Responses to Survey of Primary Dealers

Markets Group, Federal Reserve Bank of New York

November 2016

Responses to Survey of Primary Dealers
Distributed: 10/20/2016 – Received by: 10/24/2016

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.*

1. a) Provide below your expectations for changes, if any, to the language referencing each of the following topics in the November FOMC statement.

Current economic conditions:
(22 responses)

Several dealers indicated that they expected no or few significant changes to the Committee's assessment of current economic conditions in the November FOMC statement. Several dealers expected that the Committee would note that economic activity has expanded at a "modest" pace, and several expected that the Committee would characterize growth of household spending as as having moderated. Several dealers suggested that the Committee would reference continued improvement in the labor market. Lastly, several dealers expected that the Committee would acknowledge the recent increase in market-based measures of inflation compensation.

Economic outlook:
(22 responses)

Many dealers noted that they expected no or few significant changes to the Committee's language on the economic outlook.

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

Some 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, while some dealers expected the Committee to signal a higher likelihood of an increase in the target range occurring at the upcoming meeting. Several specifically suggested that the Committee would indicate that the case for an increase in the target range "continued to strengthen" or had "strengthened further," while several others noted that the statement could incorporate a reference to the "next meeting."

Communication on the Committee's policy of reinvesting principal payments on Treasury and agency securities:
(22 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.

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

Other:
(6 responses)

Dealers did not provide substantial commentary in this section.

2. How would you grade the Federal Reserve System's communication with the public since the policy survey on September 12? 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	9
5 - Effective	0

Please explain.
(21 responses)

Several dealers cited some difficulty in interpreting the variety of views expressed by FOMC participants and in assessing the policy implications of the Chair's reference to running a "high-pressure economy" in a speech on October 14. However, several dealers interpreted Fed communications over the period as effectively signaling its intention to increase the target range by the end of the year.

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.
(21 responses)

Target Rate / Midpoint of Target Range

	Nov. 1-2 2016	Dec. 13-14 2016	Jan. 31 - Feb. 1 2017	Mar. 14-15 2017	May 2-3 2017	Jun. 13-14 2017	Jul. 25-26 2017
25th Pctl	0.38%	0.63%	0.63%	0.63%	0.63%	0.63%	0.63%
Median	0.38%	0.63%	0.63%	0.63%	0.63%	0.88%	0.88%
75th Pctl	0.38%	0.63%	0.63%	0.63%	0.63%	0.88%	0.88%
# of Responses	23	23	23	23	23	23	23

	2017 Q3	2017 Q4	2018 Q1	2018 Q2	2018 H2	2019 H1	2019 H2
25th Pctl	0.63%	0.88%	1.13%	1.38%	1.13%	1.38%	1.38%
Median	0.88%	1.13%	1.13%	1.38%	1.63%	1.88%	2.00%
75th Pctl	0.88%	1.13%	1.38%	1.63%	1.88%	2.25%	2.38%
# of Responses	23	23	21	21	21	21	21

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	2.50%	2.00%
Median	2.75%	2.25%
75th Pctl	3.00%	2.70%

c) Please indicate the percent chance that you attach to the following possible outcomes for the Committee's next policy action between now and the end of 2017.

	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 2017
Average	72%	6%	23%

d) Conditional on the Committee's next policy action between now and the end of 2017 being an increase 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. Only fill out this conditional probability distribution if you assigned a non-zero probability to the Committee's next policy action between now and the end of 2017 being an increase.

	Increase Occurs at November FOMC meeting	Increase Occurs at December FOMC meeting	Increase Occurs in 2017
Average	6%	65%	29%

e) Please indicate the percent chance that you attach to the target federal funds rate or range falling in each of the following ranges at the end of 2017, conditional on the following possible scenarios for the direction and timing of the Committee's next poicy action between now and the end of 2017. Only fill out the conditional probability distributions for which you assigned a non-zero probability to the conditioning event occurring. If you expect a target range, please use the midpoint of that range in providing your response.
(21 responses)

Next change is increase, occurs by the end of 2016

	<0.00%	0.00-0.25%	0.26-0.50%	0.51-0.75%	0.76-1.00%	1.01-1.25%	1.26-1.50%	≥1.51%
Average	0%	4%	5%	15%	27%	30%	12%	7%

