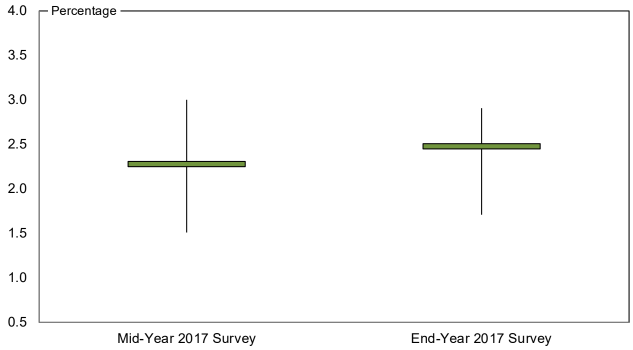
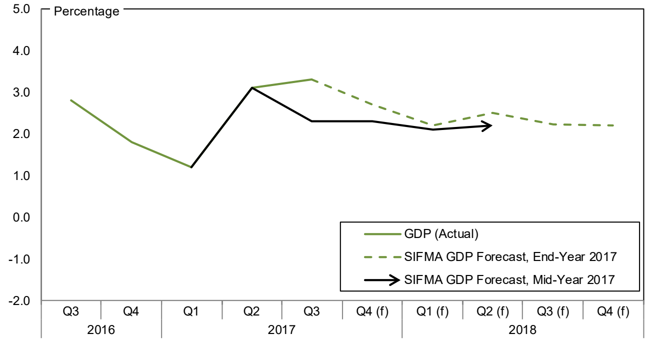
Full Year 2018 GDP Growth Estimates
End-Year 2017 vs Mid-Year 2017



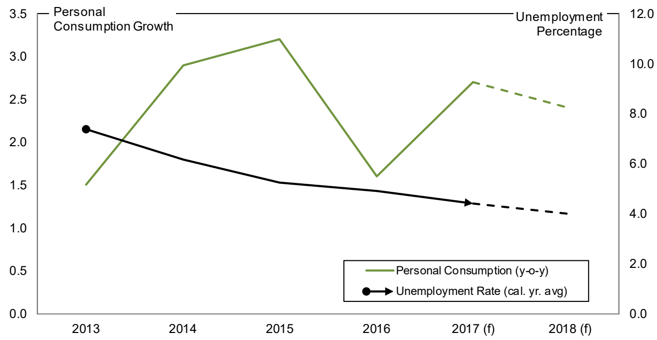
Sources: SIFMA Economic Advisory Roundtable Mid-Year 2017 and End-Year 2017 Economic Outlook Surveys

Real GDP Growth Rate
Quarter over Quarter Change, annualized



*(f) Forecast
Source: Actuals: Bureau of Economic Analysis; Forecasts: SIFMA Economic Advisory Roundtable End-Year 2017 Economic Outlook Survey

Consumer Spending Growth Rate and Unemployment Rate
Calendar Year Averages



*(f) Forecast
Source: Actuals: Bureau of Economic Analysis (Personal Consumption) & Bureau of Labor Statistics (Unemployment); Forecasts: SIFMA Economic Advisory Roundtable End-Year 2017 Economic Outlook Survey

GDP OUTLOOK STRENGTHENS SLIGHTLY; U.S. FISCAL POLICY AND FED ACTIONS KEY FACTORS

SIFMA's Economic Advisory Roundtable forecasted that the U.S. economy will grow 2.3 percent in 2017, strengthening[1] to 2.5 percent in 2018. The current outlook for 2017 and 2018 is stronger than the Roundtable's mid-year predictions of 2.1 percent and 2.3 percent, respectively.

THE ECONOMY

The median end-year forecast calls for 2017 gross domestic product (GDP) to grow by 2.3 percent on a year-over-year basis and by 2.6 percent and on a fourth-quarter-to-fourth-quarter basis, stronger than the 2.1 percent predicted on both a year-over-year and fourth-quarter-to-fourth-quarter basis in the 2017 mid-year survey.[2] On a quarterly basis, respondents expect real GDP to grow by 2.7 percent in 4Q'17 on an annualized basis.

