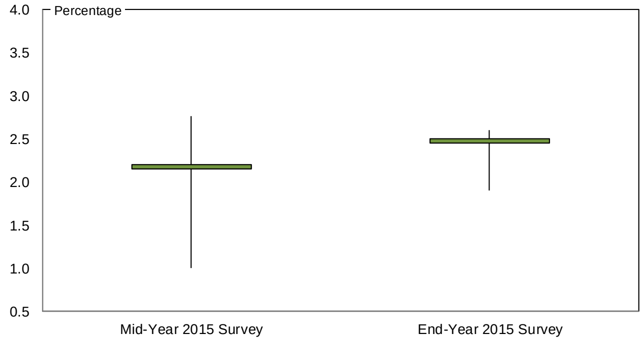
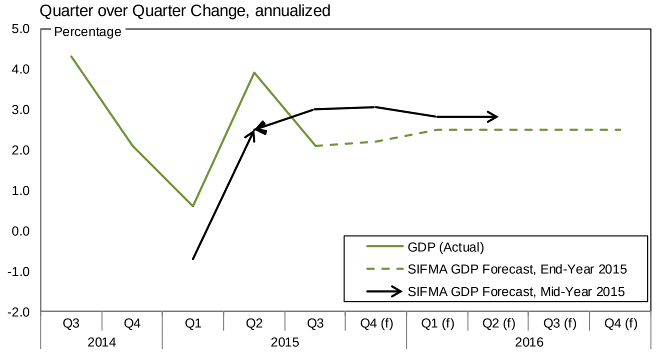
Full Year 2015 GDP Growth Estimates
Mid-Year 2015 vs End-Year 2015



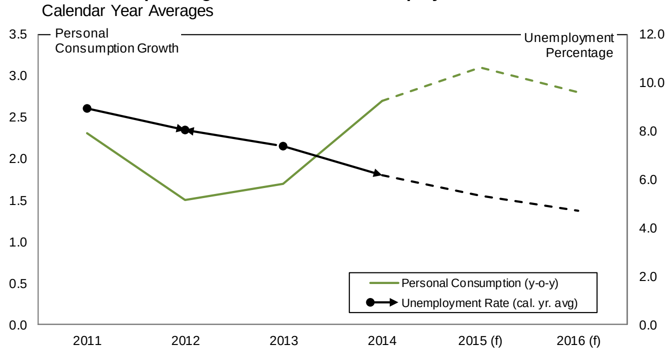
Sources: SIFMA Economic Advisory Roundtable Mid-Year 2015 and End-Year 2015 Economic Outlook Surveys

Real GDP Growth Rate
Quarter over Quarter Change, annualized



*(f) Forecast
Source: Actuals: Bureau of Economic Analysis; Forecasts: SIFMA Economic Advisory Roundtable End-Year 2015 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 Rountable End-Year 2015 Economic Outlook Survey

2015 GDP OUTLOOK STRENGTHENS TO 2.5 PERCENT; MONETARY POLICY STILL KEY FACTOR

SIFMA's Economic Advisory Roundtable forecasted that the U.S. economy will grow at a solid 2.5 percent rate both this year and next.[1] The current outlook for 2015 is stronger than the Roundtable's mid-year 2015 prediction of 2.2 percent, mainly due to stronger than expected growth in the first half.

The Roundtable continues to expect the Federal Open Market Committee (FOMC) to raise the current 0.0 to 0.25 percent target federal funds rate range, with over 90 percent of respondents expecting the first rate hike to come at the meeting this week.

