Responses to Survey of Market Participants

Markets Group, Federal Reserve Bank of New York

July 2015

Responses to Survey of Market Participants
Distributed: 07/15/2015 – Received by: 07/20/2015

For most questions, median responses across respondents, along with the 25th and 75th percentiles, are reported. For questions that ask respondents to give a probability distribution, the average response across dealers for each potential outcome is reported.[1] Brief summaries of the comments received in free response form are also provided.

Responses were received from 30 respondents. Except where noted, all 30 respondents responded to each question. In some cases, respondents may not have provided forecasts extending to the same time horizon as requested in the survey. In these instances, the number of respondents who answered all parts of the question is indicated.

Monetary Policy Expectations

1. a) Provide below your expectations for changes, if any, to the language referencing each of the following topics in the July FOMC statement. Limit your responses to changes you consider most likely.

Current economic conditions and the economic outlook:
(28 responses)

Some respondents expected a modest upgrade to the Committee's assessment of the current economic growth outlook in the July FOMC statement. Several respondents expected a modest upgrade to the Committee's assessment of the labor market outlook. In addition, several respondents expected that the statement would indicate that external risks had abated somewhat over the intermeeting cycle. Several other respondents did not expect any material changes to the Committee's characterization of current economic conditions or the economic outlook in the statement.

Communication on the Committee's policy of reinvesting principal payments on Treasury and agency securities:
(27 responses)

Most respondents expected no material change to the Committee's policy of reinvesting the proceeds from maturing Treasury and agency securities.

Communication on the expected path of policy rates and forward guidance on the target federal funds rate:
(28 responses)

Some respondents reported that they expect no significant change in the Committee's communication regarding the expected path of policy rates or forward guidance on the target federal funds rate. However, several other respondents noted that the statement might reflect an increased likelihood that the first increase in the target range could occur later this year. Lastly, several respondents indicated that the statement language might reflect that the Committee would likely take a "gradual" approach to policy normalization.

Other:
(8 responses)

Respondents did not provide substantial commentary in this section.

b) How do you expect the June FOMC events to influence market perceptions of the stance of monetary policy, if at all? (1 = less accommodative, 3 = neutral, 5 = more accommodative)

[1] Answers may not sum to 100 percent due to rounding.

Perceived Stance of Monetary Policy	
25th Pctl	2
Median	3
75th Pctl	3

Please explain:
(24 responses)

Several respondents noted their expectation that the July FOMC statement would not materially impact market perceptions of the stance of monetary policy. Several respondents noted that possible changes to the statement reflecting that the Committee is closer to raising rates could be perceived as less accommodative.

2. a) How would you grade the Federal Reserve System's communication with the markets and with the public since the policy survey on June 8? Please provide a rating between 1 and 5, with 1 indicating ineffectiveness and 5 indicating effectiveness.

	Fed Communication Grade Number of Respondents:
1 - Ineffective	0
2	6
3	10
4	13
5 - Effective	1

3. a) Of the possible outcomes below, provide the percent chance you attach to the timing of the first increase in the federal funds target rate or range. Also, provide your estimate for the most likely meeting for the first increase.

	Jul. 28-29	Sep. 16-17	Oct. 27-28	Dec. 15-16	Jan. 26-27	Mar. 15-16	Apr. 26-27	≥ Jun. 14-15
Average	2%	43%	12%	23%	7%	7%	2%	4%

	Most Likely Meeting of First Increase in Target Rate or Range
25th Pctl	September 2015
Median	September 2015
75th Pctl	September 2015

b) Provide the percent chance you attach to the target federal funds rate or range not returning to the zero lower bound during the 2 years following liftoff.

	Probability of Not Returning to ZLB within 2 Years Following Liftoff
25th Pctl	75%
Median	80%
75th Pctl	85%

Conditional on the target not returning to the zero lower bound, provide the percent chance you attach to the net change in the target rate or range in each of the two years following liftoff.