For 2018, the end-year forecast calls for GDP to grow by 2.5 percent on a year-over-year basis and by 2.3 percent on a fourth-quarter-to-fourth-quarter basis, compared with 2.3 percent and 2.1 percent in the mid-year survey. On a quarterly basis, real GDP is expected to grow on an annualized basis by 2.2 percent in 1Q'18, 2.5 percent in 2Q'18, 2.2 percent in 3Q'18, and 2.2 percent in 4Q'18.[3]

Employment is expected to continue improving, and on a stronger basis than expected in the mid-year survey. Survey respondents predict the unemployment rate to average 4.4 percent in 2017 (unchanged from the mid-year survey), falling to 4.0 percent in 2018 (compared to 4.3 percent in the mid-year survey).[4] Expectations for job growth remained unchanged from the mid-year survey, with employers expected to add 2.1 million workers to payrolls in 2017[5] and 1.8 million in 2018.[6] Expectations for personal consumption strengthened from the mid-year survey to 2.7 percent for 2017 (from 2.4 percent) but remained the same at and 2.4 percent for 2018.[7]

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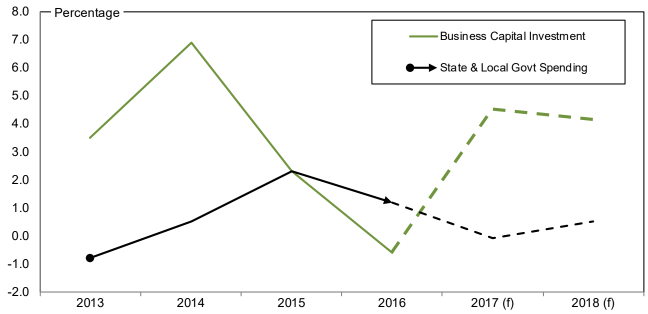
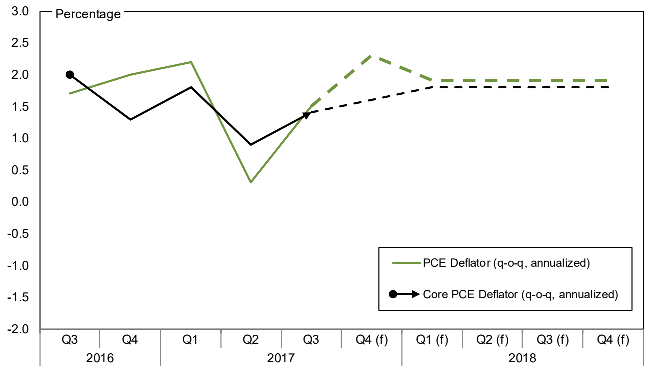
[1] The end-year 2017 survey was conducted from November 14, 2017 to December 1, 2017. The forecasts discussed in the text and appearing in the accompanying data tables and graphs are the median values of the individual member firms' submissions, unless otherwise specified.
[2] The full-year 2017 GDP growth forecasts ranged from 2.2 percent to 2.8 percent and on a fourth-quarter-to-fourth-quarter basis ranged from 2.4 percent to 2.8 percent.
[3] On a quarterly basis, annualized GDP growth forecasts ranged from 2.1 percent to 3.7 percent in 4Q'17, 1.5 percent to 2.9 percent in 1Q'18, 1.9 percent to 3.0 percent in 2Q'18, 1.8 percent to 3.3 percent in 3Q'18, and 0.4 percent to 3.1 percent in 4Q'18.
[4] The full-year 2017 average unemployment rate forecast ranged from 4.1 percent to 4.4 percent and for 2018 ranged from 3.8 percent to 4.5 percent.
[5] The full-year 2017 non-farm payroll employment growth forecasts ranged from 1.7 million jobs to 2.2 million jobs.
[6] The full-year 2018 non-farm payroll employment growth forecasts ranged from 1.4 million jobs to 2.2 million jobs.
[7] Personal consumption growth forecasts ranged from 2.5 percent to 3.0 percent in 2017, and 2.1 percent to 3.3 percent in 2018.

