Responses to Survey of Primary Dealers

Markets Group, Federal Reserve Bank of New York

July 2015

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For most questions, median responses across dealers, 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 22 primary dealers. Except where noted, all 22 dealers responded to each question. In some cases, dealers 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:

Some dealers expected the July FOMC statement to note a moderate expansion in economic growth. Some also indicated that the statement would reflect an upgrade to the current assessment of the labor market. Several dealers anticipated that the statement would note that the weaker-than-expected economic growth in the first quarter of 2015 was largely transitory, while several other dealers expected the statement to reflect a modest upgrade to the Committee's characterization of domestic housing market activity. Several dealers expected there to be no material changes to the July FOMC statement.

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

All of the dealers expected no change to the Committee's policy of reinvesting principal payments on Treasury and agency securities in the July FOMC statement.

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

Most dealers expected there to be no change in the communication on the expected path of policy rates and/or forward guidance on the target federal funds rate. Several dealers indicated that the statement might reflect an increased likelihood that the first increase in the target range could occur later this year.

Other:

Dealers did not provide substantial commentary in this section.

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

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

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

Please explain:
(21 responses)

Some dealers noted their expectation that the July FOMC statement would not materially impact market perceptions of the stance of monetary policy.

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	4
3	10
4	8
5 - Effective	0

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	1%	40%	11%	24%	8%	11%	2%	4%

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

	First Year Following Liftoff				
	0 - 50 basis points	51 - 100 basis points	101 - 150 basis points	151 - 200 basis points	>200 basis points
Average	15%	47%	25%	11%	3%

	Second Year Following Liftoff				
	0 - 50 basis points	51 - 100 basis points	101 - 150 basis points	151 - 200 basis points	>200 basis points
Average	12%	32%	26%	21%	8%

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. (21 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%	0.25%	0.25%	0.50%	0.50%	0.75%	0.75%	1.00%	1.25%	1.50%	1.88%	2.25%	2.75%	3.00%
Median	0.25%	0.50%	0.50%	0.75%	0.75%	1.00%	1.00%	1.13%	1.25%	1.75%	2.25%	2.75%	3.13%	3.25%
75th Pctl	0.25%	0.50%	0.50%	0.75%	0.75%	1.00%	1.00%	1.25%	1.50%	2.00%	2.50%	3.13%	3.50%	3.75%
# of Responses	22	22	22	22	22	21	21	20	19	19	16	16	16	13

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%	0.00%	0.00%	0.25%	0.25%	0.50%	0.50%	0.75%	1.00%	1.25%	1.63%	1.88%	2.50%	2.75%
Median	0.00%	0.25%	0.25%	0.50%	0.50%	0.75%	0.75%	0.88%	1.00%	1.50%	2.00%	2.50%	2.88%	3.00%
75th Pctl	0.00%	0.25%	0.25%	0.50%	0.50%	0.75%	0.75%	1.00%	1.25%	1.75%	2.25%	2.88%	3.25%	3.50%
# of Responses	22	22	22	22	22	21	21	20	19	19	16	16	16	13

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%	0.50%	0.50%	0.75%	1.00%	2.25%	2.50%	2.50%	2.75%
Median						0.25%	0.50%	0.88%	1.50%	1.75%	2.25%	2.50%	2.75%	3.38%
75th Pctl						0.25%	0.50%	1.25%	1.50%	1.75%	2.25%	2.75%	3.25%	3.50%
# of Responses	0	0	0	0	0	1	1	2	3	3	5	5	5	8

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	3.25%	2.50%
Median	3.38%	2.74%
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	19%	45%	34%	2%	1%	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%	17%	28%	26%	16%	5%	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	21%	23%	25%	17%	9%	4%	2%

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):
(21 responses)

Many dealers did not materially change their expectation for the most likely timing of liftoff and/or the most likely path of the target rate or range. Several dealers 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 dealers also noted weaker economic data over the intermeeting period as motivating the change in their expectation.

