Responses to Survey of Primary Dealers

Markets Group, Federal Reserve Bank of New York

December 2016

Responses to Survey of Primary Dealers
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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 December FOMC statement.

Current economic conditions:

Several dealers indicated that they expected no or few significant changes to the Committee's assessment of current economic conditions in the December FOMC statement. Several dealers expected that the Committee would acknowledge improved economic data or note that economic activity had expanded at a "moderate" rate, and several expected that the Committee would acknowledge the increase in market-based measures of inflation compensation. Lastly, some dealers suggested that the Committee would reference continued improvement in the labor market and/or a decline in the unemployment rate.

Economic outlook:

Several dealers noted that they expected no or few significant changes to the Committee's language on the economic outlook, while several dealers expected that the Committee would characterize near-term risks to the economic outlook as "balanced."

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

Many dealers expected no change in the Committee's communication on the expected path of policy rates and forward guidance on the target range for the federal funds rate, while several expected the Committee to announce an increase in the target range for the federal funds rate at the current meeting.

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

Most dealers expected no change in the Committee's communication on its policy of reinvesting principal payments on Treasury and agency securities.

Other:
(5 responses)

Dealers did not provide substantial commentary in this section.

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

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

Several dealers reported that they expected no significant changes to the medians of FOMC participants' economic projections in the December SEP. Several dealers expected the median of FOMC participants' projections for 2016 GDP growth to increase, and several also expected the median projections for 2017 and/or 2018 GDP growth to increase. Meanwhile, several others suggested that the median projections for 2017 and/or 2018 GDP growth would remain unchanged. Several dealers suggested that the median unemployment rate projection for 2016 would decrease, and several also expected the median unemployment rate projections in 2017 and/or 2018 to decrease. Additionally, several dealers suggested that the median projections for headline and/or core PCE inflation in 2016 would increase, and several also expected the median headline and/or core PCE inflation projections to increase for 2017 and/or 2018. Lastly, several dealers indicated that they did not yet expect FOMC participants' economic projections to fully incorporate the potential impact of possible changes in fiscal policy.

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

Federal Funds Rate

	Year-end 2016	Year-end 2017	Year-end 2018	Year-end 2019	Longer Run
25th Pctl	0.63%	1.13%	1.88%	2.63%	2.88%
Median	0.63%	1.13%	1.88%	2.63%	2.88%
75th Pctl	0.63%	1.13%	1.88%	2.63%	2.88%

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

Several dealers indicated that they expected no or few significant changes to the medians of FOMC participants' projections for the target federal funds rate. Additionally, some dealers noted that they did not yet expect FOMC participants' rate projections to fully incorporate the potential impact of possible changes in fiscal policy.

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

Some dealers expected the Chair either to avoid commenting on potential policy initiatives of the incoming administration or to highlight uncertainty over the potential impact of such initiatives. At the same time, several dealers expected that the Chair would emphasize a gradual expected pace of further increases in the target range for the federal funds rate, and several anticipated that the Chair would continue to stress data dependency. Several dealers also suggested the Chair would explain the rationale for the increase in the target range for the federal funds rate expected at the December meeting, with several expecting her to comment on the amount of slack remaining in the labor market. Lastly, several dealers expected that the Chair would adopt a tone similar to her testimony before the Joint Economic Committee on November 17.

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						
	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	Sep. 19-20 2017
25th Pctl	0.63%	0.63%	0.63%	0.63%	0.88%	0.88%	0.88%
Median	0.63%	0.63%	0.63%	0.63%	0.88%	0.88%	0.88%
75th Pctl	0.63%	0.63%	0.63%	0.63%	0.88%	0.88%	0.88%
# of Responses	23	23	23	23	23	23	23
	2017 Q4	**2018 Q1**	**2018 Q2**	**2018 Q3**	**2018 Q4**	**2019 H1**	**2019 H2**
25th Pctl	1.13%	1.13%	1.38%	1.38%	1.63%	1.88%	1.88%
Median	1.13%	1.38%	1.38%	1.63%	1.83%	2.13%	2.38%
75th Pctl	1.13%	1.38%	1.63%	1.88%	1.88%	2.44%	2.63%
# of Responses	23	23	23	23	23	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.
(22 responses)

	Longer Run	10-yr Average FF Rate
25th Pctl	2.50%	2.00%
Median	2.75%	2.27%
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	95%	1%	4%

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 Dec. 2016 FOMC Meeting	Increase Occurs at Jan. 2017 FOMC Meeting	Increase Occurs at Mar. 2017 FOMC Meeting or Later
Average	92%	3%	5%

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 policy 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.