Business Capital Investment and State & Local Government Spending



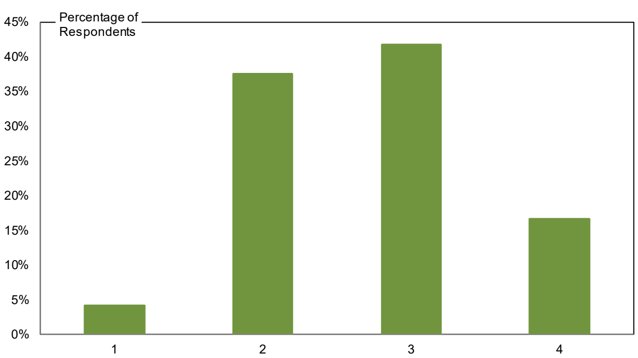
*(f) Forecast
Source: Actuals: Bureau of Economic Analysis; Forecasts: SIFMA Economic Advisory Roundtable End-Year 2017 Economic Outlook Survey

PCE Deflator & Core PCE Deflator



*(f) Forecast
Source: Actuals: Bureau of Economic Analysis; Forecasts: SIFMA Economic Advisory Roundtable End-Year 2017 Economic Outlook Survey

How Many Rate Hikes Are Expected in 2018?



Source: SIFMA Economic Advisory Rountable End-Year 2017 Economic Outlook Survey

Estimates for business capital investment strengthened from the previous survey: from 4.4 percent to 4.5 percent for full-year 2017 and from 3.0 percent to 4.2 percent for full-year 2018.[8] The outlook for state and local government spending weakened from the mid-year survey with an expectation of a 0.1 decline in 2017 (from 0.3 percent growth) and growth of 0.5 percent 2018 (from 1.5 percent).[9]

The forecast for 2017 "headline" inflation, measured by the personal consumption expenditures (PCE) chain price index, weakened slightly to 1.7 percent in the end-year survey from the mid-year 2017 forecast of 1.8 percent. For 2018, the PCE chain price index was forecast to be 1.8 percent, unchanged from expectations in mid-year.[10] The projection for the core PCE chain price index, which excludes food and energy prices, was 1.5 percent for full-year 2017 (down from 1.6 percent projected in mid-year 2017) and 1.7 percent for full-year 2018 (down from 2.0 percent expected in mid-year 2017).[11]

Economic slack/unemployment remained the dominant factor cited in the core inflation outlooks, followed by inflation expectations and global economic conditions. Several respondents noted that rent/shelter costs were also a significant factor. One respondent noted that "the probability of a sharp upswing in inflation is greater than zero."

MONETARY POLICY

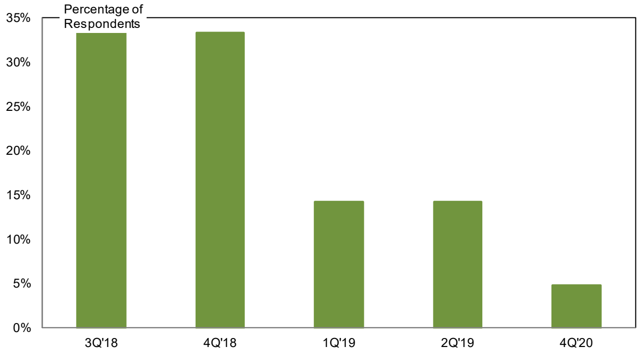
Respondents were unanimous in their expectation that the Federal Open Market Committee (FOMC) will raise the Federal Reserve's target rate range by 25 basis points at the December 12-13, 2017 meeting.

Respondents were divided on the number of rate hikes they expect in 2018: 41 percent of respondents expect three rate hikes in 2018, 38 percent of respondents expect two, 17 percent expect four rate hikes and the remainder, only one rate hike.

Survey respondents considered labor market conditions to be the most important factor in the FOMC's decision to raise rates, followed by indicators of inflation pressure and inflation expectations.