Next change is increase, occurs in 2017

	<0.00%	0.00-0.25%	0.26-0.50%	0.51-0.75%	0.76-1.00%	1.01-1.25%	1.26-1.50%	≥1.51%
Average	0%	4%	6%	23%	38%	23%	5%	1%

Next change is decrease

	<0.00%	0.00-0.25%	0.26-0.50%	0.51-0.75%	0.76-1.00%	1.01-1.25%	1.26-1.50%	≥1.51%
Average	8%	63%	16%	6%	3%	3%	0%	0%

f) i) Please indicate the percent chance that you attach to the target federal funds rate or range falling in each of the following ranges at the end of 2018 and 2019, conditional on not moving to the zero lower

<u>bound (ZLB) at any point during 2016-2019</u>. If you expect a target range, please use the midpoint of that range in providing your response.

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	20%	25%	32%	16%	5%	1%	1%

Year-end 2019

	≤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	17%	17%	24%	26%	10%	4%	1%

ii) **Please indicate the percent chance that you attach to moving to the ZLB at some point in 2016-2019.**

	Probability of Moving to ZLB at Some Point in 2016-2019
25th Pctl	15%
Median	25%
75th Pctl	35%

If you placed a non-zero probability on moving to the ZLB at some point in 2016-2019 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 2016-2019
25th Pctl	H2 2017
Median	H2 2018
75th Pctl	H1 2019

iii) **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 2018 and 2019,</u> <u>conditional on moving to the ZLB at some point in 2016-2019</u>. Only fill out these conditional probability distributions if you assigned a non-zero probability to moving to the ZLB at some point in 2016-2019. If you expect a target range, please use the midpoint of that range in providing your response.**
(22 responses)

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	6%	41%	17%	11%	9%	10%	3%	2%

Year-end 2019

	<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%	41%	20%	14%	9%	4%	3%	2%

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

	Level of Target Fed Funds Rate or Range at ELB
25th Pctl	-0.25%
Median	0.00%
75th Pctl	0.13%

For parts a-f, 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 responses to reflect a higher probability of a rate hike occurring by the December FOMC meeting, while several dealers indicated that they made no or few significant changes to their responses since the last policy survey.

4. Previous FOMC communication has indicated that the economy's neutral 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. Please provide your estimate for the current level of the neutral real federal funds rate and at each of the time periods below.
(20 responses)

Level of Neutral Real Fed Funds Rate

	Current Level	Year-end 2017	Year-end 2018	Year-end 2019
25th Pctl	0.00%	0.00%	0.15%	0.43%
Median	0.25%	0.88%	1.00%	1.25%
75th Pctl	1.00%	1.38%	2.00%	2.38%

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

Some dealers cited an expected increase in productivity growth as a factor underlying their expectation for a gradual rise in the neutral real federal funds rate over time.

Please explain any changes to your estimates, where applicable, since the last time this set of questions was asked on July 18.
(12 responses)

Several dealers indicated that they made no or few significant changes to their estimates.

5. 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	4%	20%	51%	22%	3%	0%	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	4%	13%	27%	34%	16%	4%	2%

6. **In 2014, the Securities and Exchange Commission (SEC) adopted amendments to Rule 2a-7, which governs money market mutual funds (MMMFs) under the Investment Company Act. The deadline to implement these reforms occurred on October 14, 2016. With consideration to any recent changes in money markets that may have happened as a result of these reforms, please indicate your expectations for the most likely levels of total prime and government MMMF assets under management (AUM), as well as the 3-month USD LIBOR-OIS spread and aggregate ON RRP demand, at each of the two timeframes below.**
(19 responses)

	Prime MMMF AUM ($ billions)		Government MMMF AUM ($ billions)		3-Month USD LIBOR-OIS Spread (bps)		Aggregate ON RRP Demand ($ billions)	
	Dec. 2016	Dec. 2017	Dec. 2016	Dec. 2017	Dec. 2016	Dec. 2017	Dec. 2016	Dec. 2017
25th Pctl	375	450	2100	2000	38	30	150	120
Median	400	500	2123	2000	38	32	166	150
75th Pctl	412	575	2150	2101	40	39	175	165

If your expectations for any of the above indicators differ across these two timeframes, please explain.
(17 responses)

In explaining their views, several dealers indicated their expectation that as prime MMMF assets under management (AUM) stabilize, prime MMMFs will lengthen the weighted average maturities of their investments, leading to a narrowing of the 3-month USD LIBOR-OIS spread from current levels and an increase in yields on prime MMMF investments. Furthermore, several dealers suggested that a wider yield spread between prime and government MMMFs willl incent a modest reversal of investor flows out of government MMMFs and back into prime MMMFs by the end of next year.