(29 complete responses)

	First Year Following Liftoff				
	0 - 50 basis points	51 - 100 basis points	101 - 150 basis points	151 - 200 basis points	>200 basis points
Average	22%	45%	24%	7%	2%

	Second Year Following Liftoff				
	0 - 50 basis points	51 - 100 basis points	101 - 150 basis points	151 - 200 basis points	>200 basis points
Average	17%	37%	29%	12%	4%

c) Provide your estimate of the most likely outcome (i.e., the mode) for the target federal funds rate or range, as applicable, immediately following the FOMC meetings and at the end of each quarter or half-year period below. If you expect a range, please provide both the top and bottom of the range in the specified fields below. If you expect a target rate, provide your response in the "Target rate" field only.
(29 complete responses)

Top of Target Range

	July 28-29	September 16-17	October 27-28	December 15-16	January 26-27	March 15-16	April 26-27	2016 Q2	2016 Q3	2016 Q4	2017 H1	2017 H2	2018 H1	2018 H2
25th Pctl	0.25%	0.50%	0.50%	0.50%	0.75%	0.75%	0.75%	1.00%	1.00%	1.25%	1.75%	2.00%	2.00%	2.00%
Median	0.25%	0.50%	0.50%	0.75%	0.75%	1.00%	1.00%	1.25%	1.50%	1.75%	2.00%	2.25%	2.50%	2.75%
75th Pctl	0.25%	0.50%	0.50%	0.75%	0.75%	1.00%	1.00%	1.25%	1.50%	1.75%	2.25%	2.88%	3.25%	3.50%
# of Responses	26	25	25	25	24	23	23	23	23	23	21	20	17	17

Bottom of Target Range

	July 28-29	September 16-17	October 27-28	December 15-16	January 26-27	March 15-16	April 26-27	2016 Q2	2016 Q3	2016 Q4	2017 H1	2017 H2	2018 H1	2018 H2
25th Pctl	0.00%	0.25%	0.25%	0.25%	0.50%	0.50%	0.50%	0.75%	0.75%	1.00%	1.50%	1.75%	1.75%	1.75%
Median	0.00%	0.25%	0.25%	0.50%	0.50%	0.75%	0.75%	1.00%	1.25%	1.50%	1.75%	2.00%	2.25%	2.50%
75th Pctl	0.00%	0.25%	0.25%	0.50%	0.50%	0.75%	0.75%	1.00%	1.25%	1.50%	2.00%	2.50%	3.00%	3.25%
# of Responses	26	25	25	25	24	23	23	23	23	23	21	20	17	17

Target Rate

	July 28-29	September 16-17	October 27-28	December 15-16	January 26-27	March 15-16	April 26-27	2016 Q2	2016 Q3	2016 Q4	2017 H1	2017 H2	2018 H1	2018 H2
25th Pctl	0.25%	0.25%	0.25%	0.50%	0.50%	0.50%	0.50%	0.75%	1.00%	1.25%	2.00%	2.00%	2.50%	3.00%
Median	0.25%	0.25%	0.25%	0.50%	0.63%	1.00%	1.00%	1.25%	1.50%	1.75%	2.25%	2.63%	3.00%	3.25%
75th Pctl	0.25%	0.50%	0.50%	0.75%	0.75%	1.00%	1.25%	1.25%	1.50%	2.00%	2.50%	3.00%	3.50%	3.50%
# of Responses	3	5	5	5	6	7	7	7	7	7	9	10	13	13

d) In addition, provide your estimate of the longer-run target federal funds rate and your expectation for the average federal funds rate over the next 10 years.

	Longer Run	10-yr Average FF Rate
25th Pctl	3.00%	2.10%
Median	3.50%	2.50%
75th Pctl	3.75%	3.00%

e) **Of the possible outcomes below, please indicate the percent chance you attach to the target federal funds rate or range falling in each of the following ranges at the end of 2015, 2016, and 2017. If you expect a target range please use the midpoint of the range in providing your response.**

Year-End 2015

	0.00 - 0.25%	0.26 - 0.50%	0.51 - 1.00%	1.01 - 1.50%	1.51 - 2.00%	2.01 - 2.50%	≥2.51%
Average	18%	40%	39%	4%	0%	0%	0%