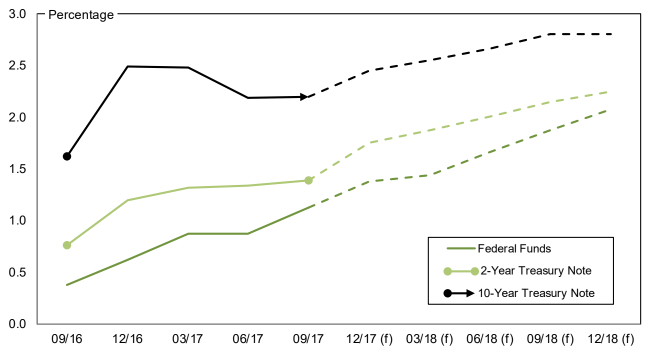
[8] The full-year 2017 business fixed investment forecasts ranged from 2.2 percent to 4.6 percent and for 2018 ranged from 2.5 percent to 5.2 percent.
[9] The full-year 2017 real state and local government spending forecasts ranged from (0.3) percent to 2.5 percent and for 2018 ranged from (0.2) percent to 2.6 percent.
[10] The full-year 2017 PCE deflator forecasts ranged from 1.3 percent to 2.0 percent and for 2018 from 1.6 percent to 2.2 percent.
[11] The full-year 2017 core PCE deflator forecasts ranged from 1.5 percent to 1.9 percent and for 2018 from 1.4 percent to 2.1 percent.

When Will the Lower End of the Fed Funds Target Rate Range Rise to 2%?



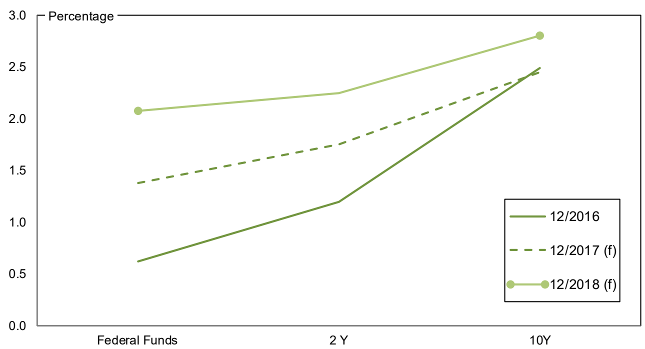
Source: SIFMA Economic Advisory Rountable End-Year 2017 Economic Outlook Survey

Federal Funds Rate and Treasury Yields (monthly average)



*(f) Forecast
Source: Actuals: Bureau of Economic Analysis, Federal Reserve; Forecasts: SIFMA Economic Advisory Roundtable End-Year 2017 Economic Outlook Survey

U.S. Yield Curve Forecasts



*(f) Forecast
Actuals and forecasts are averages for the month of the specified date..
Source: Actuals: U.S. Treasury, Federal Reserve; Forecasts: SIFMA Economic Advisory Roundtable End-Year 2017 Economic Outlook Survey.

Consistent with the mid-year survey, respondents' forecasts for when the lower end of the target federal funds rate range will reach 2 percent were clustered around the second half of 2018 and early 2019. Two thirds of respondents predicted by the end of 2018 (evenly split between the third and fourth quarters), 28 percent forecasted in the first half of 2018; and the remainder in the last quarter of 2020.

Although the Federal Reserve concluded its asset purchase program in October 2014, it has continued to maintain accommodative financial conditions through its policy of rolling over Treasury securities as well as reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities into agency mortgage-backed securities. In June 2017, the FOMC outlined a balance sheet normalization policy, reducing its balance sheet by decreasing reinvestment of principal payments received.

Respondents expect the FOMC's balance sheet normalization to increase the term premium by 10 bps in 2018, and by 10 bps in 2019.[12] One respondent noted that "[the] term premium will likely continue to be driven by global growth prospects/global yields and the Fed's narrative on long-run neutral rates." A few respondents noted that while the staff changes in the FOMC added uncertainty to their outlook, balance sheet normalization was expected to remain gradual.

INTEREST RATES

When the survey was completed on December 1, 2017, the 10-year U.S. Treasury yield was 2.37 percent. The median survey forecasts for 10-year Treasury rates were: 2.45 percent for December 2017, 2.55 percent for March 2018, 2.66 percent for June 2018, 2.80 percent for September 2018 and 2.80 percent for December 2018.[13]

Most respondents (89 percent) expected the Treasury yield curve (Fed funds-to-10-year Treasury yield spread) to flatten by June 2018, with the balance split between expecting the curve to remain the same or steepen. Inflation and inflationary expectations was the dominant factor cited impacting Treasury yields in the first half of 2018, followed U.S. economic conditions and FOMC interest rate policy.