THE ECONOMY The median end-year forecast called for 2015 gross domestic product (GDP) to grow by 2.5 percent on a year-over-year basis and by 2.2 percent on fourth-quarter-to-fourth-quarter basis, stronger than the 2.2 percent and 1.9 percent, respectively, predicted in the mid-year survey.[2]

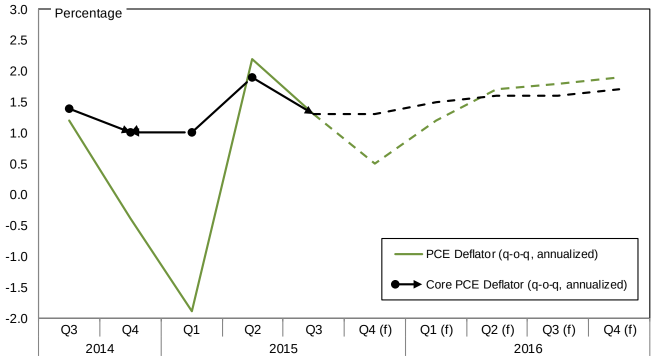
The first and second quarters of 2015 came in considerably higher than the mid-year forecast: 1Q'15 growth was 0.6 percent on an annualized basis versus a forecast of negative 0.7 percent and 2Q'15 was 3.9 percent versus an estimate of 2.5 percent. This is partly offset by the weaker than expected third quarter: the Bureau of Economic Analysis (BEA) now pegs 3Q'15 at 2.1 percent versus the mid-year forecast of 3.0 percent. The third and most complete BEA estimate won't be available until December 22.

Looking forward, respondents expected 4Q'15 GDP growth to be 2.2 percent on an annualized basis, rising to 2.5 percent over the following four quarters. That is considerably more conservative than the mid-year quarterly forecast of 3.1 percent growth in 4Q'15, followed by 2.8 percent in 1Q'16 and 2Q'16.[3] On a full year basis, GDP growth is also expected to be 2.5 percent in 2016.[4]

Employment is expected to continue to improve. Survey respondents predicted the unemployment rate to fall from an average of 5.3 percent in 2015 to 4.7 percent in 2016, suggesting a bigger dip than the mid-year forecast of 5.4 percent and 4.9 percent, respectively.[5] Employers are expected to add 2.5 million workers to their payrolls in 2015,[6] falling slightly to 2.1 million in 2016.[7] This should underpin continued solid growth in consumer spending; the Roundtable expects personal consumption to increase 3.1 percent in 2015 and 2.8

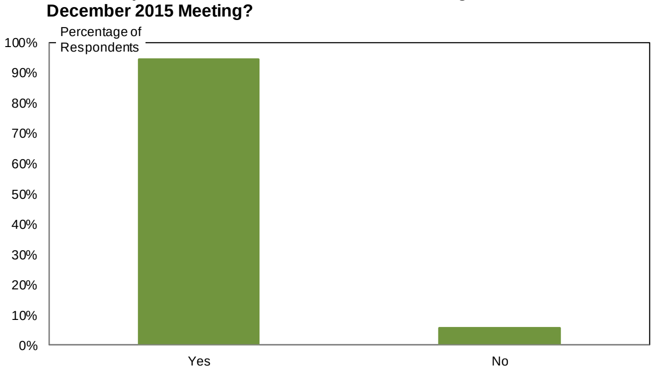
[1] The end-year 2015 survey was conducted from November 19, 2015 to December 4, 2015. The forecasts discussed in the text and appearing in the accompanying data tables and graphs are the median values of the individual member firms' submissions, unless otherwise specified.
[2] The full-year 2015 GDP growth forecasts ranged from 1.9 percent to 2.6 percent and on a fourth-quarter-to-fourth-quarter basis ranged from 1.8 percent to 2.5 percent.
[3] On a quarterly basis, annualized GDP growth forecasts ranged from 0.6 percent to 3.2 percent in 4Q'15, 1.6 percent to 2.9 percent in 1Q'16, 1.8 percent to 3.4 percent in 2Q'16, 1.8 percent to 3.5 percent in 3Q'16, and 1.9 percent to 3.2 percent in 4Q'16.
[4] The full-year 2016 GDP growth forecasts ranged from 1.9 percent to 3.1 percent and on a fourth-quarter-to-fourth-quarter basis ranged from 1.9 percent to 3.0 percent.
[5] The full-year 2015 average unemployment rate forecast ranged from 4.5 percent to 5.3 percent and for 2016 ranged from 3.9 percent to 5.0 percent.
[6] The full-year 2015 non-farm payroll employment growth forecasts ranged from 2.0 million jobs to 2.9 million jobs.
[7] The full-year 2016 non-farm payroll employment growth forecasts ranged from 1.3 million jobs to 2.9 million jobs.

