some unwinding of energy effects; even long-term TIPS spreads plummeted alongside oil. However, much of the recovery has come in the wake of the election results. Markets are anticipating that the more growth-focused agenda of the new administration will boost inflation, or at least they are putting a higher premium on protecting themselves from an extreme inflation outcome.

Consumers, on the other hand, appear less convinced. Inflation expectations measured by the University of Michigan's Consumer Sentiment survey remained near multiyear lows in December. The preliminary January readings hint at an uptick, but we suspect Fed officials will want to see a firm turnaround in consumer inflation expectations, which have proved less volatile, before turning up the pace of tightening. While consumer expectations will likely rise following a pickup in realized inflation, as recently as September Yellen warned that "we can't take longer-run inflation expectations for granted."

Economics Group, Well Fargo Securities Charlotte, NC

Special Questions:

1. At which meeting in 2017 will the Federal Reserve's Open Market Committee <u>NEXT</u> raise interest rates?

(Percentage of those responding)

<u>Jan. 31-Feb. 1</u>	<u>Mar. 14-15</u>	<u>May 2-3</u>	<u>June 13-14 2017</u>
0.0%	24.4%	8.9%	57.8%

<u>Jul. 25-26</u>	<u>Sep. 19-20</u>	<u>Oct. 31-Nov. 1</u>	<u>Dec. 12-13</u>
2.2%	6.7%	0.0%	0.0%

2. The median forecast of the FOMC's December 2016 "dot plot" suggests three 25 basis points rate increases will occur in 2017. By how many basis points do you expect the FOMC will raise interest rates in 2017?

(Percentage of those responding)

<u>0 basis points</u>	<u>25 basis points</u>	<u>50 basis points</u>	<u>75 basis points</u>	<u>100 basis points</u>	<u>More than 100 basis points</u>
0.0%	4.4%	53.3%	28.9%	13.3%	0.0

3. When will the Federal Reserve finally aloow it balance sheet to shrink?

(Percentage of those responding)

<u>2nd half 2017</u>	<u>1st half 2018</u>	<u>2nd half 2018</u>	<u>1st half 2019</u>	<u>2nd half 2019</u>
14.3%	31.1%	33.3%	11.9%	2.4%

<u>1st half 2020</u>	<u>2nd half 2020</u>	<u>Sometime later</u>
2.4%	2.4%	2.4%

4. What are the odds that a U.S. recession will begin during 2017? What about 2018?

(Between 0% and 100%)
Odds of a U.S. recession in:

	<u>2017</u>	<u>2018</u>
Consensus	**16.1%**	**20.6%**
Top 10 Average	23.9%	32.3%
Bottom 10 Average	8.5%	11.0%

5. Will we see a "full border tax adjustment" component adopted by Congress as part of the Trump Administration's tax reform legislation?

(Percentage of those responding

<u>Yes</u>	<u>No</u>
22.0%	78.0%

6. The current federal corporate tax rate is 35%. What do you think it will be cut to under the Trump Administration?

What will federal corporate tax rate be cut to
<u>under Trump administration</u>

Consensus	**22.2%**
Top 10 Average	27.3%
Bottom 10 Average	18.4%

7. The 12-month change in the Consumer Price Index (CPI) rose from 1.7% in November to 2.1% in December. The 12-month change in the core CPI increased from 2.1% in November to 2.2% in December. What will be the December-over-December change in the CPI and the core CPI in 2017?