Respondents were evenly divided between expectations for the TED (Treasury bill less LIBOR) spread: 38 percent expected the spread to widen in the first half of 2018, 31 percent expected the spread the narrow, and the balance expect the spread to remain the same.

Nearly 60 percent of the respondents expect investment grade bond yield spreads to widen, 24 percent expect spreads to narrow, and the balance expect them to remain unchanged. Three quarters of respondents expect high yield bond spreads to widen, 19 percent expect spreads to narrow, and the balance expect them to remain unchanged.

[12] The term premium forecasts for 2018 ranged from 0 to 35 bps, and ranged from 0 to 30 bps in 2019.

[13] The 10-year Treasury yield forecasts ranged from 2.30 percent to 2.65 percent for December 2017, from 2.25 percent to 2.85 percent for March 2018, from 2.15 percent to 3.0 percent for June 2018; from 2.05 percent to 3.20 percent in September 2018, and from 1.95 percent to 3.40 percent for December 2018.

Risks to Growth: Fiscal Stimulus, Tax Reform and Inflation on the Upside; Geopolitical Unrest, Global Slowdown and Market Corrections on the Downside

Respondents were asked to rank factors by their potential impact on U.S. economic growth in the first half of 2018. U.S. fiscal policy was considered the most important factor impacting U.S. economic growth, closely followed by Federal Reserve actions.

Upside and downside risks to the growth forecasts were relatively concentrated among respondents. Tax reform, fiscal stimulus and inflation were the most often cited risks among respondents on the upside. On the downside, global slowdown, geopolitical shocks and a market correction impacting confidence were the leading causes for concern. One respondent noted that "the lack of household imbalances means any downside will likely be a confidence-related event."

Oil Prices

Panelists placed a 11 percent chance on West Texas Intermediate (WTI) crude oil prices falling below $40 a barrel at the end of June 2018, a 21 percent chance on prices between $41 and $50 a barrel, a 45 percent chance of prices between $51 and $60, and a 23 percent chance of prices rising to $61 or higher. Respondents estimated that the most likely scenario (prices remaining between $51 and $60) would have no impact on economic growth.

Respondents estimated that WTI would settle at an equilibrium price of $62.00 per barrel three years from now, assuming continued moderate global growth.[14]

Policy Outlook

The Administration has aired several potential policy changes, some of which are more likely to be realized than others. Overall, respondents were divided on the impact that the uncertainty regarding major government initiatives would have on GDP in 2018: most respondents (79 percent) were evenly split between expecting no impact or a positive impact to GDP growth, with the balance expecting a negative impact.

Respondents were asked to rank several potential policy changes aired by the new Administration in terms of how likely there are to be accomplished in 2018. Half of respondents expect immigration limits to have the greatest chance, followed by reduced regulation and repeal/replace of the ACA. When asked such policy changes' impact on economic growth, immigration limits were expected to have a negative impact, with half of respondents expecting a reduction of less than 25 bps and another fifth of respondents expecting up a reduction of 25 to 50 bps, and the remainder no impact. Two thirds of respondents expect the ACA repeal/replace would have no impact, with one expecting a slightly positive impact and the balance expecting a negative impact. On the other hand, most respondents expected reduced regulation would have a positive impact of up to 25 bps to GDP.

Tax Reform

When asked about tax reform, most respondents (86 percent) expected tax reform to be enacted, with 14 percent dissenting. Three quarters of respondents expected tax reform to happen by the end of 2017 or first quarter 2018, with the remainder expecting it by the end of 2018 or early 2019.

When asked which aspect of tax reform would have the most positive impact on U.S. economic growth, reform of corporate rates was the most oft-cited aspect, followed by international tax reform. A few respondents also noted that capex expensing would also have a positive impact.

Respondents were divided as to its ultimate impact on the economy, with a majority expecting the tax reform package to increase the long-term potential growth rate of the U.S. economy.

[14] The range for estimates of the equilibrium oil price was $45 per barrel to $68.21 per barrel.