7. **In its most recent FOMC statement, the Committee indicated that it anticipates continuing its existing policy of reinvesting principal payments from its holdings of agency debt and agency MBS, and of rolling over maturing Treasury securities at auction, until normalization of the level of the federal funds rate is "well under way."**

   a) **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?**
   (22 responses)

	Level of Target Fed Funds Rate/Range
25th Pctl	1.13%
Median	1.19%
75th Pctl	2.00%

b) What is your estimate for the most likely timing (in months forward) of a change to the Committee's policy of 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."
(22 responses)

	Months Forward	
	Treasuries*	Agency Debt and MBS**
25th Pctl	15	18
Median	20	24
75th Pctl	30	30

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

Please explain the factors behind any change to your expectations in parts a and b since the last policy survey.
(15 responses)

Some dealers reported that they made no or few significant changes to their responses since the last policy survey.

c) i) Please indicate the percent chance that you attach to the following possible outcomes for the par value of the SOMA portfolio <u>at the end of 2019</u>, <u>conditional on not moving to the ZLB at any point in 2016-2019</u>. For reference, the current level of the SOMA portfolio, including inflation compensation and settled and unsettled agency MBS, according to the October 12, 2016 H.4.1, was $4275 billion. Levels referenced below are in $ billions.
(22 responses)

	≤3000	3001 - 3500	3501 - 4000	4001 - 4500	≥4501
Average	4%	15%	42%	34%	6%

ii) Please indicate the percent chance that you attach to the following possible outcomes for the par value of the SOMA portfolio <u>at the end of 2019</u>, <u>conditional on moving to the ZLB at any point in 2016-2019</u>. Levels referenced below are in $ billions.

	≤4000	4001 - 4500	4501 - 5000	5001 - 5500	≥5501
Average	6%	33%	28%	20%	12%

8. **Provide your estimate of the most likely outcome for output, inflation, and unemployment. (16 responses)**

		Q4/Q4 2016	Q4/Q4 2017	Q4/Q4 2018	Q4/Q4 2019	Longer Run
GDP	25th Pctl	1.60%	1.80%	1.65%	1.80%	1.73%
	Median	1.70%	2.10%	1.90%	2.00%	1.80%
	75th Pctl	1.80%	2.30%	2.15%	2.00%	2.00%
Core PCE Deflator	25th Pctl	1.70%	1.80%	1.90%	1.90%	
	Median	1.80%	1.90%	2.00%	2.00%	
	75th Pctl	1.80%	2.00%	2.00%	2.00%	
Headline PCE Deflator	25th Pctl	1.40%	1.90%	1.95%	1.95%	2.00%
	Median	1.50%	2.00%	2.00%	2.00%	2.00%
	75th Pctl	1.60%	2.10%	2.20%	2.10%	2.00%
Unemployment Rate*	25th Pctl	4.80%	4.50%	4.50%	4.60%	4.60%
	Median	4.90%	4.60%	4.60%	4.70%	4.85%
	75th Pctl	4.90%	4.70%	4.70%	4.80%	5.00%

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

9. a) **For the outcomes below, provide the percent chance you attach to the annual average <u>CPI inflation</u> rate from November 1, 2016 - October 31, 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%	30%	37%	13%	5%

	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 November 1, 2021 - October 31, 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%	27%	39%	15%	5%

	Most Likely Outcome
25th Pctl	2.00%
Median	2.20%
75th Pctl	2.30%

10. 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%	10%	10%
Median	5%	15%	18%
75th Pctl	10%	20%	25%

**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.
(14 responses)

Several dealers indicated that they made no or few significant changes to their responses since the last policy survey.