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.**
(21 responses)

	Current Level	Year-end 2015	Year-end 2016	Year-end 2017
25th Pctl	0.00%	0.00%	0.50%	1.00%
Median	0.00%	0.50%	1.00%	1.25%
75th Pctl	0.75%	1.00%	1.00%	1.50%

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

Several dealers 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 dealers cited demographic factors and labor market developments as a major factor underlying their estimate. Several dealers 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.
(18 responses)

Several dealers 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 dealers cited an expected increase in trend GDP growth, with several dealers pointing to an expected increase in productivity growth, as major factors 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	5%	14%	35%	32%	10%	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	19%	35%	25%	13%	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).
(16 responses)

Several dealers noted no material changes to their expectations since the last policy survey on June 8.

b) The 10-year Treasury yield increased 5 basis points between June 16 and July 15. Please decompose this change into changes in the market's expected average real policy rate, expected average inflation rate, and the market-implied nominal term premium. Please ensure that your sum matches the change.

	Change in Market's Expected Average Real Policy Rate	Change in Market's Expected Average Inflation Rate	Change in Market-Implied Nominal Term Premium
Average (bps)	2	0	3

What factor or factors were most material in driving your estimate of the intermeeting change in each of the subcomponents listed above?
(20 responses)

Several dealers characterized the change in the 10-year Treasury yield over the intermeeting period as primarily being driven by a change in measures of market-implied nominal term premiums. Several dealers noted that changes in the expected average real policy rate and/or average inflation rate were minimal.

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	30%	60%	9%	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	4%	22%	52%	18%	5%

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.**

	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%	62.6%	142.3	2.1%	1.3%	0.5%	1.9%
Median	5.2%	62.7%	142.5	2.3%	1.4%	0.7%	2.0%
75th Pctl	5.2%	62.8%	142.8	2.4%	1.5%	1.0%	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".***
(17 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%	0.12%	0.05%	0.02%	0.18%	110	300
Median	0.25%	0.13%	0.13%	0.05%	0.07%	0.20%	138	300
75th Pctl	0.25%	0.13%	0.15%	0.05%	0.15%	0.27%	150	300

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%	0.32%	0.25%	0.24%	0.35%	150	500
Median	0.50%	0.38%	0.35%	0.25%	0.30%	0.45%	300	600
75th Pctl	0.50%	0.38%	0.38%	0.25%	0.40%	0.55%	500	750

† 3 dealers 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	1.50%	1.13%	1.13%	1.10%	0.95%	1.25%	150	300
Median	1.50%	1.38%	1.38%	1.25%	1.33%	1.40%	250	400
75th Pctl	1.50%	1.50%	1.50%	1.25%	1.45%	1.75%	400	600

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	3.00%	2.88%	2.88%	2.75%	2.55%	2.95%	75	200
Median	3.25%	3.25%	3.25%	3.00%	3.08%	3.40%	150	300
75th Pctl	3.50%	3.50%	3.50%	3.30%	3.50%	3.60%	250	400

**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.
(20 responses)

Several dealers noted that they expect the cap for overnight RRP operations to be temporarily raised at liftoff. Several dealers noted that they expect the Committee to gradually phase out overnight RRP operations as a policy tool.

e) Please provide the percent chance you attach to the average effective federal funds rate, excluding month- or quarter-end dates, falling within the following subsets relative to the 25 basis point target range in the first month immediately following liftoff.
(21 responses)

	Below the Range	Bottom 8 Basis Points of Range	Middle 9 Basis Points of Range	Top 8 Basis Points of Range	Above the Range
Average	5%	36%	44%	13%	2%

Please explain which factor or factors were most relevant in formulating your expectations and any assumptions made.
(20 responses)

Several dealers indicated that the effective federal funds rate will likely trade close to the middle of the range after liftoff, similar to current trading dynamics. Several dealers noted that they expect the effective federal funds rate to be supported by the overnight RRP rate 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.

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	Q4 2016	Q3 2016

Number of Months Relative to Liftoff

	Treasuries	Agency Debt and MBS
25th Pctl	6	6
Median	9	6
75th Pctl	12	12

**Two dealers expected no end to reinvestments of Treasury securities.*

***One dealer expected no end to reinvestments of Agency Debt and MBS securities.*

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.

