Responses to Survey of Primary Dealers

Markets Group, Federal Reserve Bank of New York

September 2016

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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 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 September FOMC statement.

Current economic conditions:

Some dealers expected that the Committee would continue to characterize economic activity as expanding at a "moderate rate." With regard to labor market conditions, some dealers suggested that the Committee would reference continued improvement in the labor market while several others expected that the Committee would note that the pace of job gains had moderated.

Economic outlook:

Some dealers indicated that they expected few significant changes to the Committee's language on the economic outlook, while several dealers noted that the Committee could include a "balanced" or "nearly balanced" risk assessment.

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

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.

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.

Other:
(7 responses)

Dealers did not provide substantial commentary in this section.

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

b) What are your expectations for the medians of FOMC participants' economic projections in the Summary of Economic Projections (SEP)?

Many dealers expected that the median of FOMC participants' projections for 2016 GDP growth would likely decrease. Several dealers noted that they expected no changes to median projections for the unemployment rate across the forecast horizon, while several expected the median unemployment rate projection for 2016 to increase. Additionally, several dealers expected no changes to participants' median projections for headline and/or core PCE inflation, while several others expected the median projections for 2016 headline and/or core PCE inflation to decline. Lastly, several dealers reported that they expected no significant changes to the medians of FOMC participants' projections in the SEP for 2017, 2018 and for the longer run across all economic variables.

c) What are your expectations for the medians of FOMC participants' target federal funds rate projections in the Summary of Economic Projections (SEP)?
(22 responses)

Federal Funds Rate

	Year-end 2016	Year-end 2017	Year-end 2018	Year-end 2019	Longer Run
25th Pctl	0.63%	1.38%	2.13%	2.50%	2.75%
Median	0.63%	1.38%	2.13%	2.81%	3.00%
75th Pctl	0.63%	1.38%	2.25%	2.88%	3.00%

Please explain any assumptions underlying your expectations.

Some dealers indicated that they expected the median of FOMC participants' projections for the target federal funds rate at year-end 2016 to decline to imply one increase in the target range by year-end. In addition, several dealers noted their expectation that the median of FOMC participants' rate projections could imply two rate hikes in 2017, while several also reported that they expected a decline in the Committee's median projection for the longer run target federal funds rate.

d) What are your expectations for the Chair's press conference?

Several dealers anticipated that the Chair would reiterate that the case for another increase in the target range had strengthened, with several also expecting that the Chair could suggest that a rate increase by year-end 2016 is likely. Additionally, several dealers expected that the Chair would continue to emphasize data dependency and note that the FOMC seeks further evidence of progress toward its objectives. Lastly, several dealers suggested that the Chair would adopt a tone consistent with her speech at the Jackson Hole symposium.

2. 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.

Target Rate / Midpoint of Target Range

	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	Jun. 13-14 2017
25th Pctl	0.38%	0.38%	0.63%	0.63%	0.63%	0.63%	0.63%
Median	0.38%	0.38%	0.63%	0.63%	0.63%	0.63%	0.88%
75th Pctl	0.38%	0.38%	0.63%	0.63%	0.63%	0.63%	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%	1.38%	1.38%	1.63%
Median	0.88%	1.13%	1.13%	1.38%	1.63%	1.88%	2.13%
75th Pctl	0.88%	1.13%	1.38%	1.63%	1.88%	2.38%	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	3.00%	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 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	60%	3%	37%

d) 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. Only fill out this conditional probability distribution if you assigned a non-zero probability to the Committee's next policy action in 2016 being an increase.

	Increase Occurs at September FOMC meeting	Increase Occurs at November FOMC meeting	Increase Occurs at December FOMC meeting
Average	26%	8%	67%

e) 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>. If you expect a target range, please use the midpoint of that range in providing your response.

Year-end 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%	3%	37%	54%	6%	0%	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 <u>at the end of 2017, 2018 and 2019, conditional on not moving to the zero lower 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.**
(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	35%	42%	17%	5%	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	19%	26%	29%	17%	6%	2%	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	16%	17%	23%	26%	10%	5%	2%

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	30%

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	H1 2018
75th Pctl	H2 2018

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 2017, 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 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	6%	40%	17%	13%	16%	5%	2%	1%

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	7%	45%	17%	11%	8%	7%	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%	13%	9%	5%	3%	2%

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	-0.38%
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.
(19 responses)

Several dealers indicated that they revised their responses to reflect a more gradual expected path of increases in the target range for the federal funds rate, while several dealers indicated that they had made few significant changes to their policy expectations since the last policy survey.

3. 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.
(22 responses)

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	6%	28%	46%	14%	3%	1%	1%

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%	17%	35%	29%	9%	4%	2%

4. **Measures of implied volatility across equity and long-term interest rate markets are currently running below their long-run averages*, and measures of implied volatility across foreign exchange markets have declined since earlier in the year. Please rate the importance of the factors below in explaining the current low level of implied volatility across these markets (5 = very important, 1 = not important).**

**Refers to an average of daily measures of implied volatility since 1994.*

	Fed policy actions and communications	Advanced foreign central bank policy actions and communications	Emerging market central bank policy actions and communications	Reduced uncertainty around global economic outlook	Fiscal policy globally
1 - Not Important	0	0	3	3	9
2	1	0	9	6	11
3	7	2	9	9	3
4	8	14	2	2	0
5 - Very Important	7	7	0	3	0
Total Respondents	23	23	23	23	23

	Reduced political uncertainty globally	Low levels of realized volatility	More active selling of volatility for yield enhancement	Other
1 - Not Important	8	0	0	0
2	8	0	2	0
3	6	6	13	0
4	1	11	6	0
5 - Very Important	0	6	1	1
Total Respondents	23	23	22	1

If "Other", please explain.
(1 response)

Dealers did not provide substantial commentary in this section.