Year-End 2016

	≤0.50%	0.51 - 1.00%	1.01 - 1.50%	1.51 - 2.00%	2.01 - 2.50%	2.51 - 3.00%	≥3.01%
Average	7%	18%	30%	29%	13%	3%	1%

Year-End 2017

	≤2.00%	2.01 - 2.50%	2.51 - 3.00%	3.01 - 3.50%	3.51 - 4.00%	4.01 - 4.50%	≥4.51%
Average	32%	22%	20%	15%	7%	3%	1%

If you changed your responses to parts a and/or c since the policy survey on June 8, please explain the factors that motivated you to make the change(s):
(23 responses)

Several respondents cited various FOMC communications, including the June SEP and the Chair's testimony before Congress, as informing the change in their expectation for the balance of risks around the timing of liftoff. Several respondents noted weaker data over the intermeeting period as informing the change in their expectation while others indicated that international developments, such as those in China and Greece, had impacted their expectations. Many respondents did not make any material changes to their expectation for the most likely timing of liftoff and/or the most likely path of the target rate or range.

f) **In a March speech, Chair Yellen indicated that the "equilibrium real federal funds rate, the real rate consistent with the economy achieving maximum employment and price stability in the medium term, is currently quite low by historical standards." Conditioned on your expectations for the economy and the future stance of policy, what is your forecast for the level of the equilibrium real federal funds rate at each of the time periods below? Please also provide your estimate of the current level of the equilibrium real federal funds rate.**
(28 responses)

	Current Level	Year-end 2015	Year-end 2016	Year-end 2017
25th Pctl	0.00%	0.00%	0.50%	1.00%
Median	0.38%	0.63%	1.20%	1.48%
75th Pctl	1.00%	1.25%	1.68%	1.84%

Please list the major factors underlying your estimate for the current level of the equilibrium federal funds rate.
(29 responses)

Several respondents cited lower trend GDP growth as a major factor underlying their estimate for the current level of the equilibrium federal funds rate. In addition, several respondents cited demographic factors and labor market *developments as a major factor underlying their estimate. Several respondents also cited various global factors as important factors underlying their estimate.*

If you expect future levels of the equilibrium real federal funds rate to be different than its current level, please provide the major factors underlying your expectation.
(21 responses)

Several respondents cited dissipating economic or cyclical headwinds as a major factor underlying their expectation for future levels of the equilibrium real federal funds rate to differ from its current level. In addition, several respondents specifically cited an expected increase in trend GDP growth as underlying their expectation. Several respondents also cited changes in their expectation for the inflation outlook as a major factor. Lastly, several respondents pointed to shifting global factors as a major factor underlying their expectation.

4. a) **Of the possible outcomes below, provide the percent chance you attach to the 10-year Treasury yield falling in each of the following ranges at the end of 2015 and 2016.**

Year-End 2015

	≤1.50%	1.51-2.00%	2.01-2.50%	2.51-3.00%	3.01-3.50%	3.51-4.00%	>4.00%
Average	6%	17%	36%	29%	9%	2%	1%

Year-End 2016

	≤2.50%	2.51-3.00%	3.01-3.50%	3.51-4.00%	4.01-4.50%	4.51-5.00%	>5.00%
Average	27%	30%	24%	11%	5%	2%	1%

If you changed your expectations since the last policy survey on June 8, explain the factors that motivated you to make the change(s).
(19 responses)

Several respondents noted no material changes to their expectations since the last policy survey on June 8. Several respondents cited various international developments, including increased uncertainty over the Chinese growth outlook, as motivating the change in their expectation.

