Responses to Survey of Primary Dealers

Markets Group, Federal Reserve Bank of New York

March 2016

Responses to Survey of Primary Dealers
Distributed: 03/03/2016 – Received by: 03/07/2016

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

Current economic conditions and the economic outlook:
(21 responses)

Some dealers expected the Committee to upgrade its assessment of current economic conditions, and several dealers expected that it would highlight ongoing improvement in the labor market. Several dealers also suggested that the Committee would acknowledge an upward rebound in market-based measures of inflation compensation, or alternatively note that these measures "remain low" rather than "declined further." Additionally, several dealers expected the Committee to indicate that survey-based measures of longer-term inflation expectations were little changed or declined slightly over the intermeeting period. Lastly, several dealers indicated that the Committee would likely reintroduce an assessment of risks to the outlook, with several suggesting that it would characterize risks to the outlook as "balanced" or "nearly balanced."

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.

Communication on the expected path of policy rates and forward guidance on the target federal funds rate:
(21 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 in the March FOMC statement. However, several dealers indicated that they expected the medians of FOMC participants' rate projections in the SEP to decline, reflecting a more gradual expected pace of policy tightening.

Other:
(9 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' <u>economic projections</u> in the Summary of Economic Projections (SEP)?
(21 responses)

Some dealers anticipated that FOMC participants' economic projections for 2016 would be adjusted in response to recent data releases, with several dealers noting their expectation that the median of participants' forecasts for 2016 GDP growth would likely decrease, and several also suggesting that the medians of their forecasts for 2016 headline and/or core PCE inflation would likely increase slightly. Furthermore, several dealers reported that they expected few significant changes to the medians of FOMC participants' economic projections in the SEP.

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

	Federal Funds Rate			
	Year-End 2016	**Year-End 2017**	**Year-End 2018**	**Longer Run**
25th Pctl	1.13%	2.00%	2.88%	3.25%
Median	1.13%	2.13%	3.00%	3.50%
75th Pctl	1.13%	2.13%	3.13%	3.50%

Please explain any assumptions underlying your expectations.

In explaining their responses, some dealers indicated that they expected the median of FOMC participants' projections for the target federal funds rate at year-end 2016 to imply only three rate hikes this year, partly reflecting their anticipation that the Committee would leave the target range unchanged at the March meeting. In addition, several dealers noted their expectation that the medians of FOMC participants' rate projections would reflect a more gradual expected pace of policy normalization, citing Fed communication over the period perceived as highlighting increased downside risks to the outlook from recent global economic and financial market developments. Lastly, several dealers suggested that the median longer-run rate projection would decline modestly.

d) What are your expectations for the Chair's post-FOMC conference?
(21 responses)

Several dealers expected that the Chair would acknowledge ongoing improvement in the labor market and an uptick in realized inflation data. Additionally, several dealers expected that the Chair would continue to emphasize data dependency and that policy normalization could continue at any future meeting. Lastly, several dealers expected the Chair to discuss recent global economic and financial market developments, including how the Committee views the potential impact of these developments on the U.S. economic outlook.

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.
(20 responses)

	Target Rate / Midpoint of Target Range						
	Mar. 15-16 2016	Apr. 26-27 2016	Jun. 14-15 2016	Jul. 26-27 2016	Sep. 20-21 2016	Nov. 1-2 2016	Dec. 13-14 2016
25th Pctl	0.38%	0.38%	0.38%	0.38%	0.63%	0.63%	0.88%
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%	0.88%	0.88%	1.13%
# of Responses	22	22	22	22	22	22	22

	2017 Q1	2017 Q2	2017 Q3	2017 Q4	2018 H1	2018 H2	2019 H1
25th Pctl	0.88%	1.13%	1.13%	1.38%	1.88%	2.00%	2.13%
Median	0.88%	1.13%	1.38%	1.63%	2.13%	2.56%	2.56%
75th Pctl	1.38%	1.63%	1.88%	2.13%	2.63%	3.00%	3.19%
# of Responses	22	22	22	22	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	3.00%	2.15%
Median	3.25%	2.64%
75th Pctl	3.38%	3.00%

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	72%	8%	20%

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. 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 March FOMC Meeting	Increase Occurs at April FOMC Meeting	Increase Occurs at June FOMC Meeting or Later
Average	8%	14%	77%

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. 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.

