Responses to Survey of Primary Dealers

Markets Group, Federal Reserve Bank of New York

July 2016

Responses to Survey of Primary Dealers
Distributed: 07/14/2016 – Received by: 07/18/2016

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 23 primary dealers. ***Except where noted, all 23 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. Provide below your expectations for changes, if any, to the language referencing each of the following topics in the July FOMC statement.

Current economic conditions:

Many dealers expected the Committee to note continued improvement in the labor market, while several other dealers expected that the Committee would acknowledge a deceleration in labor market momentum. Furthermore, some dealers expected the Committee to note an improvement in economic activity, and several expected that the July FOMC statement would reference the continued growth in consumer spending, and the ongoing contribution of the housing sector to overall growth. Additionally, several dealers expected that the Committee would acknowledge low or stable market-based measures of inflation compensation.

Economic outlook:
(22 responses)

Some dealers indicated that they expected no significant changes to the Committee's communication on the economic outlook in the July FOMC statement. Several other dealers noted that they expected the Committee to indicate that uncertainty regarding the economic outlook remains elevated.

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

Most dealers expected no change in the Committee's communication on the expected path of policy rates and forward guidance on the target federal funds rate in the July FOMC statement.

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

All dealers that submitted responses to this question expected no change in the Committee's communication on its policy of reinvesting principal payments on Treasury and agency securities.

Other:
(5 responses)

Dealers did not provide substantial commentary in this section.

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

2. **How would you grade the Federal Reserve System's communication with the markets and with the public since the policy survey on June 6? Please provide a rating between 1 and 5, with 1 indicating ineffectiveness and 5 indicating effectiveness.**

	Fed Communication Grade Number of Respondents:
1 - Ineffective	1
2	4
3	9
4	9
5 - Effective	0

Please Explain:
(22 responses)

In explaining their rating, several dealers cited some difficulty in interpreting the variety of views expressed by FOMC participants since the June FOMC meeting. In contrast, several dealers noted that FOMC participants had clearly explained their views regarding the appropriate path of monetary policy. Additionally, several dealers cited a lack of clarity regarding the drivers of declines in FOMC participants' year-end target rate projections in the June SEP.

3. a) **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. For the time periods at which you expect a target range, please indicate the midpoint of that range in providing your response.**
(23 responses)

Target Rate / Midpoint of Target Range

	Jul. 26-27 2016	Sep. 20-21 2016	Nov. 1-2 2016	Dec. 13-14 2016	Jan. 31 - Feb. 1 2017	Mar. 14-15 2017	May 2-3 2017
25th Pctl	0.38%	0.38%	0.38%	0.38%	0.38%	0.38%	0.38%
Median	0.38%	0.38%	0.38%	0.63%	0.63%	0.63%	0.63%
75th Pctl	0.38%	0.38%	0.38%	0.63%	0.63%	0.63%	0.63%
# of Responses	23	23	23	23	23	23	23

	2017 Q2	2017 Q3	2017 Q4	2018 H1	2018 H2	2019 H1	2019 H2
25th Pctl	0.63%	0.63%	0.88%	1.00%	1.13%	1.25%	1.38%
Median	0.88%	0.88%	1.13%	1.38%	1.63%	1.88%	1.94%
75th Pctl	0.88%	1.13%	1.13%	1.63%	1.88%	2.19%	2.44%
# of Responses	23	23	20	20	20	20	20

b) **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	2.63%	2.00%
Median	3.00%	2.25%
75th Pctl	3.25%	2.70%

c) The following questions relate to your expectations for the Committee's next policy action in 2016 and some associated conditional outcomes for the year-end 2016 target federal funds rate or range. <u>Only fill out the conditional probability distributions in parts (ii), (iii), and (iv) if you assign a non-zero probability to the conditioning event occurring</u>.

i) Please indicate the percent chance that you attach to the following possible outcomes for the Committee's next policy action in 2016.

	Next Change is Increase in Target Rate or Range	Next Change is Decrease in Target Rate or Range	No Change in Target Rate or Range in 2016
Average	52%	6%	43%

ii) Conditional on the Committee's next policy action in 2016 being an <u>increase</u> in the target federal funds rate or range, please indicate the percent chance that you attach to the following possible outcomes for the timing of such a change. <u>Only fill out this conditional probability distribution if you assigned a non-zero probability to the next change in the target rate or range being an increase</u>.

	Increase Occurs at July FOMC meeting	Increase Occurs at September FOMC meeting	Increase Occurs at November FOMC meeting or later
Average	3%	26%	70%

iii) Conditional on the Committee's next policy action in 2016 being a <u>decrease</u> in the target federal funds rate or range, please indicate the percent chance that you attach to the following possible outcomes for the timing of such a change. <u>Only fill out this conditional probability distribution if you assigned a non-zero probability to the next change in the target rate or range being a decrease</u>.