5. a) **Provide the percent chance you attach to the unemployment rate falling within the following ranges at the time of the first increase in the target federal funds rate or range.**

	< 5.0%	5.0 - 5.4%	5.5 - 5.9%	6.0 - 6.5%	> 6.5%
Average	23%	64%	12%	1%	0%

b) **Provide the percent chance you attach to inflation between 1 and 2 years ahead falling within the following ranges at the time of the first increase in the target federal funds rate or range.**

	< 1.25%	1.25 - 1.74%	1.75 - 2.24%	2.25 - 2.74%	≥ 2.75%
Average	10%	30%	46%	11%	3%

c) **Provide your estimate for the most likely value of the following indicators at the time of the first increase in the target federal funds rate or range. When specifying values below, where appropriate, provide your**

estimate consistent with the last published value prior to the announcement of liftoff. For reference, the level of total U.S. employees on nonfarm payrolls for June, seasonally adjusted, was 141.8 million.
(29 responses)

	Unemployment Rate	Labor Force Participation Rate	Total NFP*	12-Month Change in Average Hourly Earnings	Core 12-Month PCE Inflation	Headline 12-Month PCE Inflation	Inflation Between 1 and 2 Years Ahead
25th Pctl	5.1%	62.7%	142.2	2.2%	1.4%	0.3%	1.8%
Median	5.2%	62.8%	142.3	2.3%	1.4%	0.5%	1.9%
75th Pctl	5.3%	62.8%	142.4	2.4%	1.5%	0.6%	2.0%

**In millions*

d) Provide your forecast for the expected levels of the following indicators at the time periods provided below. If you expect a target range, please enter the range. If you do not believe a particular tool will be used during one or more of the time periods below, please enter "N/A". If you do not believe a cap on the O/N RRP will be employed at a particular time period, please write "No cap".*
(24 complete responses)

One Quarter Prior to Liftoff

	IOER Rate	Target Federal Funds Rate or Range	Federal Funds Effective Rate	O/N RRP Rate	3-month T-bill Rate	Overnight Treasury GCF Repo Rate	O/N RRP Demand ($ bn)	O/N RRP Cap ($ bn)**
25th Pctl	0.25%	0.13%	0.10%	0.05%	0.02%	0.14%	140	300
Median	0.25%	0.13%	0.13%	0.05%	0.10%	0.25%	150	300
75th Pctl	0.25%	0.13%	0.13%	0.10%	0.15%	0.27%	200	300

† 2 respondents expected no O/N RRP cap.

Immediately Following Liftoff

	IOER Rate	Target Federal Funds Rate or Range	Federal Funds Effective Rate	O/N RRP Rate	3-month T-bill Rate	Overnight Treasury GCF Repo Rate	O/N RRP Demand ($ bn)	O/N RRP Cap ($ bn)**
25th Pctl	0.50%	0.38%	0.33%	0.25%	0.20%	0.35%	300	300
Median	0.50%	0.38%	0.35%	0.25%	0.30%	0.49%	400	550
75th Pctl	0.50%	0.38%	0.38%	0.30%	0.35%	0.54%	600	1000

† 9 respondents expected no O/N RRP cap.

1 Year Following Liftoff

	IOER Rate	Target Federal Funds Rate or Range	Federal Funds Effective Rate	O/N RRP Rate	3-month T-bill Rate	Overnight Treasury GCF Repo Rate	O/N RRP Demand ($ bn)	O/N RRP Cap ($ bn)**
25th Pctl	1.25%	1.00%	1.00%	1.15%	1.10%	1.25%	250	300
Median	1.50%	1.38%	1.37%	1.25%	1.29%	1.37%	390	500
75th Pctl	1.50%	1.38%	1.40%	1.25%	1.40%	1.55%	575	800

† 6 respondents expected no O/N RRP cap.

3 Years Following Liftoff	IOER Rate	Target Federal Funds Rate or Range	Federal Funds Effective Rate	O/N RRP Rate	3-month T-bill Rate	Overnight Treasury GCF Repo Rate	O/N RRP Demand ($ bn)	O/N RRP Cap ($ bn)**
25th Pctl	2.25%	2.13%	2.15%	2.00%	2.02%	2.30%	150	300
Median	3.25%	3.13%	3.15%	3.00%	3.10%	3.18%	250	300
75th Pctl	3.50%	3.50%	3.40%	3.34%	3.38%	3.55%	480	500

† 4 respondents expected no O/N RRP cap.