	Decrease Occurs at March FOMC Meeting	Decrease Occurs at April FOMC Meeting	Decrease Occurs at June FOMC Meeting or Later
Average	2%	6%	93%

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. 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.**

Next change is increase, occurs at Apr. 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	1%	4%	7%	44%	39%	5%	1%	0%

Next change is increase, occurs at Jun. 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	1%	4%	8%	55%	29%	3%	1%	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	14%	78%	7%	1%	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, conditional on not returning 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	16%	19%	31%	20%	9%	3%	1%

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	12%	13%	16%	21%	19%	12%	6%

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	15%
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 <u>level</u> of the target federal funds rate or range at the ZLB (i.e. the effective lower bound), as well as the most likely <u>timing</u> of such an event.
(20 responses)

	Level of Fed Funds Rate or Range at ZLB
25th Pctl	-0.38%
Median	-0.13%
75th Pctl	0.13%

	Timing of Return to ZLB at Some Point in 2016-2018
25th Pctl	H1 2017
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 <u>at the end of 2017 and 2018, conditional on returning to the ZLB at some point in 2016-2018</u>. 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.
(18 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	13%	45%	15%	10%	7%	5%	4%	2%

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	12%	47%	17%	10%	6%	3%	2%	1%

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

Several dealers indicated that they modestly adjusted their probability distributions for the year-end target federal funds rate given changes to the bins at the lower end of the distribution since the last policy survey. Furthermore, several dealers indicated that they revised their responses to reflect a more gradual expected path of increases in the target range.

3. **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	10%	28%	34%	20%	7%	2%	0%

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	6%	16%	24%	27%	19%	6%	2%

b) **Since mid-2014, various measures of the 5-year/5-year forward breakeven rate of inflation have declined by approximately 100 basis points. Provide your estimate for the decomposition of this decline. Please ensure your signs are correct.**

	Change in Expected Average CPI Inflation	Change in Inflation Risk Premium	Change in other Risk Premia
Average (bps)	-36	-32	-31

c) **Please rate the importance of the following factors in explaining the change in each of the components of the 5-year/5-year forward breakeven rate (5=very important, 1=not important).**
(20 responses)

Change in Expected Average CPI Inflation

	Change in outlook for US econ growth	Changes in household inflation expectations	Realized inflation data	Changes in labor market dynamics	Changes in oil and commodity prices	Changes in US dollar exchange rate	Changes in risk asset prices	Changes in perception of future FOMC reaction function	Market technicals
Average	3.2	2.8	3.5	2.2	4.1	3.4	2.7	2.4	1.7

Change in Inflation Risk Premium

	Change in outlook for US econ growth	Changes in household inflation expectations	Realized inflation data	Changes in labor market dynamics	Changes in oil and commodity prices	Changes in US dollar exchange rate	Changes in risk asset prices	Changes in perception of future FOMC reaction function	Market technicals
Average	2.6	2.8	3.4	2.2	4.0	3.0	3.1	2.5	3.0

Change in Other Risk Premia

	Change in outlook for US econ growth	Changes in household inflation expectations	Realized inflation data	Changes in labor market dynamics	Changes in oil and commodity prices	Changes in US dollar exchange rate	Changes in risk asset prices	Changes in perception of future FOMC reaction function	Market technicals
Average	2.1	1.3	1.6	1.3	2.9	2.3	3.4	1.6	4.3

d) **Please comment on how your expectations for 5-year/5-year forward average CPI inflation have changed since mid-2014, if at all. If the change in your expectations is different from what you estimated as the change in the market's expectations over this period, please explain.**
(20 responses)

Several dealers noted that their expectations for 5-year/5-year forward average CPI inflation have not changed significantly since mid-2014. However, several other dealers noted declines in their expectations over this period. In explaining changes in either their own expectations or what they estimated as the change in the market's expectations, several dealers cited increased disinflationary pressures from abroad as an important factor.

4. In the January FOMC meeting minutes, it was reported that FOMC participants discussed "the extent to which the recent turbulence in global financial markets might restrain U.S. economic activity." Please rate the importance of the following factors that may explain financial market volatility and the declines in some risk asset prices since the start of the year (5=very important, 1=not important).

Importance of the Following Factors in Explaining Financial Market Volatility and Declines in Some Risk Asset Prices since the Start of the Year

	Changes to outlook on U.S. growth/inflation	Changes to outlook on foreign growth/inflation	Chinese FX developments	Volatility in oil markets	Recent Fed policy actions and communications	Recent foreign central bank policy actions and communications	Other (please explain)*
Average	2.9	4.0	3.9	4.1	2.4	3.6	

*Only four dealers submitted ratings for this category.

If "Other", please explain.
(4 responses)

Dealers did not provide substantial commentary in this section.