	Next change is increase, occurs at Jan. 2017 FOMC meeting or earlier							
	≤0.50%	0.51-0.75%	0.76-1.00%	1.01-1.25%	1.26-1.50%	1.51-1.75%	1.76-2.00%	≥2.01%
Average	4%	7%	21%	40%	20%	6%	1%	0%

	Next change is increase, occurs at Mar. 2017 FOMC meeting or later							
	≤0.50%	0.51-0.75%	0.76-1.00%	1.01-1.25%	1.26-1.50%	1.51-1.75%	1.76-2.00%	≥2.01%
Average	6%	17%	31%	32%	10%	3%	1%	0%

	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	10%	67%	17%	4%	1%	1%	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 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 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%	22%	36%	21%	8%	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	8%	12%	25%	26%	15%	9%	4%

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	10%
Median	20%
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.
(22 responses)

	Timing of Move to ZLB at Some Point in 2016-2019
25th Pctl	H2 2018
Median	H1 2019
75th Pctl	H2 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.
(20 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%	34%	20%	14%	10%	9%	5%	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	8%	44%	21%	12%	9%	4%	2%	1%

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.
(19 responses)

Several dealers indicated that they revised their responses to reflect a higher probability of a rate hike occurring at the December FOMC meeting, and several adjusted their responses to reflect a less gradual expected pace of future increases in the target range for the federal funds rate. Some dealers also indicated that they altered their responses to reflect an increased probability of expansionary fiscal policy and the likelihood that such policy would result in a steeper path for the federal funds rate, a delay in the timing of a recession or a move to the zero lower bound (ZLB), and/or a reduced probability of a recession or a move to the ZLB over the forecast period. Lastly, several dealers noted that their responses reflected increased confidence in the economic outlook as a result of fiscal policy proposals.

3. 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.

(19 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%	0.50%	0.60%
Median	0.00%	0.75%	1.00%	1.00%
75th Pctl	0.75%	1.00%	1.75%	2.25%

If you expect the neutral real federal funds rate to change over time, please provide the major factors underlying your expectation. Additionally, please explain any changes to your estimates since the last policy survey.
(21 responses)

Several 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 or as driving changes to their estimates since the last policy survey. Additionally, several dealers pointed to an increase in the probability of expansionary fiscal policy as a factor underlying their expectation for a gradual rise in the neutral real federal funds rate over time or as driving changes to their estimates since the last policy survey.

4. **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	1%	4%	11%	53%	27%	4%	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	2%	6%	11%	22%	32%	21%	6%

Please explain the factors behind any change to you expectations since the last policy survey.
(18 responses)

Several dealers reported that they adjusted higher their probability distributions for the 10-year Treasury yield at the end of 2016 and 2017 in response to recent increases in the 10-year Treasury yield. Several dealers also altered their distributions in response to a higher perceived likelihood of expansionary fiscal policy, with several specifically noting expectations for higher future GDP growth and inflation outcomes. Lastly, several dealers cited expectations for a higher expected path of the real federal funds rate as driving an increase in their forecasts.

5. a) **The 10-year nominal Treasury yield increased 56 basis points from November 1 to November 30. Please decompose this change into the following components. Please ensure that your sum matches the change in the 10-year Treasury yield. Please also ensure your signs are correct.**

	Change in Market's Expectations for Average Real Policy Rate (bps)	Change in Market Expectations for Average Inflation Rate (bps)	Change in Market-Implied Nominal Term Premium		Change in 10-Year Treasury Yield (sum of decomp)
			Change in Real Term Premium (bps)	Change in Inflation Risk Premium (bps)	
Average	15	15	12	14	56

b) Please rate the importance of the following factors in explaining the change in the 10-year nominal Treasury yield over the intermeeting period (5=very important, 1=not important).