PCE Deflator & Core PCE Deflator



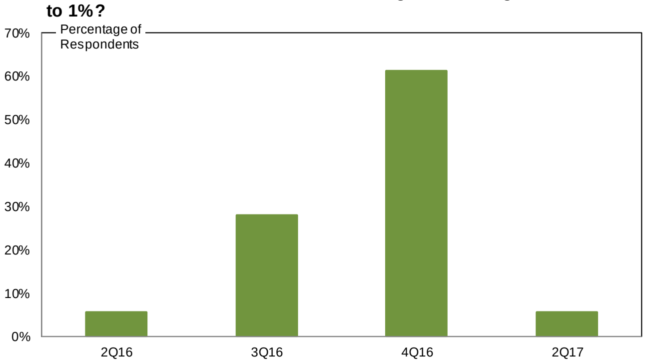
*(f) Forecast
Source: Actuals: Bureau of Economic Analysis; Forecasts: SIFMA Economic Advisory Roundtable End-Year 2015 Economic Outlook Survey

Do You Expect the FOMC Raise the Fed Funds Target Rate at December 2015 Meeting?



Source: SIFMA Economic Advisory Rountable End-Year 2015 Economic Outlook Survey

When Will the Lower End of Fed Funds Target Rate Range Rise to 1%?



Source: SIFMA Economic Advisory Rountable End-Year 2015 Economic Outlook Survey

percent in 2016.[8]

Business capital investment growth estimates for full-year 2015 strengthened to 3.2 percent (from the 3.0 percent forecasted in the mid-year survey); 2016 is expected to improve to 3.7 percent, lower than the 4.6 percent forecast at mid-year.[9] The outlook for state and local government spending strengthened to 1.5 percent growth in 2015 (versus 0.9 percent growth forecast at mid-year) and 1.8 percent growth in 2016 (1.6 percent forecast in mid-year).[10]

The forecast for "headline" inflation, measured by the personal consumption expenditures (PCE) chain price index, weakened slightly from the mid-year forecast, with 0.3 percent growth expected for full-year 2015 and 1.4 percent for full-year 2016, compared to 0.5 percent and 1.6 percent, respectively, in the previous forecast.[11] The projection for the core PCE chain price index, which excluded food and energy prices, was 1.3 percent for full-year 2015 (unchanged from mid-year) and 1.6 percent for full-year 2016 (down from 1.7 in mid-year).[12]

The dispersion of views around core inflation is relatively narrow. Nearly 70 percent of respondents expected PCE core inflation to remain between 1.3 percent and 1.6 percent by mid-2016, while 22 percent expect it to be above 1.6 percent and the balance below 1.3 percent. For end-2016, 83 percent of respondents expected core PCE inflation to remain between 1.5 percent and 2.0 percent, with the balance expecting it to be below 1.5 percent.

Economic slack/unemployment was the dominant factor cited in the core inflation outlooks, as in prior surveys, followed by the strength of the U.S. dollar and commodity price pass through. One respondent noted that "inflation expectations are very important, but I expect them to be relatively stable."

MONETARY POLICY As referenced earlier, over 90 percent of respondents expect the Fed's first rate hike to occur at the FOMC's December 15-16, 2015 meeting, raising the range from 0.0 to 0.25 percent to 0.25 to 0.50 percent.

Survey respondents were nearly unanimous that labor market conditions are the most important factor in the FOMC's decision to raise rates, followed by readings of financial developments and inflation or inflationary expectations.