2017 December-over-December change in:

	<u>CPI</u>	<u>Core CPI</u>
Consensus	**2.4%**	**2.3%**
Top 10 Average	2.8%	2.6%
Bottom 10 Average	2.0%	2.0%

Databank:

2017 Historical Data

Monthly Indicator	Jan	Feb	Mar	Apr	May	Jun	Jly	Aug	Sep	Oct	Nov	Dec
Retail and Food Service Sales (a)												
Auto & Light Truck Sales (b)												
Personal Income (a, current $)												
Personal Consumption (a, current $)												
Consumer Credit (e)												
Consumer Sentiment (U. of Mich.)												
Household Employment (c)												
Non-farm Payroll Employment (c)												
Unemployment Rate (%)												
Average Hourly Earnings (All, cur. $)												
Average Workweek (All, hrs.)												
Industrial Production (d)												
Capacity Utilization (%)												
ISM Manufacturing Index (g)												
ISM Non-Manufacturing Index (g)												
Housing Starts (b)												
Housing Permits (b)												
New Home Sales (1-family, c)												
Construction Expenditures (a)												
Consumer Price Index (nsa., d)												
CPI ex. Food and Energy (nsa., d)												
Producer Price Index (n.s.a., d)												
Durable Goods Orders (a)												
Leading Economic Indicators (g)												
Balance of Trade & Services (f)												
Federal Funds Rate (%)												
3-Mo. Treasury Bill Rate (%)												
10-Year Treasury Note Yield (%)												

