Responses to Survey of Market Participants

Markets Group, Federal Reserve Bank of New York December 2016

Responses to Survey of Market Participants Distributed: 12/1/2016 – Received by: 12/5/2016

For most questions, median responses across respondents, along with the 25th and 75th percentiles, are reported. For questions that ask respondents to give a probability distribution, the average response across respondents for each potential outcome is reported.¹ Brief summaries of the comments received in free response form are also provided.

Responses were received from 29 respondents. **Except where noted, all 29 respondents responded to each question.** In some cases, respondents 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: (28 responses)

Some respondents indicated that they expected no or few significant changes to the Committee's assessment of current economic conditions in the December FOMC statement. Several respondents 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 respondents suggested that the Committee would reference continued improvement in the labor market and/or a decline in the unemployment rate.

Economic outlook: (28 responses)

Some respondents noted that they expected no or few significant changes to the Committee's language on the economic outlook, while several respondents expected that the Committee would express increased confidence in the economic outlook. Additionally, several respondents suggested that the Committee could reference the potential policy proposals of the new administration.

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

Some respondents 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. Several respondents also expected the Committee to emphasize a gradual or data-dependent approach to further increases in the target range.

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

(27 responses)

All respondents 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: (10 responses)

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

Respondents did not provide substantial commentary in this section.

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

Several respondents reported that they expected no significant changes to the medians of FOMC participants' economic projections in the December SEP. Several respondents 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. Several respondents suggested that the median unemployment rate projection for 2016 would decrease, and several also expected the median projections for headline and/or core PCE inflation for 2016 to increase. Lastly, several respondents 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%	2.60%	2.88%			
Median	0.63%	1.13%	1.90%	2.63%	2.88%			
75th Pctl	0.63%	1.20%	2.00%	2.63%	3.00%			

Federal Funda Data

Please explain any assumptions underlying your expectations. (28 responses)

Some respondents indicated that they expected no or few significant changes to the medians of FOMC participants' projections for the target federal funds rate, while several respondents expected that the medians of FOMC participants' rate projections would reflect a steeper policy path compared to the September SEP. Several respondents expected that the medians of FOMC participants' target federal funds rate projections would not yet fully incorporate the potential impact of possible changes in fiscal policy.

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

Several respondents expected the Chair to either avoid commenting on potential policy initiatives of the incoming administration or to highlight uncertainty over the potential impact of possible changes to economic policies, while several others suggested the Chair could note that potential fiscal policy initiatives could be stimulative for the economy. At the same time, several respondents 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 respondents also expected that 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 acknowledge further evidence of progress towards the Committee's objectives. Lastly, several respondents 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%	1.13%	
75th Pctl	0.63%	0.63%	0.63%	0.88%	0.88%	0.88%	1.13%	
# of Responses	29	29	29	29	29	29	29	
	2017 Q4	2018 Q1	2018 Q2	2018 Q3	2018 Q4	2019 H1	2019 H2	
- 25th Pctl	1.13%	1.13%	1.38%	1.63%	1.63%	1.88%	2.13%	
Median	1.13%	1.38%	1.63%	1.88%	1.88%	2.13%	2.38%	
75th Pctl	1.38%	1.63%	1.88%	2.13%	2.38%	2.75%	2.88%	
# of Responses	29	29	29	29	29	29	29	

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%	1.80%	
Median	2.75%	2.38%	
75th Pctl	3.00%	2.50%	

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

	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 <u>between now and the end of 2017</u> 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 between now and the end of 2017 being an increase.

	Increase Occurs at	Increase Occurs at	Increase Occurs at
	Dec. 2016 FOMC	Jan. 2017 FOMC	Mar. 2017 FOMC
	Meeting	Meeting	Meeting or Later
Average	93%	3%	4%

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 <u>between now and the end of 2017</u>. 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	sincrease,	occurs at	Jan. 2017	FOMC me	eting or ea	arlier
	≤ 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	5%	8%	16%	30%	22%	12%	4%	2%
	Nex	t change i	is increase	, occurs a	t Mar. 2017	FOMC me	eeting or I	ater
	≤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	8%	23%	28%	22%	11%	5%	2%	1%
			Ne	ext change	e is decrea	se		
	<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	16%	68%	12%	3%	1%	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 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.

