# Responses to Survey of Market Participants

Markets Group, Federal Reserve Bank of New York January 2015

# Responses to Survey of Market Participants Distributed: 01/15/2015 – Received by: 01/20/2015

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

Responses were received from 27 market participants. Except where noted, all 27 participants responded to each question. In some cases, participants 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) How do you expect the January FOMC statement to influence market perceptions of the stance of monetary policy, if at all? (1 = less accommodative, 3 = neutral, 5 = more accommodative)

Perceived Stance of					
Monetary Policy					
25th Pctl	2				
Median	3				
75th Pctl	3				

# Please explain: (24 responses)

Many participants indicated that they anticipate that the January FOMC statement would not materially alter the market's perceptions of the stance of monetary policy.

b) How would you grade the Federal Reserve System's communication with the markets and with the public since the policy survey on December 8? Please provide a rating between 1 and 5, with 1 indicating ineffectiveness and 5 indicating effectiveness.

	Fed Communication Grade Number of Respondents:
1 - Ineffective	0
2	3
3	9
4	14
5 - Effective	11

#### Please explain: (23 responses)

Some participants noted that the Federal Reserve System's communication over the period was consistent with prior periods. Several participants mentioned that the Chair's press conference in particular provided clarity on the Committee's reaction function. Several participants thought that FOMC communications over the period sent conflicting messages.

<sup>&</sup>lt;sup>1</sup>Answers may not sum to 100 percent due to rounding.

2. a) Of the possible outcomes below, provide the percent chance you attach to the timing of the first increase in the federal funds target rate or range. Also, provide your estimate for the most likely meeting for the first increase.

	Jan. 27-28	Mar. 17-18	Apr. 28-29	Jun. 16-17	Jul. 28-29	Sep. 16-17	Oct. 27-28	Dec. 15-16	≥ Jan. 2016
Average	0%	1%	4%	26%	14%	25%	7%	10%	13%
				Most Lik First Incr Rate	-	Target			
		25th	n Pctl	Ju	ine 2015				
		Med	lian	Ju	uly 2015				

b) Provide the percent chance you attach to the target federal funds rate or range not returning to the zero lower bound during the 2 years following liftoff. Conditional on the target not returning to the zero lower bound, provide the percent chance you attach to the net change in the target rate or range in each of the two years following liftoff.

September 2015

75th Pctl

		Probability ZLB within	•		
		25th Pctl			
		Median 75%			
		75th Pctl	859	%	
		First Ye	ar Followii	ng Liftoff	
	0 - 50	51 - 100	101 - 150	151 - 200	>200
	basis	basis	basis	basis	basis
		Nu ci c			
	points	points	points	points	points
Average			points 27%	points 12%	points 2%
Average	points	points 40%		12%	•
Average	points	points 40%	27%	12%	•
Average	points 18%	points 40%	27% ear Follow	12%	2%
Average	<b>points</b> 18% <b>0 - 50</b>	points 40% Second Y 51 - 100	27% ear Follow 101 - 150	12% ing Liftoff 151 - 200	2%

Please rate the importance of the following factors in determining your assessment of the probability of returning to the zero lower bound during the 2 years following liftoff, if applicable (5 = very important, 1 = not important).

	Adverse future shocks to the U.S. economy	Adverse future shocks to foreign economies	Premature increase in target rate or range	Adverse future changes in financial stability	Other (4 responses)
Average	4.1	3.3	2.6	3.1	2.8

# If "Other", please explain. (3 responses)

Participants did not provide substantial commentary in this section.

c) Provide your estimate of the most likely outcome (i.e., the mode) for the target federal funds rate or range, as applicable, at the end of each period below. If you expect a range, please provide both the top and bottom of the range in the specified fields below. If you expect a target rate, provide your response in the "Target rate" field only.