Looking forward, one respondent noted, "The tightening will be slower than even the FOMC expects. The economy is still fragile, especially overseas. Inflation is likely to be lower than expected too." Another respondent added that "[the tightening decision] is still very much data-dependent, but likely gradual with rates likely to end up relatively low when the Fed is done."

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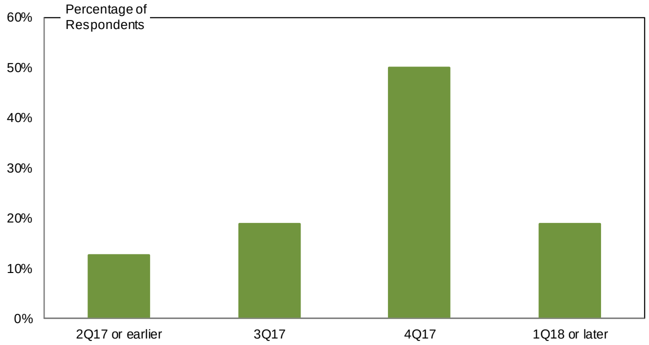
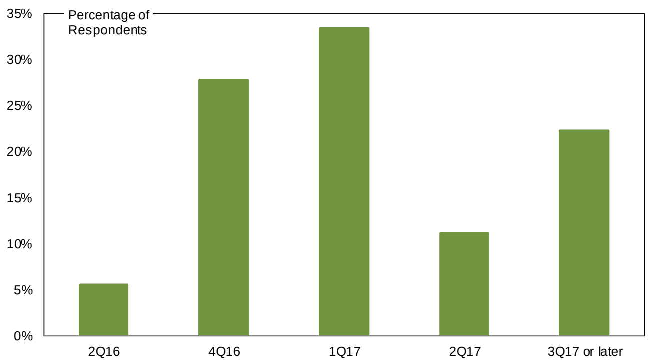
[8] Personal consumption growth forecasts ranged from 3.0 percent to 3.3 percent in 2015, and 2.3 percent to 3.4 percent in 2016.
[9] The full-year 2015 business fixed investment forecasts ranged from 2.9 percent to 3.3 percent and for 2016 ranged from 2.6 percent to 5.7 percent.
[10] The full-year 2015 real state and local government spending forecasts ranged from 0.6 percent to 1.9 percent and for 2016 ranged from 0.8 percent to 2.9 percent.
[11] The full-year 2015 PCE deflator forecasts ranged from 0.1 percent to 0.5 percent and for 2016, from 0.6 percent to 1.9 percent.
[12] The full-year 2015 core PCE deflator forecasts ranged from 1.3 percent to 1.5 percent and for 2016 from 1.0 percent to 1.9 percent.

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



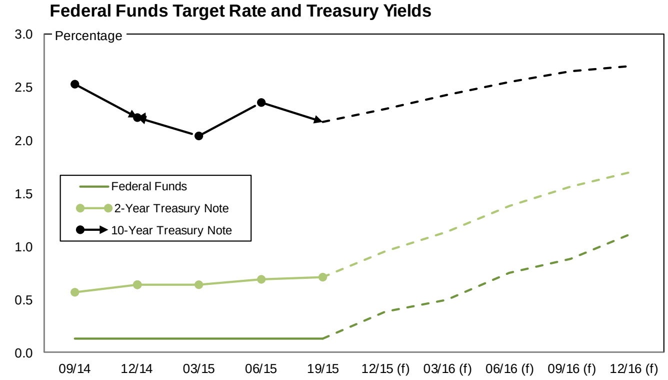
Source: SIFMA Economic Advisory Rountable End-Year 2015 Economic Outlook Survey

When Will the FOMC End Balance Sheet Reinvestment?