			<u>Ye</u>	ear-end 20	<u>18</u>		
	≤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%	15%	30%	25%	12%	6%	2%
			<u>Ye</u>	ear-end 20	<u>19</u>		
	≤1.00%	1.01- 1.50%	1.51- 2.00%	2.01- 2.50%	2.51- 3.00%	3.01- 3.50%	≥3.51%

17%

12%

10%

Average

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

25%

20%

10%

6%

	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 timing of such an event.

	Timing of Move to ZLB at Some Point in 2016-2019			
25th Pctl	H1 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 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. (28 responses)

				<u>Year-er</u>	nd 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	9%	49%	16%	9%	6%	5%	2%	3%
				<u>Year-er</u>	nd 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	13%	63%	14%	7%	3%	1%	0%	0%

iv) What is your estimate of the target federal funds rate or range at the effective lower bound? (28 responses)

	Level of Target Fed Funds Rate or Range		
	at ELB		
25th Pctl	-0.31%		
Median	0.00%		
75th Pctl	0.06%		

For parts a-f, please explain the factors behind any change to your expectations, where applicable, since the last policy survey.

(24 responses)

Several respondents reported that they adjusted their responses to reflect a less gradual expected pace of increases in the target range for the federal funds rate, while several noted greater uncertainty regarding the range of possible policy outcomes. Some respondents also indicated that they adjusted 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, some respondents noted that their responses reflected increased confidence in the economic outlook.

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.

	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%	0.50%				
Median	0.25%	0.50%	0.75%	1.00%				
75th Pctl	0.63%	1.13%	1.50%	1.75%				

Lovel of Neutral Deal Fed Funda Date

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. (24 responses)

Several respondents indicated that they made no or few significant changes to their estimates of the neutral real federal funds rate since the last survey. Meanwhile, several respondents 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 respondents cited a decrease in global financial headwinds and/or an increase in the probability of expansionary fiscal policy as factors 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%	17%	45%	28%	4%	0%			
	Year-end 2017									
	≤1.00%	1.01- 1.50%	1.51- 2.00%	2.01- 2.50%	2.51- 3.00%	3.01- 3.50%	≥3.51%			
Average	3%	6%	13%	24%	27%	17%	8%			

Please explain the factors behind any change to you expectations since the last policy survey. (25 responses)

Several respondents 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 respondents 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 some noting higher expected inflation outcomes and/or higher expected levels of Treasury issuance.

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. (28 responses)

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

	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	7	4	3	9	2
2	1	1	7	7	3	2	5	0
3	2	3	8	6	17	9	9	0
4	15	11	4	7	5	11	4	1
5 - Very Important	11	14	2	2	0	4	2	0
Total Respondents	29	29	29	29	29	29	29	3

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

If "Other", please explain. (2 responses)

Respondents 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				Changes in	Changes in			
	Outlook for				Outlook for	Outlook for Non-			
	Federal	Changes in	Changes in	Changes in	Financial	Financial			
	Government	Outlook for Tax	Outlook for	Outlook for	Regulatory	Regulatory	Other		
_	Expenditures	Policy	Monetary Policy	Trade Policy	Policy	Policy	(Please Explain)		
1 - Not Important	0	0	3	6	3	7	1		
2	2	2	4	6	6	7	1		
3	2	4	9	11	9	9	1		
4	8	10	11	5	9	5	0		
5 - Very Important	17	13	2	1	2	1	1		
Total Respondents	29	29	29	29	29	29	4		

If "Other", please explain. (2 responses)

Respondents did not provide substantial commentary in this section.

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. (28 responses)

Many respondents 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 respondents indicated that expected changes to regulatory and tax policies were important drivers of recent changes in U.S. equity prices, and several also noted that expected changes in U.S. trade policy were an important driver of recent changes in the trade-weighted value of the dollar.

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. (27 responses)

Several respondents expected that the levels of money market rates would increase in line with the federal funds rate, 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 respondents reported that they expected an

increase in repo rates and several expected a decline in unsecured overnight rates, both similar to recent reporting dates.