Factors Explaining the Change in the 10-Year Nominal Treasury Yield

	Changes in Outlook for U.S. Economic Growth	Changes in Outlook for U.S. Inflation	Changes in Perception of Long-Run Neutral Fed Funds Rate	Changes in Perception of FOMC's Reaction Function	Changes in Uncertainty around the Path of the Nominal Fed Funds Rate	Changes in Expected Supply of Treasuries Held by the Public	Changes in Market Sentiment/Safe-Haven Flows	Other (Please Explain)
1 - Not Important	0	0	8	6	4	2	5	0
2	3	1	8	9	4	6	9	0
3	3	6	3	5	10	7	6	1
4	7	5	4	3	4	3	1	0
5 - Very Important	10	11	0	0	1	5	2	0
Total Respondents	23	23	23	23	23	23	23	1

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

Dealers did not provide substantial commentary in this section.

c) Please rate the importance of the following factors relating to market expectations for U.S. economic policies in explaining the change in the 10-year nominal Treasury yield over the intermeeting period (5=very important, 1=not important).

Factors Related to Market Expectations for U.S. Economic Policies Explaining the Change in the 10-Year Nominal Treasury Yield

	Changes in Outlook for Federal Government Expenditures	Changes in Outlook for Tax Policy	Changes in Outlook for Monetary Policy	Changes in Outlook for Trade Policy	Changes in Outlook for Financial Regulatory Policy	Changes in Outlook for Non-Financial Regulatory Policy	Other (Please Explain)
1 - Not Important	0	0	2	6	1	6	0
2	0	0	5	9	12	11	0
3	10	3	8	3	6	4	0
4	6	4	6	4	3	2	0
5 - Very Important	7	16	2	1	1	0	0
Total Respondents	23	23	23	23	23	23	0

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

d) Do you view the drivers of the trade-weighted dollar and U.S. equity prices over the intermeeting period, as well as their importance, as the same as or different than indicated above? If different, please explain.
(22 responses)

Many dealers noted that the drivers of the trade-weighted dollar and U.S. equity prices over the intermeeting period, as well as their relative importance, were the same as indicated above. Meanwhile, several dealers indicated that expected changes to regulatory and tax policies were important drivers of recent changes in U.S. equity prices.

6. a) **Provide your estimate of the most likely outcome for the 10-year Treasury yield at the end of each period below. In addition, provide your estimate of the longer-run level of the 10-year Treasury yield.**

10-Year Treasury Yield

	2016 Q4	2017 Q1	2017 Q2	2017 Q3	2017 Q4
25th Pctl	2.30%	2.40%	2.48%	2.51%	2.54%
Median	2.35%	2.50%	2.60%	2.65%	2.75%
75th Pctl	2.40%	2.55%	2.65%	2.75%	2.90%
# of Responses	23	22	22	22	22
	2018 H1	**2018 H2**	**2019 H1**	**2019 H2**	**Longer Run**
25th Pctl	2.70%	2.88%	2.80%	2.90%	3.08%
Median	3.00%	3.15%	3.06%	3.20%	3.38%
75th Pctl	3.25%	3.33%	3.50%	3.70%	3.95%
# of Responses	21	20	18	18	20

b) **Provide your estimate of the most likely outcome for the 30-year fixed primary mortgage rate at the end of each period below. In addition, provide your estimate of the longer-run level of the 30-year fixed primary mortgage rate.**

30-Year Fixed Primary Mortgage Rate

	2016 Q4	2017 Q1	2017 Q2	2017 Q3	2017 Q4
25th Pctl	4.00%	3.92%	4.06%	4.15%	4.25%
Median	4.05%	4.12%	4.23%	4.28%	4.38%
75th Pctl	4.11%	4.25%	4.35%	4.50%	4.53%
# of Responses	20	20	20	20	20

	2018 H1	2018 H2	2019 H1	2019 H2	Longer Run
25th Pctl	4.37%	4.47%	4.60%	4.66%	4.60%
Median	4.53%	4.75%	4.86%	4.85%	5.00%
75th Pctl	4.90%	5.00%	5.05%	5.30%	5.40%
# of Responses	20	19	18	18	19

7. a) **How do you expect the relative levels of money market rates to evolve over the next intermeeting period? Additionally, please indicate your expectations for year-end dynamics in money markets.**
(21 responses)

Some dealers noted their expectation for money market rates to increase in line with policy rates, while several also expected the USD 3-month LIBOR-OIS spread to narrow further. With respect to expectations for dynamics in money markets over year-end, several dealers reported that they expected upward pressure on repo rates, and several expected that ON RRP take-up would increase substantially ahead of and/or on the year-end date.

b) **Provide your forecast for the most likely level (in $ billions) of average aggregate ON RRP demand during each of the years below. If you do not believe the ON RRP facility will be in use during one or more of the years below, please enter "N/A."**
(18 responses)

Aggregate Demand for ON RRP ($ bn)

	2017	2018	2019
25th Pctl	115	90	75
Median	150	120	100
75th Pctl	160	150	150

8. 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?