Source: SIFMA Economic Advisory Rountable End-Year 2015 Economic Outlook Survey

Federal Funds Target Rate and Treasury Yields



*(f) Forecast
Source: Actuals: Bureau of Economic Analysis, Federal Reserve; Forecasts: SIFMA Economic Advisory Roundtable End-Year 2015 Economic Outlook Survey

Asked when the lower end of target federal funds rate range would reach 1 percent, 34 percent of respondents predicted 3Q'16 or earlier, roughly 60 percent forecast 4Q'16 and the balance 2Q'17. Expectations for when the lower end of target federal funds rate range would reach 2 percent spanned from 4Q'16 to 4Q'18, with most predicting the second half of 2017 (69 percent).

Although the Fed 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. Asked when the Fed's reinvestment policy would end, two-thirds of the respondents expected either 4Q'16 or 1Q'17. One respondent noted an expectation that the Fed would taper it reinvestment policy beginning in 3Q'16 through 3Q'17, while another predicted MBS reinvestments would end in 1Q'17, but reinvestment in Treasuries might be permanent.

INTEREST RATES When the survey was completed on December 4, 2015 the 10-year U.S. Treasury yield was 2.28 percent and the median survey forecasts for 10-year Treasury rates were: 2.30 percent for December 2015, 2.43 percent for March 2016, 2.55 percent for June 2016, 2.65 percent for September 2016 and 2.70 percent for December 2016.[13]

The overwhelming majority of respondents expected the Treasury yield curve (Fed funds-to-10-year Treasury yield spread) to flatten by mid-2016 (94 percent), with the balance expecting the curve to steepen.

Slightly more than half of survey respondents expected the TED (Treasury bill less LIBOR) spread to remain the unchanged by mid-2016, while a third expected the spread to narrow and the balance expected the spread to widen.

Opinions were similarly dispersed over the path of investment-grade (IG) and high-yield (HY) spreads. Roughly half of respondents expected IG spreads to remain about unchanged by mid-2016, nearly 30 percent expected spreads to narrow and the balance expected spreads to widen. By contrast, slightly more than half of the respondents expected the HY spreads to widen by mid-2016, a third forecasted the spreads to narrow and the balance expected spreads to remain about the same. Note that the survey was completed before the recent volatility in the credit market.

Risks to Growth: Consumer Spending and Housing on the Upside; Global Economic Weakness and a Strong U.S. Dollar on the Downside

Respondents were asked to rank factors by their potential impact on U.S. economic growth in the first half of 2016. FOMC interest rate policy was considered the most important factor impacting U.S. economic growth, followed by private credit market conditions and business confidence, unchanged from the mid-2015 survey. Developments in the Eurozone, U.S. fiscal policy and developments in Emerging Markets were ranked a distant fourth through sixth.

[13] The average 10-year Treasury yield forecasts ranged from 2.10 percent to 2.50 percent for December 2015, from 2.29 percent to 2.60 percent for March 2016, from 2.35 percent to 2.85 percent for June 2016; from 2.20 percent to 3.20 percent in September 2016, and from 2.25 percent to 3.45 percent for December 2016.

Upside and downside risks to the growth forecasts varied considerably among respondents. Wage growth driving increasing demand for consumer durables and housing were common themes among respondents. Other upside influences included stronger global growth, recovery in capital expenditure, improvement in the manufacturing sector and low oil prices.

On the downside, the main area of concern was the negative impact of a downshift in global economic growth and the stronger U.S. dollar. Several also cited the Fed raising rates too much and/or too quickly as a risk to the downside. Other potential downside risks noted included further weakening in the manufacturing sector, oil price volatility and geopolitical risks/shocks.

Oil Prices

Panelists placed a 40 percent chance on West Texas Intermediate (WTI) crude oil prices being in a range between $41 and $50 a barrel at mid-2016, with a 25 percent chance of prices either falling to below $40 a barrel or rising to between $51 and $60 a barrel, and a 10 percent chance of prices rising above $61. Respondents estimated that the most likely scenario – oil prices remaining in the $41 and $50 per barrel range – would have no impact on economic growth. Only the two outer ranges were broadly predicted to have an impact on GDP growth: the median forecaster predicted that prices below $40 per barrel would raise GDP growth by 20 bps, while prices above $61 per barrel would lower growth by 10 bps.

