Responses to Survey of Primary Dealers

Markets Group, Federal Reserve Bank of New York

January 2016

Responses to Survey of Primary Dealers
Distributed: 01/14/2016 – Received by: 01/19/2016

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 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 January FOMC statement. Limit your responses to changes you consider most likely.

Current economic conditions and the economic outlook:

Many dealers expected that the Committee would modestly downgrade its current growth assessment, with several pointing to the slowing in U.S. economic growth in the fourth quarter of 2015 as well as recent weaker-than-expected economic activity data in explaining their views. Similarly, several dealers suggested that the Committee would moderate its assessment of household spending and business fixed investment, and that it would note the further decline in energy prices and/or market-based measures of inflation compensation over the intermeeting period. Some also indicated that the Committee would likely continue to highlight ongoing improvement in the labor market. Lastly, several dealers expected that the January FOMC statement would make reference to recent financial market volatility and developments abroad.

Communication on the Committee's policy of reinvesting principal payments on Treasury and agency securities:
(20 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.

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

Most dealers that submitted responses to this question expected no change in the Committee’s communication on the expected path of policy rates and forward guidance on the target federal funds rate.

Other:
(8 responses)

Dealers did not provide substantial commentary in this section.

2. How would you grade the Federal Reserve System’s communication with the markets and with the public since the policy survey on December 7? Please provide a rating between 1 and 5, with 1 indicating ineffectiveness and 5 indicating effectiveness.

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

Fed Communication Grade	Number of Respondents:
1 - Ineffective	0
2	2
3	9
4	10
5 - Effective	1

Please explain:
(20 responses)

In explaining their rating, several dealers characterized the Committee's decision to raise the target range for the federal funds rate at the December FOMC meeting as effectively communicated. However, several dealers also cited some difficulty in interpreting the variety of views expressed by FOMC participants since the December meeting, particularly with regard to the Committee's near-term outlook for additional increases in the target range and outlook for inflation.

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. 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

	Jan. 26-27 2016	Mar. 15-16 2016	Apr. 26-27 2016	Jun. 14-15 2016	Jul. 26-27 2016	Sep. 20-21 2016	Nov. 1-2 2016
25th Pctl	0.50%	0.50%	0.50%	0.75%	0.75%	1.00%	1.00%
Median	0.50%	0.75%	0.75%	0.75%	0.88%	1.00%	1.00%
75th Pctl	0.50%	0.75%	0.75%	1.00%	1.00%	1.25%	1.25%
# of Responses	22	22	22	22	22	22	21

	2016 Q4	2017 Q1	2017 Q2	2017 Q3	2017 Q4	2018 H1	2018 H2
25th Pctl	1.00%	1.25%	1.50%	1.75%	1.75%	2.00%	2.25%
Median	1.25%	1.50%	1.75%	2.00%	2.25%	2.50%	2.75%
75th Pctl	1.25%	1.50%	2.00%	2.25%	2.25%	3.00%	3.25%
# of Responses	22	22	22	22	21	19	19

Bottom of Target Range

	Jan. 26-27 2016	Mar. 15-16 2016	Apr. 26-27 2016	Jun. 14-15 2016	Jul. 26-27 2016	Sep. 20-21 2016	Nov. 1-2 2016
25th Pctl	0.25%	0.25%	0.25%	0.50%	0.50%	0.75%	0.75%
Median	0.25%	0.50%	0.50%	0.63%	0.75%	0.75%	0.75%
75th Pctl	0.25%	0.50%	0.50%	0.75%	0.75%	1.00%	1.00%
# of Responses	22	22	22	22	22	22	21

	2016 Q4	2017 Q1	2017 Q2	2017 Q3	2017 Q4	2018 H1	2018 H2
25th Pctl	1.00%	1.00%	1.25%	1.50%	1.50%	1.75%	2.00%
Median	1.00%	1.25%	1.50%	1.75%	2.00%	2.25%	2.50%
75th Pctl	1.25%	1.50%	1.75%	2.00%	2.25%	2.75%	3.25%
# of Responses	22	22	22	22	21	19	19

	Target Rate						
	Jan. 26-27 2016	Mar. 15-16 2016	Apr. 26-27 2016	Jun. 14-15 2016	Jul. 26-27 2016	Sep. 20-21 2016	Nov. 1-2 2016
25th Pctl							
Median							
75th Pctl							
# of Responses	0	0	0	0	0	0	0

	2016 Q4	2017 Q1	2017 Q2	2017 Q3	2017 Q4	2018 H1	2018 H2
25th Pctl					2.50%	2.25%	2.25%
Median					2.50%	2.63%	2.88%
75th Pctl					2.50%	3.00%	3.50%
# of Responses	0	0	0	0	1	2	2

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	2.90%	2.15%
Median	3.25%	2.65%
75th Pctl	3.50%	3.01%

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. 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.