	Level of Target Fed Funds Rate/Range
25th Pctl	1.13%
Median	1.38%
75th Pctl	1.88%

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."

Months Forward

	Treasuries*	Agency Debt and MBS**
25th Pctl	13	15
Median	18	18
75th Pctl	25	24

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

***One dealer expects no end to reinvestments of agency debt and MBS.*

c) In its Policy Normalization Principles and Plans, the Committee indicated that it "expects to cease or commence phasing out reinvestments" after liftoff. Of the possible outcomes below, please indicate the percent chance that you attach to the Committee during the process of policy normalization ceasing its reinvestments all at once, phasing out its reinvestments over time, or not changing its reinvestments.

Treasuries

	No Change to Reinvestments	Reinvestments Ceased All at Once	Reinvestments Phased Out Over Time
Average	23%	11%	66%

Agency Debt and MBS

	No Change to Reinvestments	Reinvestments Ceased All at Once	Reinvestments Phased Out Over Time
Average	18%	16%	66%

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.**
(20 responses)

Anticipated Duration of Phase-Out (in Months)

	Treasuries	Agency Debt and MBS
25th Pctl	10	9
Median	12	12
75th Pctl	27	30

e) i) **Please indicate the percent chance* that you attach to the following possible outcomes for the par value of the SOMA portfolio at the end of 2019, conditional on not moving to the ZLB at any point in 2016-2019. For reference, the current level of the SOMA portfolio, including inflation compensation and settled and unsettled agency MBS, according to the November 25, 2016 H.4.1, was $4270 billion. Levels referenced below are also in $ billions.**

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

	≤3000	**3001 - 3500**	**3501 - 4000**	**4001 - 4500**	**≥4501**
Average ($ bn)	5%	15%	40%	34%	6%

ii) **Please indicate the percent chance* that you attach to the following possible outcomes for the par value of the SOMA portfolio at the end of 2019, conditional on moving to the ZLB at any point in 2016-2019. Levels referenced below are in $ billions. Only fill out this probability distribution if you assigned a non-zero probability to moving to the ZLB at some point in 2016-2019.**
(22 responses)

	≤4000	**4001 - 4500**	**4501 - 5000**	**5001 - 5500**	**≥5501**
Average ($ bn)	6%	33%	27%	22%	13%

Please explain the factors behind any change to your expectations, where applicable, since the last policy survey.
(15 responses)

Several dealers noted that their expectations had not changed since the last policy survey.

9. a) **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	1.80%	2.10%	2.00%	1.60%	1.60%
	Median	1.90%	2.20%	2.40%	1.90%	1.90%
	75th Pctl	2.00%	2.40%	2.80%	2.25%	2.15%
Core PCE Deflator	25th Pctl	1.70%	1.80%	2.00%	1.95%	
	Median	1.80%	1.96%	2.10%	2.00%	
	75th Pctl	1.80%	2.00%	2.20%	2.15%	
Headline PCE Deflator	25th Pctl	1.50%	2.00%	2.00%	2.00%	2.00%
	Median	1.60%	2.03%	2.10%	2.00%	2.00%
	75th Pctl	1.70%	2.20%	2.30%	2.20%	2.00%
Unemployment Rate*	25th Pctl	4.70%	4.40%	4.30%	4.40%	4.60%
	Median	4.80%	4.50%	4.40%	4.50%	4.80%
	75th Pctl	4.80%	4.60%	4.50%	4.75%	5.00%

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

Please explain any changes to your forecasts since the last policy survey.
(20 responses)

Several dealers noted that they revised higher their growth and inflation forecasts to reflect a higher perceived likelihood of expansionary fiscal policy.

b) Please indicate any changes to your estimates (in percentage points) for the U.S. federal fiscal deficit as a percentage of GDP, and any changes in the total contribution to your forecasts (in percentage points) for GDP growth (Q4/Q4) in 2017 and 2018 from U.S. federal fiscal policy, combining direct and indirect effects, since the last policy survey.
(22 responses)

	Change in Estimate for U.S. Fiscal Deficit (in Percentage Points)	
	2017	2018
25th Pctl	0.10	0.31
Median	0.30	0.83
75th Pctl	1.00	1.50

	Change in GDP Contribution of Fiscal Policy (in Percentage Points)	
	2017	2018
25th Pctl	0.00	0.00
Median	0.10	0.40
75th Pctl	0.30	0.60

If you view the change in the contribution of U.S. federal fiscal policy to your forecasts for GDP growth in either 2017 or 2018 as significant, please explain your response.
(21 responses)

Several dealers indicated that their estimates for the U.S. federal fiscal deficit as a percentage of GDP increased relative to the last policy survey due to expectations for expansionary fiscal policy under the new administration. Several also expected that tax cuts and government expenditures could boost GDP growth through increased investment and consumer spending.