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

In explaining their ratings, several dealers pointed to global rather than domestic developments as important factors that may explain financial market volatility since the start of the year. Specifically, several dealers highlighted developments in Chinese foreign exchange markets, increased global growth concerns, and volatility in oil markets as important factors. However, several dealers also highlighted weaker-than-expected U.S. economic data and/or the slowdown in fourth quarter U.S. GDP growth. Lastly, several dealers noted that financial market volatility since the start of the year may have been driven by increased concerns over the perceived limitations of further global monetary policy easing.

5. a) Please indicate your expectations for the most likely level (excluding month-end and quarter-end dates) of aggregate ON RRP demand during the intermeeting period immediately following the next FOMC meeting, as well as 6 months and 1 year from now.
(21 responses)

Aggregate Demand for ON RRP ($ bn)

	Next FOMC meeting	6 months forward	1 year forward
25th Pctl	50	70	75
Median	60	100	85
75th Pctl	75	150	150

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

In their responses, several dealers noted their expectation that aggregate demand for ON RRP operations will remain near recent ranges over the next intermeeting period. Additionally, some dealers suggested that demand may increase over the medium term given an expected increase in demand for short-term, high-quality assets stemming from money fund reform implementation in the second half of the year.

How do you expect the relative levels of money market rates to evolve over the next intermeeting period, as well as 6 months and 1 year from now?
(20 responses)

Some dealers indicated that they expect current relationships between money market rates to remain largely the same over the next intermeeting period, as well as 6 months and 1 year from now. However, several other dealers highlighted the possibility that term bank funding rates may increase relative to overnight money market rates, citing an expected decrease in investor demand for term investments ahead of money fund reform implementation in the second half of the year. Additionally, several dealers noted that U.S. Treasury bill rates and/or overnight repo rates may decline relative to other overnight rates, reflecting increased demand for short-term, high-quality assets resulting from money fund reform implementation in 2016.

b) In the January FOMC meeting minutes, it was reported that FOMC participants discussed strategies for reintroducing an aggregate cap on ON RRP operations and managing the cap subsequently, with "nearly all" participants indicating a preference for waiting "a couple of months or longer" before making operational adjustments to the facility. What is your estimate for the most likely timing (in months forward) of when the Committee will reduce aggregate ON RRP capacity from its current level?*

	Expected Timing of Reduction in Capacity (months)
25th Pctl	5
Median	9
75th Pctl	10

**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)." The Desk indicated that it anticipates that "around $2 trillion of Treasury securities" will be available for ON RRP operations to fulfill the FOMC's domestic policy directive.*

What is your expectation for the most likely level to which aggregate ON RRP capacity will be reduced at this time?

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

Please explain any assumptions underlying your expectations regarding the Committee's future strategy for managing the ON RRP facility, as well as any change to your expectations since the last policy survey.
(21 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 noted their expectation that the Committee may wait to assess the impact of money fund reform implementation in the second half of this year before making significant changes to the parameters of the ON RRP facility.

6. 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	13	12
Median	18	18
75th Pctl	21	21

*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	1.38%
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	19%	15%	66%

Agency Debt and MBS

	No Change to Reinvestments	Reinvestments Ceased All at Once	Reinvestments Phased Out Over Time
Average	13%	17%	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	11	9
Median	12	12
75th Pctl	12	12

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 made few significant changes to their responses in parts a-d since the last policy survey. Additionally, several 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.

e) i) <u>Conditional on not returning 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 February 25, 2016, H.4.1, was $4273 billion.

	SOMA Value at Year-end 2018 Conditional on <u>Not</u> Returning to ZLB ($ bn)
25th Pctl	3,555
Median	3,863
75th Pctl	4,082

ii) <u>Conditional on returning 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?
(21 responses)

	SOMA Value at Year-end 2018 Conditional on Returning to ZLB ($ bn)
25th Pctl	4,273
Median	4,500
75th Pctl	4,800

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

		Q4/Q4 2016	Q4/Q4 2017	Q4/Q4 2018	Longer Run
	25th Pctl	2.00%	2.10%	1.75%	1.80%
GDP:	Median	2.20%	2.25%	2.00%	2.00%
	75th Pctl	2.40%	2.50%	2.40%	2.10%
	25th Pctl	1.60%	1.80%	1.80%	
Core PCE Deflator:	Median	1.70%	1.90%	2.00%	
	75th Pctl	1.90%	2.00%	2.10%	
	25th Pctl	1.30%	1.90%	2.00%	2.00%
Headline PCE Deflator:	Median	1.55%	2.05%	2.10%	2.00%
	75th Pctl	1.60%	2.10%	2.20%	2.00%
	25th Pctl	4.60%	4.40%	4.60%	4.70%
Unemployment Rate*:	Median	4.65%	4.50%	4.70%	4.90%
	75th Pctl	4.80%	4.70%	4.80%	5.00%

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

b) Please indicate the percent chance that you attach to the unemployment rate being at or below 4.2 percent at year-end 2016.