Please explain your response, including any assumptions or underlying views.
(20 responses)

Many dealers commented that accommodative monetary policies across several major foreign advanced central banks, as well as the expectation of a more gradual removal of accommodation from the Fed than was previously anticipated, were significant drivers of low levels of measures of implied volatility across markets. Additionally, several dealers suggested that increased selling of volatility for 'yield enhancement' amid historically low levels of longer-dated global sovereign bond yields had been an important factor. Furthermore, several dealers pointed to low levels of realized volatility in explaining their response. Lastly, several dealers noted that a perceived limited economic impact resulting from the U.K.'s decision to leave the European Union contributed to declines in measures of implied volatility compared to levels seen earlier in the year.

5. a) **From July 1 to September 7, the 3-month USD LIBOR-OIS spread increased from 28 to 40 basis points. Please indicate your expectations for the most likely level of the 3-month USD LIBOR-OIS spread over the timeframes below.**

	One Week Prior to MMMF Reform*	First Few Weeks of December
25th Pctl	42	38
Median	45	40
75th Pctl	48	45

**Refers to the implementation of the amendments to Rule 2a-7 on October 14, 2016, as outlined by the SEC in 2014, under the Investment Company Act*

b) If your expectation for the 3-month USD LIBOR-OIS spread differs across these two timeframes, please explain.
(20 responses)

Some dealers suggested that the 3-month USD LIBOR-OIS spread would narrow following the money market fund reform implementation deadline on October 14th, with several specifically noting their expectation that this would be driven by prime money market funds increasing the weighted average maturities of their investments after the implementation deadline had passed. Several dealers indicated that the 3-month USD LIBOR-OIS spread would likely settle at a higher equilibrium level than had prevailed earlier in the year, reflecting a lasting impact from money market fund reform.

c) Do you think that the recent widening of the 3-month USD LIBOR-OIS spread (or any anticipated further widening, if applicable) has had a significant impact on broader U.S. financial conditions? Please explain.

Several dealers noted that the recent widening in the 3-month USD LIBOR-OIS spread had not resulted in a significant tightening of broader U.S. financial market conditions, with several commenting that the widening in this spread had largely been offset by moves in other asset prices. However, several other dealers suggested that it had resulted in a tightening of broader U.S. financial market conditions, given their view that 3-month USD LIBOR is an important benchmark for a variety of floating-rate loans in the economy.

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

Several dealers indicated that they expected no change to the parameters of the ON RRP facility over the next year, while several other dealers suggested that the Committee may reduce aggregate ON RRP capacity from its current level by the end of this year or sometime in 2017. With regard to usage of the facility, several dealers noted that they expected an increase in aggregate ON RRP demand ahead of the money market fund reform implementation deadline on October 14th.

7. 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	16	16
Median	21	24
75th Pctl	24	29

**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?
(29 responses)

	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	25%	12%	63%

Agency Debt and MBS

	No Change to Reinvestments	Reinvestments Ceased All at Once	Reinvestments Phased Out Over Time
Average	20%	12%	68%

d) i) <u>Conditional on not moving to the ZLB at any point in 2016-2019</u>, what is your mean expectation for the par value of the SOMA portfolio at the end of 2019? For reference, the current level of the SOMA portfolio, including inflation compensation and settled and unsettled agency MBS according to the August 31, 2016 H.4.1, was $4266 billion.*

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

	SOMA Value at Year-end 2019 Conditional on <u>Not</u> Moving to ZLB ($ bn)
25th Pctl	3,750
Median	3,850
75th Pctl	4,175

ii) **<u>Conditional on moving to the ZLB at some point in 2016-2019</u>, what is your mean expectation for the par value of the SOMA portfolio at the end of 2019?**

	SOMA Value at Year-end 2019 Conditional on Moving to ZLB ($ bn)
25th Pctl	4,266
Median	4,626
75th Pctl	5,000

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

Several dealers reported that they did not make significant changes to their expectations since the last policy survey. Several others dealers commented that they adjusted their response to part d (i and ii) given that the timeframe of the conditioning scenario lengthened to include 2019.

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

		Q4/Q4 2016	Q4/Q4 2017	Q4/Q4 2018	Q4/Q4 2019	Longer Run
GDP	25th Pctl	1.60%	1.90%	1.70%	1.80%	1.70%
	Median	1.80%	2.10%	2.00%	2.00%	1.85%
	75th Pctl	1.90%	2.30%	2.20%	2.00%	2.00%
Core PCE Deflator	25th Pctl	1.70%	1.70%	1.80%	1.90%	
	Median	1.70%	1.90%	2.00%	2.00%	
	75th Pctl	1.80%	2.00%	2.00%	2.00%	
Headline PCE Deflator	25th Pctl	1.30%	1.90%	1.80%	1.90%	2.00%
	Median	1.50%	2.00%	2.00%	2.00%	2.00%
	75th Pctl	1.60%	2.10%	2.20%	2.05%	2.00%
Unemployment Rate*	25th Pctl	4.70%	4.40%	4.50%	4.60%	4.70%
	Median	4.80%	4.50%	4.65%	4.70%	4.90%
	75th Pctl	4.80%	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 CPI inflation rate from September 1, 2016 - August 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%	12%	31%	35%	12%	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 September 1, 2021 - August 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%	28%	38%	15%	5%

	Most Likely Outcome
25th Pctl	2.10%
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%	15%
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.
(16 responses)

Several dealers indicated that they made no significant changes to their responses, while several other dealers noted that they lowered the probability they assigned to a global recession occurring in the next six months.