**For dealers that submitted ranges, midpoints of the ranges are used.*
***Only dealers who forecasted a cap were included in the calculation for the expected size of the O/N RRP cap.*

Please note how you expect the Committee's approach to policy normalization to evolve over time. Additionally, comment on any changes you expect over time in the relative levels of money market rates and the expected amount of O/N RRP usage.
(21 responses)

Several respondents noted that they expect the cap for overnight RRP operations to be temporarily raised at liftoff. Several respondents indicated their expectation that demand for overnight RRP operations would substantially increase in the near- to medium-term horizon following liftoff. In addition, several respondents indicated that they expect the Committee to gradually phase out RRP operations as a policy tool. Several respondents noted that regulatory reforms will likely impact how demand for overnight RRP operations and money market spreads evolve after liftoff.

6. a) Provide your estimate of the most likely quarter and year during which the FOMC will first cease reinvesting some or all payments of principal on Treasuries and/or agency debt and MBS. In addition, please provide your expectation for the timing, in months, relative to the first increase in the target rate or range. If you do not expect the FOMC to cease reinvestments for either or both asset classes during the process of policy normalization, please select "N/A". Please ensure your signs are correct.
(26 responses)

	Most Likely Quarter and Year of End to Reinvestments	
	Treasuries	Agency Debt and MBS
25th Pctl	Q1 2016	Q1 2016
Median	Q2 2016	Q2 2016
75th Pctl	Q2 2016	Q2 2016

	Number of Months Relative to Liftoff	
	Treasuries	Agency Debt and MBS
25th Pctl	6	6
Median	7	9
75th Pctl	9	9

b) In its Policy Normalization Principles and Plans, the Committee indicated that it "expects to cease or commence phasing out reinvestments" after liftoff. For Treasuries and agency debt and MBS, please indicate the percent chance you attach to the Committee during the process of policy normalization ceasing its reinvestments all at once, phasing out its reinvestments over time, or not changing its reinvestments.
(26 responses)

	Treasuries		
	No Change to Reinvestments	**Reinvestments Ceased All at Once**	**Reinvestments Phased Out Over Time**
Average	10%	24%	65%

	Agency Debt and MBS		
	No Change to Reinvestments	**Reinvestments Ceased All at Once**	**Reinvestments Phased Out Over Time**
Average	9%	24%	67%

Please explain the factors behind any change in your expectations in either parts a and/or b since the policy survey on June 8.
(19 responses)

Several respondents noted no material change in their expectations since the last policy survey on June 8.

c) **If you placed a non-zero probability on reinvestments being phased out over time, please indicate the number of months over which you expect this to occur.**
(24 responses)

	Anticipated Duration of Phase-Out (in Months)	
	Treasuries	Agency Debt and MBS
25th Pctl	6	6
Median	11	9
75th Pctl	12	12

Please explain your assumptions for what factors would likely drive the pace at which reinvestments are phased out.
(25 responses)

Several respondents indicated that the pace at which reinvestments are phased out would likely be consistent with the Committee's intention to gradually reduce the size of SOMA holdings. Several respondents noted that the pace could be driven by market functioning and liquidity concerns. Several respondents noted their expectation that the pace at which reinvestments are phased out could be influenced by the behavior of long-term interest rates over the course of the tightening cycle.

7. a) **For the outcomes below, provide the percent chance you attach to the annual average CPI inflation rate from July 1, 2015 - June 30, 2020. Please also provide your point estimate for the most likely outcome.**
(29 responses)

	≤1.00%	1.01-1.50%	1.51-2.00%	2.01-2.50%	2.51-3.0%	≥3.01%
Average	6%	18%	35%	27%	9%	5%

Point estimate for most likely outcome:

	Most Likely Outcome
25th Pctl	1.75%
Median	1.90%
75th Pctl	2.00%

b) For the outcomes below, provide the percent chance you attach to the annual average CPI inflation rate from July 1, 2020 - June 30, 2025. Please also provide your point estimate for the most likely outcome. (29 responses)

	≤1.00%	1.01-1.50%	1.51-2.00%	2.01-2.50%	2.51-3.00%	≥3.01%
Average	5%	13%	28%	33%	15%	7%

Point estimate for most likely outcome:

	Most Likely Outcome
25th Pctl	2.00%
Median	2.15%
75th Pctl	2.30%