	Decrease Occurs at July FOMC meeting	Decrease Occurs at September FOMC Meeting	Decrease Occurs at November FOMC Meeting or Later
Average	2%	14%	84%

iv) Of the possible outcomes below, please indicate the percent chance that you attach to the target federal funds rate or range falling in each of the following ranges <u>at the end of 2016</u>, conditional on the following possible scenarios for the direction and timing of the Committee's next policy action in 2016. <u>Only fill out the conditional probability distributions for which you assigned a non-zero probability to the conditioning event occurring</u>. If you expect a target range, please use the midpoint of that range in providing your response.

	Next change is increase, occurs at Sep. meeting or earlier							
	<0.00%	**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	0%	2%	7%	84%	6%	0%	0%	0%

	Next change is increase, occurs at Nov. meeting or later							
	<0.00%	**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	0%	0%	4%	93%	2%	0%	0%	0%

	Next change is decrease							
	<0.00%	**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	7%	90%	3%	0%	0%	0%	0%	0%

d) i) Of the possible outcomes below, please indicate the percent chance that you attach to the target federal funds rate or range falling in each of the following ranges <u>at the end of 2017 and 2018</u>, <u>conditional on not moving to the zero lower bound (ZLB) at any point during 2016-2018</u>. If you expect a target range, please use the midpoint of that range in providing your response. (21 responses)

	Year-end 2017						
	≤1.00%	**1.01-1.50%**	**1.51-2.00%**	**2.01-2.50%**	**2.51-3.00%**	**3.01-3.50%**	**≥3.51%**
Average	31%	43%	21%	4%	1%	0%	0%

	Year-end 2018						
	≤1.00%	**1.01-1.50%**	**1.51-2.00%**	**2.01-2.50%**	**2.51-3.00%**	**3.01-3.50%**	**≥3.51%**
Average	21%	25%	26%	16%	7%	3%	1%

ii) Please indicate the percent chance that you attach to moving to the ZLB at some point in 2016-2018.

	Probability of Moving to ZLB at Some Point in 2016-2018
25th Pctl	10%
Median	25%
75th Pctl	30%

If you placed a non-zero probability on moving to the ZLB at some point in 2016-2018 above, please indicate your estimate for the most likely <u>timing</u> of such an event.

	Timing of Moving to ZLB at Some Point in 2016-2018
25th Pctl	H1 2017
Median	H2 2017
75th Pctl	H2 2018

iii) **Of the possible outcomes below, please indicate the percent chance that you attach to the target federal funds rate or range falling in each of the following ranges <u>at the end of 2017 and 2018</u>, <u>conditional on moving to the ZLB at some point in 2016-2018</u>. <u>Only fill out these conditional probability distributions if you assigned a non-zero probability to moving to the ZLB at some point in 2016-2018</u>. If you expect a target range, please use the midpoint of that range in providing your response.**
(22 responses)

Year-end 2017

	<0.00%	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	9%	46%	18%	12%	10%	4%	1%	0%

Year-end 2018

	<0.00%	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	10%	55%	18%	9%	4%	2%	1%	1%

iv) **What is your estimate of the target federal funds rate or range at the effective lower bound?**
(22 responses)

	Level of Target Fed Funds Rate or Range at ELB
25th Pctl	-0.50%
Median	-0.03%
75th Pctl	0.13%

For parts a-d, please explain the factors behind any change to your expectations, where applicable, since the last policy survey.
(17 responses)

Several dealers indicated that they revised their expected path of policy following FOMC communication, including the decline in FOMC participants' projections of the target federal funds rate in the June SEP. Additionally, several dealers indicated that they perceived the likely path of monetary policy as being flatter than in the last policy survey due to a perceived reduction in labor market and economic momentum. Lastly, several dealers noted uncertainty related to the impact of the U.K. referendum to leave the European Union as having driven changes in their expectations.