- 7. In its most recent FOMC statement, the Committee indicated that it anticipates continuing its existing policy of reinvesting principal payments from its holdings of agency debt and agency MBS, and of rolling over maturing Treasury securities at auction, until normalization of the level of the federal funds rate is "well under way."
 - a) What is your estimate for the most likely level of the target federal funds rate or range if and when the Committee first changes its reinvestment policy? (28 responses)

	Level of Target Fed			
_	Funds Rate/Range			
25th Pctl	1.38%			
Median	1.56%			
75th Pctl	2.00%			

b) What is your estimate for the most likely timing (in months forward) of a change to the Committee's policy of reinvesting payments of principal on Treasuries and/or agency debt and MBS? If you do not expect the FOMC to change its policy on reinvestments for either or both asset classes during the process of policy normalization, please enter "N/A."
(27 responses)

(27 responses)

	Treasuries*	Agency Debt and MBS**
25th Pctl	12	12
Median	17	18
75th Pctl	21	21
	*Three respond	ents expect no
	end to reinvestr	ments of
	Treasury secur	ities.
	**One responde	ent expects no
	end to reinvestr	ments of agency
	debt and MBS.	

Months Forward

c) 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. (25 responses)

*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)	12%	24%	33%	26%	5%

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. (24 responses)

	≤4000	4001 - 4500	4501 - 5000	5001 - 5500	≥5501	
Average (\$ bn)	8%	23%	28%	27%	14%	

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

(18 responses)

Several respondents noted that their expectations had not changed since the last policy survey. Meanwhile, several others indicated that uncertainty surrounding the future composition of the FOMC increased their uncertainty around future balance sheet policy and/or led them to assign a higher probability to an earlier end to reinvestments.

8. 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.
 (28 responses)

	≤1.00%	1.01- 1.50%	1.51- 2.00%	2.01- 2.50%	2.51- 3.00%	≥3.01%
Average	6%	14%	27%	32%	15%	7%

	Most Likely
	Outcome
25th Pctl	1.90%
Median	2.03%
75th Pctl	2.35%

c) 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.
 (28 responses)

	≤1.00%	1.01- 1.50%	1.51- 2.00%	2.01- 2.50%	2.51- 3.00%	≥3.01%
Average	6%	12%	24%	30%	19%	10%
			Most I Outc	-		
		25th Pct	l 2.0	0%		
		Median	2.2	0%		
		75th Pct	l <u>2.3</u>	0%		

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.
 (28 responses)

	≤1.50%	1.51 - 1.75%	1.76 - 2.00%	2.01 - 2.25%	2.26 - 2.50%	≥2.51%
Average	11%	15%	25%	28%	15%	7%
			Most I Outc	-		
		25th Pct	l 1.9	0%		
		Median	Median 2.05%			
		75th Pct	l2.1	4%		

Updated as of December 19, 2016

Following the December FOMC meeting (Dec. 13-14), respondents were asked to update their responses to question 2.0f the 29 respondents to the December Survey of Market Participants, 27 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%	1.13%	1.25%	
75th Pctl	0.63%	0.63%	0.88%	0.88%	0.88%	1.13%	1.38%	
# of Responses	27	27	27	27	27	27	27	
	2018 Q1	2018 Q2	2018 Q3	2018 Q4	2019 H1	2019 H2		
25th Pctl	1.13%	1.38%	1.63%	1.88%	2.00%	2.13%		
Median	1.38%	1.63%	1.88%	1.88%	2.38%	2.38%		
75th Pctl	1.63%	2.00%	2.13%	2.38%	2.75%	2.88%		
# of Responses	27	27	27	27	27	27		

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-	0.76-	1.01-	1.26-	1.51-	1.76-	≥ 2.01%	
		0.75%	1.00%	1.25%	1. 50%	1.75%	2.00%		
Average	5%	7%	14%	30%	25%	12%	5%	3%	

*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.

	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%	15%	29%	26%	13%	6%	2%		
		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	9%	11%	17%	25%	20%	11%	6%		

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	35%				

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. (26 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	9%	50%	18%	9%	5%	4%	3%	3%
	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	12%	61%	15%	8%	3%	1%	0%	0%

Please explain the factors behind any change to your expectations since the last policy survey. (10 responses)

Several respondents indicated that they made no or few significant changes to their responses since the last policy survey, while several indicated that they updated their responses to reflect a higher likelihood of a steeper policy rate path.