Respondents estimated that WTI would settle at an equilibrium price of $64.80 per barrel three years from now, assuming continued moderate global growth.[14]

Policy-Related Issues

As in prior surveys, corporate tax reform was cited as the pending policy issue which could have the greatest potential impact on the U.S. economy, followed distantly by immigration reform and completion of the Trans-Pacific Partnership. One respondent argued that a lack of showdowns over the budget or debt ceiling in 2016 supports growth, while another expects that state and local government spending to make a modest positive contribution to GDP growth.

When asked about the impact of concern or uncertainty over the direction of financial regulatory policy on 2016 economic growth, respondents were more pessimistic on the likelihood of a significant drag to GDP growth than in the previous survey: 14 percent of respondents (19 percent at midyear) expected no impact; 65 percent (75 percent at midyear) expected a negative impact of up to 50 basis points, and 21 percent (6 percent at midyear) expected a negative impact of more than a 50 basis.

[14] The range for estimates of the equilibrium oil price was $35 per barrel to $70 per barrel.

SIFMA ECONOMIC ADVISORY ROUNDTABLE FORECAST

Inflation adjusted year-over-year percentage change, unless otherwise specified.

	2015	2016
Real GDP	2.5	2.5
Real GDP (4Q – 4Q)	2.2	2.5
CPI	0.2	1.7
CPI (4Q – 4Q)	0.7	1.9
Core CPI	1.8	2.0
Core CPI (4Q – 4Q)	2.1	2.0
PCE deflator	0.3	1.4
PCE deflator (4Q – 4Q)	0.5	1.7
Core PCE deflator	1.3	1.6
Core PCE deflator (4Q – 4Q)	0.7	1.6
Personal Consumption	3.1	2.8
Nonresidential Fixed Investment	3.2	3.7
Housing Starts (millions)	1.1	1.3
Real State & Local Government Spending	1.5	1.8
Current Account Deficit ($ billions)	453.0	517.2
New Home Sales (millions of units)	0.5	0.6
Existing Home Sales (millions of units)	5.3	5.5
Nonfarm Payroll Employment (change in millions)	2.5	2.1
Unemployment Rate (calendar year average)	5.3	4.7
Federal Budget (FY, $ billions)	(439.0)	(460.0)

Quarter-to-Quarter % Changes in Annual Rates

	2015	2016			
	IV	I	II	III	IV
Real GDP	2.2	2.5	2.5	2.5	2.5
CPI	0.5	1.5	2.0	2.0	2.2
Core CPI	2.0	2.0	2.0	2.0	2.0
PCE deflator	0.5	1.2	1.7	1.8	1.9
Core PCE deflator	1.3	1.5	1.6	1.6	1.7
Personal Consumption	2.8	2.8	2.8	2.6	2.5
Nonresidential Fixed Investment	3.9	3.9	3.8	4.0	4.0

Interest Rates (monthly average %)

	Dec. '15	Mar. '16	Jun. '16	Sep. '16	Dec. '16
Fed Funds	0.38	0.50	0.75	0.88	1.13
2 Year Treasury Note	0.95	1.14	1.38	1.56	1.71
10 Year Treasury Note	2.30	2.43	2.55	2.65	2.70
30 Year Fixed-Rate Home Mortgages	4.00	4.10	4.23	4.26	4.30

Exchange Rates (monthly average %)

	Dec. '15	Mar. '16	Jun. '16	Sep. '16	Dec. '16
Yen/Dollar	123.0	123.5	124.0	124.5	125.0
Dollar/Euro	1.07	1.05	1.02	1.00	1.00

ECONOMIC ADVISORY ROUNDTABLE

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