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	75%	8%	17%

ii) Conditional on the Committee's next policy action in 2016 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 next change in the target rate or range being an increase.

	Increase Occurs at January FOMC Meeting	Increase Occurs at March FOMC Meeting	Increase Occurs at April FOMC Meeting or Later
Average	2%	52%	46%

iii) **Conditional on the Committee's next policy action in 2016 being a decrease 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 next change in the target rate or range being a decrease.**
(19 responses)

	Decrease Occurs at January FOMC Meeting	Decrease Occurs at March FOMC Meeting	Decrease Occurs at April FOMC Meeting or Later
Average	2%	9%	89%

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 at the end of 2016, conditional on the following possible scenarios for the timing and direction of the Committee's next policy action in 2016. Again, 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.**
(18 complete responses)

	Next change is increase, occurs at Mar. meeting or earlier						
	≤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	3%	7%	35%	46%	6%	1%	0%

	Next change is increase, occurs at Apr. meeting or later						
	≤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	4%	11%	46%	36%	3%	0%	0%

	Next change is decrease, occurs at Mar. meeting or earlier						
	≤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	82%	13%	4%	1%	0%	0%	0%

	Next change is decrease, occurs at Apr. meeting or later						
	≤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	88%	9%	2%	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 at the end of 2017 and 2018, conditional on not returning to the zero lower bound (ZLB) at any point during 2016-2018. If you expect a target range, please use the midpoint of that range in providing your response.**
(21 complete 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	14%	14%	26%	27%	11%	6%	2%

	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	10%	13%	17%	19%	19%	15%	8%

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

	Probability of Returning to ZLB at Some Point in 2016-2018
25th Pctl	20%
Median	25%
75th Pctl	35%

If you placed a non-zero probability on returning to the ZLB at some point in 2016-2018 above, please indicate your estimate of the level of the target federal funds rate or range at the ZLB (i.e. the effective lower bound), as well as the most likely timing of such an event.
(20 responses)

	Level of Fed Funds Rate or Range at ZLB
25th Pctl	0.00%
Median	0.13%
75th Pctl	0.13%

	Timing of Return to ZLB at Some Point in 2016-2018
25th Pctl	H2 2016
Median	H1 2017
75th Pctl	H1 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 at the end of 2017 and 2018, conditional on returning to the ZLB at some point in 2016-2018. Only fill out the conditional probability distributions if you assigned a non-zero probability to returning to the ZLB at some point in 2016-2018. If you expect a target range, please use the midpoint of that range in providing your response.
(19 responses)

	Year-end 2017						
	≤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	57%	18%	10%	5%	5%	3%	1%

	Year-end 2018						
	≤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	54%	18%	13%	8%	4%	2%	1%

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						
	≤1.50%	**1.51-2.00%**	**2.01-2.50%**	**2.51-3.00%**	**3.01-3.50%**	**3.51-4.00%**	**≥4.01%**
Average	6%	18%	35%	29%	11%	2%	1%

	Year-End 2017						
	≤1.50%	**1.51-2.00%**	**2.01-2.50%**	**2.51-3.00%**	**3.01-3.50%**	**3.51-4.00%**	**≥4.01%**
Average	5%	14%	23%	29%	21%	7%	1%

5. a) In the first two columns, please indicate your expectations for the most likely levels (excluding month-end and quarter-end dates) of the following indicators during the intermeeting period immediately following the next FOMC meeting, conditional on the below two hypothetical outcomes for the target federal funds rate or range. In the second two columns, please indicate your expectations for the most likely levels of these indicators 6 months and 1 year from now.
(17 complete responses)

No Change at Next Meeting

	IOER Rate	Target Federal Funds Rate or Range*	Effective Federal Funds Rate	ON RRP Rate	Overnight Treasury GCF Repo Rate	Overnight Treasury Tri-party repo Rate	1-month LIBOR Rate	4-week T-bill Rate	ON RRP Demand ($ bn)	ON RRP Cap ($ bn)**
25th Pctl	0.50%	0.38%	0.36%	0.25%	0.44%	0.28%	0.42%	0.19%	100	2000
Median	0.50%	0.38%	0.36%	0.25%	0.45%	0.30%	0.43%	0.20%	100	2000
75th Pctl	0.50%	0.38%	0.36%	0.25%	0.45%	0.35%	0.43%	0.21%	150	2000

† 12 dealers expected no ON RRP cap.