Treasuries

	No Change to Reinvestments	Reinvestments Ceased All at Once	Reinvestments Phased Out Over Time
Average	13%	26%	60%

Agency Debt and MBS

	No Change to Reinvestments	Reinvestments Ceased All at Once	Reinvestments Phased Out Over Time
Average	13%	32%	56%

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

Some dealers noted no material changes 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.
(19 complete responses)

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

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

Several dealers noted their expectation 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 dealers indicated that the pace could be driven by market functioning and liquidity concerns. Several dealers noted that they expect reinvestments would likely be phased out in a predictable manner.

7. a) Provide your estimate of the most likely outcome for output, inflation, and unemployment.
(17 complete responses)

		Q4/Q4 2015	Q4/Q4 2016	Q4/Q4 2017	Longer Run
GDP:	25th Pctl	2.00%	2.50%	2.30%	2.00%
	Median	2.10%	2.70%	2.40%	2.25%
	75th Pctl	2.30%	2.90%	2.70%	2.30%
Core PCE Deflator:	25th Pctl	1.40%	1.80%	1.90%	
	Median	1.50%	1.90%	2.00%	
	75th Pctl	1.60%	2.00%	2.10%	
Headline PCE Deflator:	25th Pctl	0.80%	1.80%	2.00%	2.00%
	Median	0.95%	1.90%	2.10%	2.00%
	75th Pctl	1.20%	2.10%	2.20%	2.00%
Unemployment Rate*:	25th Pctl	5.00%	4.60%	4.60%	5.00%
	Median	5.10%	4.80%	4.80%	5.10%
	75th Pctl	5.20%	4.90%	4.90%	5.50%

**Average level of the unemployment rate over Q4.*

b) What are the most significant risks to your 2015 GDP forecast?

Most significant upside risk:

Some dealers noted that stronger-than-expected consumer spending was among the most significant upside risks to their 2015 GDP forecast, while several other dealers cited continued improvement in the housing market.

Most significant downside risk:

Some dealers highlighted international developments, including in Greece and China, and weak global growth as the most significant downside risks. Some dealers suggested that either weaker net exports or other negative impacts from a stronger dollar were the most significant downside risks. Several dealers noted that weak consumer spending was a significant downside risk, while several other dealers highlighted a possible slowdown in business fixed investment.

c) How would you characterize the overall balance of U.S. economic data over the intermeeting period? (5= significantly stronger than expected, 3= neutral/mixed, 1= significantly weaker than expected). Please explain which data were most relevant in formulating your characterization.

Characterization of overall balance of economic data:

Characterization of Balance of U.S. Economic Data over Intermeeting Period	
25th Pctl	3
Median	3
75th Pctl	3

Please Explain:
(21 responses)

Some dealers characterized retail sales data over the period as weaker than expected. Several dealers contrasted recent weak consumer spending data with ongoing strength in other economic growth indicators, *including housing data, as informing their mixed interpretation of the data. Several dealers characterized aspects of recent labor market data as below expectations.*

8. 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.

	≤1.00%	1.01-1.50%	1.51-2.00%	2.01-2.50%	2.51-3.0%	≥3.01%
Average	4%	12%	31%	34%	13%	6%

Point estimate for most likely outcome:

	Most Likely Outcome
25th Pctl	2.00%
Median	2.10%
75th Pctl	2.20%

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.

	≤1.00%	1.01-1.50%	1.51-2.00%	2.01-2.50%	2.51-3.00%	≥3.01%
Average	3%	9%	23%	40%	17%	7%

Point estimate for most likely outcome:

	Most Likely Outcome
25th Pctl	2.00%
Median	2.25%
75th Pctl	2.40%

9. a) What percent chance do you attach to the U.S. economy currently being in a recession*?
b) What percent chance do you attach to the U.S. economy being in a recession* in 6 months?

	Currently in NBER Recession
25th Pctl	1%
Median	5%
75th Pctl	5%

	NBER Recession in 6 Months
25th Pctl	5%
Median	10%
75th Pctl	15%

**NBER-defined recession.*