4. **Of the possible outcomes below, please indicate the percent chance that you attach to the 10-year Treasury yield falling in each of the following ranges at the end of 2016 and 2017.**

	Year-end 2016						
	≤1.00%	1.01-1.50%	1.51-2.00%	2.01-2.50%	2.51-3.00%	3.01-3.50%	≥3.51%
Average	8%	37%	38%	12%	4%	1%	0%

	Year-end 2017						
	≤1.00%	1.01-1.50%	1.51-2.00%	2.01-2.50%	2.51-3.00%	3.01-3.50%	≥3.51%
Average	7%	18%	34%	27%	10%	3%	1%

5. **Previous FOMC communication has indicated that the economy's neutral (i.e. equilibrium) real federal funds rate, which can be understood as the level of the real federal funds rate that would be neither expansionary nor contractionary if the economy were operating near its potential, is currently low by historical standards and is likely to rise only gradually over time. Please provide your estimate for the level of the neutral real federal funds rate at each of the time periods below.**
(22 responses)

	Year-end 2016	Year-end 2017	Year-end 2018
25th Pctl	0.00%	0.00%	0.40%
Median	0.25%	0.50%	1.00%
75th Pctl	0.90%	1.25%	1.50%

If you expect the neutral real federal funds rate to change over time, please provide the major factors underlying your expectation.
(19 responses)

Several dealers cited an expected increase in trend GDP growth as a major factor underlying their expectation for changes to the level of the neutral real federal funds rate over time. In addition, several dealers cited an expected increase in productivity growth as a major factor underlying their expectations for changes to the level of the neutral real federal funds rate over time.

Please explain any changes to your estimates since the last time this set of questions was asked on October 19.
(17 responses)

In explaining changes to their estimates, several dealers cited changes to expected economic growth.

6. a) **Measures of the 5-year/5-year forward nominal Treasury rate declined around 75 basis points between January 1 and June 14, and around 15 basis points between June 15 and July 12. Please decompose these changes into changes in the market's expected average nominal short-term interest rate over the 5-year period starting 5 years forward and the market-implied nominal term premium. Please ensure that your sum matches the change. Please also ensure your signs are correct.**

	Jan. 1, 2016 - Jun. 14, 2016		
	Change in Market's Expected Nominal Rate (bps)	Change in Market-Implied Nominal Term Premium (bps)	Change in 5y5y Forward Nominal Treasury Yield
Average (bps)	-35	-40	-75

	Jun. 15, 2016 - Jul. 12, 2016		
	Change in Market's Expected Nominal Rate (bps)	Change in Market-Implied Nominal Term Premium (bps)	Change in 5y5y Forward Nominal Treasury Yield
Average (bps)	-4	-11	-15

b) **Please rate the importance of the following factors in explaining the decline in the 5-year/5-year forward nominal Treasury rate from January 1 to June 14 as well as from June 15 to July 12 (5=very important, 1=not important).**
(20 responses)

	Decline in 5y5y Forward Nominal Jan. 1, 2016 - Jun. 14, 2016						
	Changes in outlook for US economic growth	Changes in outlook for US inflation	Changes in perceptions of netural real federal funds rate	Changes in perceptions of FOMC's reaction function	Spillovers from low / declining yields abroad	Safe-haven demand	Other factors / market technicals
Average	3.7	3.0	3.4	3.0	4.5	3.2	1.4

	Jun. 15, 2016 - Jul. 12, 2016						
	Changes in outlook for US economic growth	Changes in outlook for US inflation	Changes in perceptions of netural real federal funds rate	Changes in perceptions of FOMC's reaction function	Spillovers from low / declining yields abroad	Safe-haven demand	Other factors / market technicals
Average	2.3	1.9	2.7	2.9	4.5	4.0	1.8

If "Other factors / market technicals," please explain.
(2 responses)

Dealers did not provide substantial commentary in this section.

7. What are your expectations for the ON RRP facility over the next year?

Some dealers indicated that they expect no change to the parameters of the ON RRP facility at least until the implementation of money fund reform later this year. Several dealers noted that they expect an increase in aggregate ON RRP demand as a result of money fund reform implementation later this year, with several dealers citing expected continued strong demand around quarter-end reporting dates. Additionally, several dealers expected that the Committee will reduce aggregate ON RRP capacity from its current level in the future, potentially following money fund reform implementation later this year.

8. **In its most recent FOMC statement, the Committee indicated that it anticipates continuing reinvestments "until normalization of the level of the federal funds rate is well under way."**

a) **Provide your estimate for the most likely timing (in months forward) of a change to the Committee's policy on reinvesting payments of principal on Treasuries and/or agency debt and MBS. If you do not expect the FOMC to change its policy on reinvestments for either or both asset classes during the process of policy normalization, please enter "N/A."**

Months Forward

	Treasuries*	Agency Debt and MBS**
25th Pctl	18	18
Median	24	24
75th Pctl	24	30

*Four dealers expect no end to reinvestments of Treasury securities.