Increase at Next Meeting

	IOER Rate	Target Federal Funds Rate or Range*	Effective Federal Funds Rate	ON RRP Rate	Overnight Treasury GCF Repo Rate	Overnight Treasury Tri-party repo Rate	1-month LIBOR Rate	4-week T-bill Rate	ON RRP Demand ($ bn)	ON RRP Cap ($ bn)**
25th Pctl	0.75%	0.63%	0.60%	0.50%	0.67%	0.53%	0.67%	0.43%	100	2000
Median	0.75%	0.63%	0.61%	0.50%	0.70%	0.55%	0.68%	0.45%	128	2000
75th Pctl	0.75%	0.63%	0.61%	0.50%	0.70%	0.58%	0.69%	0.47%	150	2000

† 14 dealers expected no ON RRP cap.

6 Months Forward	IOER Rate	Target Federal Funds Rate or Range*	Effective Federal Funds Rate	ON RRP Rate	Overnight Treasury GCF Repo Rate	Overnight Treasury Tri-party repo Rate	1-month LIBOR Rate	4-week T-bill Rate	ON RRP Demand ($ bn)	ON RRP Cap ($ bn)**
25th Pctl	0.75%	0.63%	0.61%	0.50%	0.70%	0.55%	0.68%	0.44%	135	700
Median	1.00%	0.88%	0.84%	0.75%	0.71%	0.58%	0.70%	0.47%	180	2000
75th Pctl	1.00%	0.88%	0.86%	0.75%	0.95%	0.80%	0.94%	0.71%	300	2000

† 8 dealers expected no ON RRP cap.

1 Year Forward	IOER Rate	Target Federal Funds Rate or Range*	Effective Federal Funds Rate	ON RRP Rate	Overnight Treasury GCF Repo Rate	Overnight Treasury Tri-party repo Rate	1-month LIBOR Rate	4-week T-bill Rate	ON RRP Demand ($ bn)	ON RRP Cap ($ bn)**
25th Pctl	1.25%	1.13%	1.10%	0.88%	0.95%	0.80%	1.04%	0.88%	120	500
Median	1.25%	1.13%	1.11%	1.00%	1.20%	1.05%	1.19%	0.95%	180	875
75th Pctl	1.50%	1.38%	1.34%	1.25%	1.42%	1.28%	1.42%	1.20%	400	2000

† 4 dealers expected no ON RRP cap.

For dealers that submitted ranges, midpoints of the ranges are used.
***For dealers who forecasted no cap, $2 trillion was used as an approximation for the expected size of the ON RRP cap.*

Please explain any assumptions underlying your responses. How do you expect moving further away from the zero lower bound (ZLB) to impact current relationships between money market rates, as well as where they trade relative to the target rate or range, if at all?
(20 responses)

Several dealers indicated that they expect current relationships between money market rates to remain largely the same over the next year, with several dealers highlighting that moving further away from the zero lower bound is unlikely to have a significant impact on the relative levels of money market rates. However, several dealers noted possible downside risks to their 4-week U.S. Treasury bill and overnight repo rate forecasts, citing expected increased demand for short-term, high quality assets resulting from money market fund reform implementation in the second half of the year.

b) Aggregate demand for RRP operations (ON and term) over the December 31, 2015, year-end date was approximately $475 billion, compared to roughly $450 billion over the September 30, 2015 quarter-end date. What are your expectations for the most likely levels of aggregate demand for RRP operations (ON and term, as applicable) over the following 2016 quarter-end dates?
(21 complete responses)

Aggregate Demand for RRPs on Quarter-end Dates ($ bn)

	Mar. 31	Jun. 30	Sep. 30	Dec. 31
25th Pctl	450	450	450	450
Median	450	480	500	500
75th Pctl	500	500	550	575

Please explain any assumptions underlying your responses. How do you expect the Fed's offerings of RRP operations (ON and term, as applicable) over quarter-end dates to evolve in 2016?
(19 responses)

Several dealers noted that aggregate demand for RRP operations (ON and term) over upcoming quarter-end dates will likely remain near recently observed levels. However, several dealers indicated that they expect aggregate demand for RRP operations on quarter-end dates to increase, with several speculating that money market fund reform implementation and other regulatory developments will increase demand for short-term, high-quality assets in 2016.

c) In the March 2015 FOMC meeting minutes, it was reported that FOMC participants "...generally saw some advantages to a temporarily elevated aggregate [ON RRP] cap...to ensure that the facility would have sufficient capacity to support policy implementation at the time of liftoff, but they also indicated that they expected that it would be appropriate to reduce ON RRP capacity fairly soon after the Committee begins firming the stance of policy."