2016 Historical Data

Monthly Indicator	Jan	Feb	Mar	Apr	May	Jun	Jly	Aug	Sep	Oct	Nov	Dec
Retail and Food Service Sales (a)	-0.5	0.3	-0.3	1.2	0.2	0.7	0.0	0.0	1.0	0.7	0.2	0.6
Auto & Light Truck Sales (b)	17.77	17.60	16.58	17.34	17.12	16.77	17.80	16.91	17.68	17.94	17.75	18.29
Personal Income (a, current $)	0.0	-0.1	0.3	0.5	0.3	0.3	0.4	0.2	0.4	0.5	0.0	
Personal Consumption (a, current $)	0.1	0.2	0.0	1.1	0.3	0.5	0.4	0.1	0.7	0.4	0.2	
Consumer Credit (e)	4.4	4.4	9.9	5.7	7.5	4.8	5.8	9.0	6.9	5.2	7.9	
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)	168	233	186	144	24	271	252	176	208	135	204	156
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. $)	25.38	25.39	25.45	25.53	25.59	25.62	25.71	25.74	25.81	25.92	25.90	26.00
Average Workweek (All, hrs.)	34.6	34.4	34.4	34.4	34.4	34.4	34.4	34.3	34.4	34.4	34.3	34.3
Industrial Production (d)	-1.4	-1.4	-2.0	-1.4	-1.2	-0.7	-1.0	-1.1	-1.0	-0.8	-0.8	0.6
Capacity Utilization (%)	75.7	75.6	74.9	75.2	75.1	75.4	75.6	75.5	75.3	75.4	74.9	75.5
ISM Manufacturing Index (g)	48.2	49.5	51.8	50.8	51.3	53.2	52.6	49.4	51.5	51.9	53.2	54.7
ISM Non-Manufacturing Index (g)	53.5	53.4	54.5	55.7	52.9	56.5	55.5	51.4	57.1	54.8	57.2	57.2
Housing Starts (b)	1.128	1.213	1.113	1.155	1.128	1.195	1.218	1.164	1.052	1.320	1.102	1.226
Housing Permits (b)	1.188	1.162	1.077	1.130	1.136	1.153	1.144	1.152	1.225	1.260	1.212	1.210
New Home Sales (1-family, c)	526	525	537	570	566	558	622	559	568	571	598	536
Construction Expenditures (a)	-0.3	1.4	1.6	-2.9	0.1	0.9	0.5	0.5	-0.2	0.6	0.9	
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	0.7	0.8	1.3	1.6
Durable Goods Orders (a)	4.3	-3.3	2.0	3.2	-2.9	-4.3	3.6	0.2	0.3	5.0	-4.8	-0.4
Leading Economic Indicators (g)	-0.2	0.1	0.1	0.5	-0.2	0.2	0.5	-0.2	0.3	0.2	0.1	0.5
Balance of Trade & Services (f)	-43.0	-45.3	-36.9	-38.2	-41.8	-44.7	-39.6	-40.6	-36.2	-42.4	-45.2	
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
January 30 Personal Income and Consumption (Dec) Pending Home Sales (Dec) Dallas Fed Manufacturing (Jan)	**31** **FOMC Meeting** Chicago PMI (Jan) Dallas Fed Services (Jan) Consumer Confidence (Jan, Conference Board) S&P/Case Shiller Home Price Index (Nov) Housing Vacancies (Q4) Employment Cost Index (Q4)	**February 1** **FOMC Meeting Statement (2:00 p.m.)** Vehicle Sales (Jan) ADP Employment (Jan) ISM Manufacturing (Jan, Final) Markit Manufacturing PMI (Jan, Final) Construction Spending (Dec) Mortgage Applications	**2** Productivity and Costs (Q4, Preliminary) Weekly Jobless Claims Weekly Money Supply	**3** Employment (Jan) Markit Services PMI (Jan, Final) ISM Non-Manufacturing PMI (Jan) Factory Orders (Dec) International Trade (Nov) Factory Orders (Nov)
6 Senior Loan Officer Survey (Q1)	**7** International Trade (Dec)) JOLTS (Dec) Consumer Credit (Dec)	**8** EIA Crude Oil Stocks Mortgage Applications	**9** Wholesale Trade (Dec) Weekly Jobless Claims Weekly Money Supply	**10** Import Prices (Jan) Consumer Sentiment (Feb, University of Michigan, Preliminary) Federal Budget (Jan)
13	**14** Producer Price Index (Jan) NFIB Survey (Jan)	**15** Retail Sales (Jan) Consumer Price Index (Jan) Industrial Production (Jan) NAHB Survey (Feb) Empire State Manufacturing (Feb) Business Inventories (Dec) TIC Data (Dec) EIA Crude Oil Stocks Mortgage Applications	**16** Housing Starts (Jan) Philadelphia Fed Manufacturing survey (Feb) Business Leader survey (Feb) Weekly Jobless Claims Weekly Money Supply	**17**
20 **President's Day** **U.S. Markets Closed**	**21** Philadelphia Fed Non-Manufacturing Survey (Feb) Markit Manufacturing PMI (Fed, flash)	**22** **FOMC Minutes** Existing Home Sales (Jan) EIA Crude Oil Stocks Mortgage Applications	**23** Markit Services PMI (Feb, Flash) FHFA Home Price Index (Dec, Q4) Kansas City Fed Survey (Feb) Weekly Jobless Claims Weekly Money Supply	**24** New Home Sales (Jan) Consumer Sentiment (Feb, Final, University of Michigan)
27 Durable Goods (Jan) Pending Home Sales (Jan) Dallas Fed Manufacturing Survey (Feb)	**28** Real GDP (Q4, Second) Advance Economic Indicators (Jan) Chicago PMI (Feb) Dallas Fed Services Survey (Feb) S&P/Case-Shiller Home Price Index (Dec)Consumer Confidence (Feb, Conference Board) Richmond Fed Survey (Jan)	**March 1** Personal Income and Consumption (Jan) Vehicle Sales (Feb) Markit Manufacturing PMI (Feb, Final) ISM Manufacturing (Feb) Construction spending (Jan) Beige Book EIA Crude Oil Stocks Mortgage Applications	**2** Weekly Jobless Claims Weekly Money Supply	**3** Markit Services PMI (Feb, Final) ISM Non-Manufacturing (Feb)
6 Factory Orders (Jan)	**7** International Trade (Jan) Consumer Credit (Jan)	**8** ADP Employment (Feb) Wholesale Trade (Jan) Productivity and Costs (Q4, Revised) EIA Crude Oil Stocks Mortgage Applications	**9** Import Prices (Feb) Quarterly Services Survey (Q4) Weekly Jobless Claims Weekly Money Supply	**10** Employment (Feb) Federal Budget (Feb)

BLUE CHIP FORECASTERS

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