**Three dealers expect no end to reinvestments of agency debt and MBS.

b) **What is your estimate for the most likely level of the target federal funds rate or range if and when the Committee first changes its reinvestment policy?**

	Level of Target Fed Funds Rate/Range
25th Pctl	1.13%
Median	1.19%
75th Pctl	1.63%

c) **In its Policy Normalization Principles and Plans, the Committee indicated that it "expects to cease or commence phasing out reinvestments" after liftoff. Of the possible outcomes below, please indicate the percent chance that 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	23%	13%	63%

Agency Debt and MBS

	No Change to Reinvestments	Reinvestments Ceased All at Once	Reinvestments Phased Out Over Time
Average	19%	13%	68%

d) i) **<u>Conditional on not moving to the ZLB at any point in 2016-2018</u>, what is your mean**

expectation for the par value of the SOMA portfolio at the end of 2018? For reference, the current level of the SOMA portfolio, including inflation compensation and settled and unsettled agency MBS according to the July 6, 2016, H.4.1, was $4268 billion.*

	SOMA Value at Year-end 2018 Conditional on <u>Not</u> Moving to ZLB ($ bn)
25th Pctl	3,935
Median	4,048
75th Pctl	4,259

ii) **<u>Conditional on moving to the ZLB at some point in 2016-2018</u>, what is your mean expectation for the par value of the SOMA portfolio at the end of 2018?**

	SOMA Value at Year-end 2018 Conditional on Moving to ZLB ($ bn)
25th Pctl	4,268
Median	4,600
75th Pctl	4,888

**This level references the most recent H.4.1 release at the time this survey was sent out to respondents.*

Please explain the factors behind any change to your expectations in parts a-d since the last policy survey.
(18 responses)

Some dealers explained that they shifted out their expectation for the most likely timing of a change to the Committee's policy on reinvestments as a result of having revised later their expectations for the timing of additional rate hikes. Several dealers noted that they perceived an increased likelihood of large-scale asset purchases since the last policy survey.

9. a) Provide your estimate of the most likely outcome for output, inflation, and unemployment.
(19 responses)

		Q4/Q4 2016	Q4/Q4 2017	Q4/Q4 2018	Longer Run
GDP:	25th Pctl	1.80%	1.90%	1.60%	1.80%
	Median	1.90%	2.00%	1.95%	2.00%
	75th Pctl	2.00%	2.30%	2.25%	2.10%
Core PCE Deflator:	25th Pctl	1.70%	1.80%	1.85%	
	Median	1.70%	1.90%	2.00%	
	75th Pctl	1.90%	2.10%	2.05%	
Headline PCE Deflator:	25th Pctl	1.50%	1.90%	1.80%	2.00%
	Median	1.60%	2.00%	2.00%	2.00%
	75th Pctl	1.70%	2.10%	2.15%	2.00%
Unemployment Rate*:	25th Pctl	4.60%	4.40%	4.55%	4.70%
	Median	4.70%	4.50%	4.70%	4.80%
	75th Pctl	4.80%	4.70%	4.80%	5.10%

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

10. a) **For the outcomes below, provide the percent chance you attach to the annual average CPI inflation rate from July 1, 2016 – June 30, 2021 falling in each of the following ranges. 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	4%	11%	32%	37%	12%	4%

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, 2021 - June 30, 2026 falling in each of the following ranges. 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%	10%	28%	39%	15%	6%

Point estimate for most likely outcome:

	Most Likely Outcome
25th Pctl	2.10%
Median	2.20%
75th Pctl	2.30%

11. **For the outcomes below, provide the percent chance you attach to the PCE inflation rate from July 1, 2018 - June 30, 2019 falling in each of the following ranges. Please also provide your point estimate for the most likely outcome.**

	≤1.50%	1.51-1.75%	1.76-2.00%	2.01-2.25%	2.26-2.50%	≥2.51%
Average	7%	16%	32%	27%	11%	6%

Point estimate for most likely outcome:

	Most Likely Outcome
25th Pctl	1.95%
Median	2.00%
75th Pctl	2.10%

12. 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?**
c) **What percent chance do you attach to the global economy being in a recession** in 6 months?**

	Currently in NBER Recession		NBER Recession in 6 Months		Global Recession in 6 Months
25th Pctl	5%	25th Pctl	15%	25th Pctl	15%
Median	5%	Median	20%	Median	23%
75th Pctl	10%	75th Pctl	20%	75th Pctl	30%

**NBER-defined recession*
***Previous IMF staff work has suggested that a "global recession" can be characterized as a period during which there is a decline in annual per-capita real global GDP, backed up by a decline or worsening in one or more of the following global macroeconomic indicators: industrial production, trade, capital flows, oil consumption and unemployment.*

Please explain the factors behind any change to your expectations in parts a-c since the last policy survey.
(18 responses)

Several dealers noted no significant changes to their responses since the last policy survey, while several other dealers cited that they perceive a higher probability of a global recession following the outcome of the U.K. referendum.