What is your estimate for the most likely timing of when the Committee will reduce aggregate ON RRP capacity from its current level?* Please frame your response in terms of a forward timeframe (days, weeks, months, years, as applicable).
(20 responses)

	Expected Timing of Reduction in Capacity (months)
25th Pctl	5
Median	12
75th Pctl	12

**At the December FOMC meeting, the Committee "...directed the Open Market Trading Desk at the Federal Reserve Bank of New York to undertake open market operations as necessary to maintain the federal funds rate in a target range of ¼ to ½ percent, including overnight reverse repurchase operations (ON RRPs) in amounts limited only by the value of Treasury securities held outright in the System Open Market Account (SOMA) and by a per-counterparty limit of $30 billion per day."*

What is your expectation for the most likely level to which aggregate ON RRP capacity will be reduced?
(20 responses)

	Level to which Aggregate ON RRP will be Reduced ($ bn)
25th Pctl	500
Median	700
75th Pctl	1000

Please explain any assumptions underlying your responses.
(19 responses)

Several dealers indicated that the timing of when the Committee will reduce aggregate ON RRP capacity from its current level may be dependent on how money market and policy rates evolve over the near- and medium-term. Additionally, several dealers indicated that future changes to aggregate ON RRP capacity may be related to changes in the size of the Federal Reserve's balance sheet.

6. In the December 2015 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	12	12
Median	15	15
75th Pctl	18	18

*Two dealers expect no end to reinvestments of Treasury securities

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	1.31%
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	18%	16%	67%

Agency Debt and MBS

	No Change to Reinvestments	Reinvestments Ceased All at Once	Reinvestments Phased Out Over Time
Average	12%	18%	70%

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

	Anticipated Duration of Phase-Out (in Months)	
	Treasuries	Agency Debt and MBS
25th Pctl	9	8
Median	12	12
75th Pctl	12	12

Please explain the factors behind any change to your expectations in parts a, c and d since the last policy survey.
(17 responses)

Several dealers reported that they made few significant changes to their responses to parts a, c and d since the last survey. Additionally, several dealers explained that language in the December FOMC statement indicating that the Committee anticipates maintaining its policy of reinvesting Treasury and agency securities "until normalization of the level of the federal funds rate is well under way" led them to shift later their expectation for the most likely timing of a change to the Committee's policy on reinvestments.

7. Provide your estimate of the most likely outcome for output, inflation, and unemployment. (18 complete responses)

		Q4/Q4 2016	Q4/Q4 2017	Q4/Q4 2018	Longer Run
GDP:	25th Pctl	2.20%	2.10%	1.80%	1.80%
	Median	2.35%	2.25%	2.00%	2.00%
	75th Pctl	2.60%	2.50%	2.40%	2.20%
Core PCE Deflator:	25th Pctl	1.50%	1.70%	2.00%	
	Median	1.65%	1.90%	2.00%	
	75th Pctl	1.70%	2.10%	2.10%	
Headline PCE Deflator:	25th Pctl	1.20%	1.90%	2.00%	2.00%
	Median	1.50%	2.00%	2.10%	2.00%
	75th Pctl	1.80%	2.20%	2.20%	2.00%
Unemployment Rate*:	25th Pctl	4.50%	4.40%	4.50%	4.70%
	Median	4.60%	4.50%	4.70%	5.00%
	75th Pctl	4.80%	4.70%	4.80%	5.10%

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

8. a) For the outcomes below, provide the percent chance you attach to the annual average CPI inflation rate from January 1, 2016 - December 31, 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%	32%	35%	12%	5%

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 January 1, 2021 - December 31, 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%	10%	27%	40%	15%	6%

Point estimate for most likely outcome:

	Most Likely Outcome
25th Pctl	2.10%
Median	2.28%
75th Pctl	2.30%

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?
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	2%	25th Pctl	10%	25th Pctl	10%
Median	5%	Median	14%	Median	19%
75th Pctl	5%	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 comment on any changes to your expectations over the intermeeting period, if applicable. (15 responses)

Some dealers noted that they revised higher the probabilities that they assigned to the U.S. and/or global economy being in a recession in 6 months. In explaining adjustments to their responses, several highlighted the recent tightening in global financial market conditions, increased global growth concerns, as well as recent weaker-than-expected economic activity data in the U.S.