	Probability of Unemployment Rate Being at or Below 4.2% at Year-end 2016
25th Pctl	10.00%
Median	17.50%
75th Pctl	25.00%

Conditional on the unemployment rate being at or below 4.2 percent at year-end 2016, provide your estimate for the most likely outcome for the PCE deflator (Q4/Q4 Growth) at year-end 2017.

	PCE Deflator (Q4/Q4 Growth) at Year-end 2017
25th Pctl	2.00%
Median	2.20%
75th Pctl	2.30%

Please explain any assumptions underlying your responses to part b.
(17 responses)

Several dealers indicated that wage pressures would likely build under this scenario, leading to an increase in PCE inflation at year-end 2017 relative to their modal expectation. However, several other dealers commented that inflationary pressures may remain subdued conditional on a decline in the unemployment rate to 4.2 percent given an expected flatter-than-historically-observed Phillips curve relationship.

8. a) For the outcomes below, provide the percent chance you attach to the annual average CPI inflation rate from March 1, 2016 - February 29, 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%	33%	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 March 1, 2021 - February 28, 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%	39%	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	3%	25th Pctl	10%	25th Pctl	10%
Median	5%	Median	15%	Median	20%
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 comment on any changes to your expectations over the intermeeting period, if applicable. (11 responses)

Dealers did not provide substantial commentary in this section.

Updated as of March 21, 2016

Following the March FOMC Meeting (March 15-16), primary dealers were asked to update their responses to question 2.

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.
(20 responses)

	Target Rate / Midpoint of Target Range					
	Apr. 26-27 2016	**Jun. 14-15 2016**	**Jul. 26-27 2016**	**Sep. 20-21 2016**	**Nov. 1-2 2016**	**Dec. 13-14 2016**
25th Pctl	0.38%	0.38%	0.38%	0.63%	0.63%	0.88%
Median	0.38%	0.63%	0.63%	0.63%	0.63%	0.88%
75th Pctl	0.38%	0.63%	0.63%	0.63%	0.63%	0.88%
# of Responses	22	22	22	22	22	22

	2017 Q1	**2017 Q2**	**2017 Q3**	**2017 Q4**	**2018 H1**	**2018 H2**	**2019 H1**
25th Pctl	0.88%	1.13%	1.13%	1.38%	1.88%	1.88%	2.06%
Median	0.88%	1.13%	1.38%	1.63%	2.13%	2.44%	2.56%
75th Pctl	1.13%	1.38%	1.63%	1.88%	2.38%	2.88%	3.13%
# of Responses	22	22	22	22	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	3.00%	2.15%
Median	3.25%	2.64%
75th Pctl	3.38%	3.00%

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.

v) 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	70%	8%	22%

vi) 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 next change in the target rate or range being an increase.

	Increase Occurs at April FOMC Meeting	Increase Occurs at June FOMC Meeting or Later
Average	8%	92%

vii) **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. 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.**

	Decrease Occurs at April FOMC Meeting	Decrease Occurs at June FOMC Meeting or Later
Average	6%	94%

viii) **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. 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.**

Next change is increase, occurs at Apr. 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	1%	3%	7%	51%	33%	4%	1%	0%

Next change is increase, occurs at Jun. 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	1%	3%	7%	62%	23%	2%	1%	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	14%	78%	7%	1%	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 returning 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.**

	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	16%	21%	30%	19%	9%	3%	1%

	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	12%	14%	18%	22%	19%	10%	6%

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	15%
Median	26%
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 <u>level</u> of the target federal funds rate or range at the ZLB (i.e. the effective lower bound), as well as the most likely <u>timing</u> of such an event.
(20 responses)

	Level of Fed Funds Rate or Range at ZLB
25th Pctl	-0.38%
Median	0.00%
75th Pctl	0.13%

	Timing of Return to ZLB at Some Point in 2016-2018
25th Pctl	H1 2017
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 <u>at the end of 2017 and 2018</u>, <u>conditional on returning to the ZLB at some point in 2016-2018</u>. 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.
(21 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	13%	45%	15%	9%	7%	5%	4%	2%

	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	12%	45%	17%	12%	7%	4%	2%	1%

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

Several dealers indicated that they made few significant changes to their responses since the last policy survey. However, several dealers also indicated that they modestly adjusted their responses following communication at the March FOMC meeting perceived as suggesting a more gradual expected path of the policy rate.