10. a) For the outcomes below, provide the percent chance you attach to the annual average CPI inflation rate from December 1, 2016 - November 30, 2021 falling in each of the following ranges. Please also provide your point estimate for the most likely outcome.

	≤1.00%	1.01-1.50%	1.51-2.00%	2.01-2.50%	2.51-3.00%	≥3.01%
Average	4%	12%	28%	37%	14%	5%

	Most Likely Outcome
25th Pctl	2.00%
Median	2.10%
75th Pctl	2.25%

b) For the outcomes below, provide the percent chance you attach to the annual average CPI inflation rate from December 1, 2021 – November 30, 2026 falling in each of the following ranges. Please also provide your point estimate for the most likely outcome.

	≤1.00%	1.01-1.50%	1.51-2.00%	2.01-2.50%	2.51-3.00%	≥3.01%
Average	4%	9%	28%	37%	16%	7%

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

c) For the outcomes below, provide the percent chance* you attach to the PCE inflation rate from December 1, 2018 - November 30, 2019 falling in each of the following ranges. Please also provide your point estimate for the most likely outcome.
(22 responses)

	≤1.50%	1.51 - 1.75%	1.76 - 2.00%	2.01 - 2.25%	2.26 - 2.50%	≥2.51%
Average	6%	14%	25%	28%	16%	11%

	Most Likely Outcome
25th Pctl	2.00%
Median	2.10%
75th Pctl	2.20%

11. 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%	10%	10%
Median	5%	13%	15%
75th Pctl	10%	15%	20%

**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.

Updated as of December 19, 2016

Following the December FOMC meeting (Dec. 13-14), primary dealers were asked to update their responses to question 2. Of the 23 respondents to the December Survey of Primary Dealers, 23 updated their responses.

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						
	Jan. 31 - Feb. 1 2017	**Mar. 14-15 2017**	**May 2-3 2017**	**Jun. 13-14 2017**	**Jul. 25-26 2017**	**Sep. 19-20 2017**	**2017 Q4**
25th Pctl	0.63%	0.63%	0.63%	0.88%	0.88%	0.88%	1.13%
Median	0.63%	0.63%	0.63%	0.88%	0.88%	0.88%	1.13%
75th Pctl	0.63%	0.63%	0.63%	0.88%	0.88%	0.88%	1.13%
# of Responses	23	23	23	23	23	23	23

	2018 Q1	**2018 Q2**	**2018 Q3**	**2018 Q4**	**2019 H1**	**2019 H2**
25th Pctl	1.13%	1.38%	1.38%	1.63%	1.88%	1.88%
Median	1.38%	1.38%	1.63%	1.88%	2.13%	2.38%
75th Pctl	1.38%	1.63%	1.88%	2.13%	2.32%	2.63%
# of Responses	23	23	23	23	20	20

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 policy 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.

	Next change is an increase, occurs at Jan. 2017 FOMC meeting or earlier							
	≤0.50%	**0.51-0.75%**	**0.76-1.00%**	**1.01-1.25%**	**1.26-1.50%**	**1.51-1.75%**	**1.76-2.00%**	**≥2.01%**
Average	4%	7%	19%	41%	22%	6%	1%	0%

**Respondents were only asked to update their response for the first probability distribution from the December survey, as the other conditioning scenarios were no longer applicable.*

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

	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	9%	19%	36%	23%	10%	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	8%	11%	24%	27%	16%	10%	4%

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	10%
Median	20%
75th Pctl	30%

iii) 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 moving to the ZLB at some point in 2016-2019. 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.
(20 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%	34%	20%	14%	9%	10%	5%	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	8%	44%	21%	12%	9%	4%	2%	1%

Please explain the factors behind any change to your expectations since the last policy survey.
(9 responses)

Several dealers indicated that they updated their responses to reflect a higher likelihood of a steeper policy rate path.