NAFTA

Asked about when NAFTA negotiations would be completed, responses were divided: 12 percent of respondents expect completion of negotiations in 1Q'18, half cited the second quarter of 2018 and the remaining responses were ranged from the second half of 2018 all the way to 2023. Two-third of respondents expect a less than a 50 percent chance of a U.S. withdrawal from NAFTA, while the other third gave it a 50 percent chance. Nearly all respondents, however, forecast a negative impact on GDP should the U.S. withdraw from NAFTA, with 60 percent expecting a decline of up to 25 bps, 30 percent expecting a GDP decline of 25 to 50 bps, and the balance no impact.

Regulatory Policy

Respondents were asked to rank the likelihood of financial regulatory reform in 2018. Reform of stress testing (Comprehensive Capital Analysis and Review (CCAR)/DFAST/CLAR) and the Volcker rule were most often cited as likely or highly likely in 2018, followed by Liquidity and Prudential requirements. Orderly liquidation, derivatives and securitization rules were often cited as 50-50 or likely, with the outlook for leverage requirements more evenly split among unlikely, 50-50 and likely.

Respondents, however, were divided as to the impact on their economic growth forecasts of such regulatory reform, with slightly more than half of respondents expecting no impact and the balance expecting an up to 50 bps uptick in GDP growth. One respondent remarked, "Reg[ulatory] reform is a huge positive. We do not give it enough credit."

SIFMA ECONOMIC ADVISORY ROUNDTABLE FORECAST

	2017	2018
Real GDP	2.3	2.5
Real GDP (4Q – 4Q)	2.6	2.3
CPI	2.1	2.2
CPI (4Q – 4Q)	2.0	2.1
Core CPI	1.8	2.0
Core CPI (4Q – 4Q)	1.8	2.1
PCE deflator	1.7	1.8
PCE deflator (4Q – 4Q)	1.6	1.8
Core PCE deflator	1.5	1.7
Core PCE deflator (4Q – 4Q)	1.4	1.8
Personal Consumption	2.7	2.4
Nonresidential Fixed Investment	4.5	4.2
Housing Starts (millions)	1.2	1.3
Real State & Local Government Spending	(0.1)	0.5
Current Account Deficit ($ billions)	(475.0)	(506.0)
New Home Sales (millions of units)	0.6	0.7
Existing Home Sales (millions of units)	5.5	5.6
Nonfarm Payroll Employment (change in millions)	2.1	1.8
Unemployment Rate (calendar year average)	4.4	4.0
Federal Budget (FY, $ billions)	(666.0)	(700.0)

Quarter-to-Quarter % Changes in Annual Rates

	2017				2018			
	I	II	III	IV	I	II	III	IV
Real GDP	1.2	3.1	3.3	2.7	2.2	2.5	2.2	2.2
CPI	3.1	(0.3)	2.0	3.2	2.3	1.9	2.1	2.1
Core CPI	2.5	0.6	1.7	2.2	2.1	2.0	2.2	2.1
PCE deflator	2.2	0.3	1.5	2.3	1.9	1.9	1.9	1.9
Core PCE deflator	1.8	0.9	1.4	1.6	1.8	1.8	1.8	1.8
Personal Consumption	1.9	3.3	2.3	2.7	2.2	2.4	2.3	2.3
Nonresidential Fixed Investment	7.2	6.7	4.7	4.7	3.9	4.0	3.7	3.2

Interest Rates (monthly average %)

	Dec. ‘17	Mar. ‘18	Jun. ‘18	Sep. ‘18	Dec. ‘18
Fed Funds	1.38	1.44	1.67	1.88	2.07
2 Year Treasury Note	1.75	1.87	2.01	2.15	2.25
10 Year Treasury Note	2.45	2.55	2.66	2.80	2.80
30 Year Fixed-Rate Home Mortgages	3.9	4.1	4.2	4.3	4.5

Exchange Rates (monthly average)

	Dec. ‘17	Mar. ‘18	Jun. ‘18	Sep. ‘18	Dec. ‘18
Yen/Dollar	113.0	114.0	114.0	115.0	113.0
Dollar/Euro	1.18	1.19	1.20	1.19	1.20
Dollar/GBP	1.32	1.32	1.33	1.33	1.34

ECONOMIC ADVISORY ROUNDTABLE

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