(26 responses)

	Top of Target Range									
	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 H1	2016 H2	2017 H1	2017 H2	2018 H1	2018 H2
25th Pctl	0.25%	0.25%	0.50%	0.75%	1.25%	1.75%	2.00%	2.50%	2.50%	2.50%
Median	0.25%	0.25%	0.50%	0.75%	1.43%	2.00%	2.25%	3.00%	3.38%	3.50%
75th Pctl	0.25%	0.50%	0.75%	1.00%	1.50%	2.25%	3.00%	3.50%	3.50%	3.75%
# of Responses	23	23	20	19	18	19	19	19	16	15
				Botto	m of Ta	rget Ra	nge			
	2015	2015	2015	2015	2016	2016	2017	2017	2018	2018
	Q1	Q2	Q3	Q4	H1	H2	H1	H2	H1	H2
25th Pctl	0.00%	0.00%	0.25%	0.50%	1.00%	1.50%	1.75%	2.00%	2.13%	2.25%
Median	0.00%	0.00%	0.25%	0.50%	1.15%	1.75%	2.00%	2.75%	2.88%	3.00%
75th Pctl	0.00%	0.25%	0.50%	0.75%	1.25%	2.00%	2.75%	3.25%	3.25%	3.25%
# of Responses	23	23	20	19	18	19	19	19	16	15
					Target	Rate				
	2015	2015	2015	2015	2016	2016	2017	2017	2018	2018
	Q1	Q2	Q3	Q4	H1	H2	H1	H2	H1	H2
25th Pctl	0.25%	0.25%	0.25%	0.50%	1.00%	1.25%	1.50%	1.75%	2.50%	2.50%
Median	0.25%	0.25%	0.38%	0.75%	1.25%	1.75%	2.25%	2.50%	3.13%	3.50%
75th Pctl	0.25%	0.25%	0.50%	0.75%	1.50%	2.25%	2.75%	3.50%	3.50%	3.50%
# of Responses	3	3	6	7	8	7	7	7	10	11

d) 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%	2.25%
Median	3.50%	2.74%
75th Pctl	3.75%	3.00%

e) Of the possible outcomes below, please indicate the percent chance you attach to the target federal funds rate or range falling in each of the following ranges at the end of 2015, 2016, and 2017. If you expect a target range for federal funds please use the midpoint of the range in providing your response.

			Ye	ar-End 20	15		
	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	16%	29%	40%	12%	3%	1%	0%
			Ye	ear-End 20	16		
	≤0.50%	0.51 - 1.00%	1.01 - 1.50%	1.51 - 2.00%	2.01 - 2.50%	2.51 - 3.00%	≥3.01%
Average	7%	15%	21%	26%	16%	10%	4%
				ear-End 20			
	≤2.00%	2.01 - 2.50%	2.51 - 3.00%	3.01 - 3.50%	3.51 - 4.00%	4.01 - 4.50%	≥4.51%
Average	28%	19%	19%	15%	12%	5%	2%

If you changed your expectations for the most likely timing of liftoff and/or the most likely path of the target rate or range since the last time the questions were asked, explain the factors that motivated you to make the change(s):

(20 responses)

Some participants noted that their probability distributions had shifted toward a shallower path of the policy rate as a result of global disinflationary pressures, while several participants pointed to low wage pressures as motivating a lower forecasted rate path.

3. Of the possible outcomes below, provide the percent chance you attach to the 10-year Treasury yield falling in each of the following ranges at the end of 2015 and 2016.

			Ye	ar-End 20	15		
	≤1.50%	1.51- 2.00%	2.01- 2.50%	2.51- 3.00%	3.01- 3.50%	3.51- 4.00%	>4.00%
Average	11%	22%	31%	22%	9%	3%	1%
			Ye	ar-End 20	16		
	≤2.50%	2.51- 3.00%	¥e 3.01- 3.50%	ar-End 20 3.51- 4.00%	16 4.01- 4.50%	4.51- 5.00%	>5.00%

4. a) Provide the percent chance you attach to the Committee making a material modification to the forwardguidance language on the path of the policy rate prior to liftoff, as appropriate, over the time periods below. If you expect multiple changes to the forward-guidance language prior to liftoff, please provide your probabilities for the first change only.

	No Change Prior to	January 2015	March 2015	April 2015	> April 2015
	Liftoff	FOMC	FOMC	FOMC	FOMC
Average	13%	9%	33%	18%	27%

# b) Please describe any material change or changes to the forward-guidance language you expect prior to liftoff, including what changes would be made and when. (25 responses)

Some participants reported that they expect the language referencing "patient" to be dropped at some point prior to the timing of the first rate increase, while several other participants indicated that they expect that language to be dropped exactly 2 meetings before liftoff. Several participants reported that they anticipate seeing some language referencing the pace of tightening following the first rate hike. Several other participants discussed that they expect to see language noting improvement in labor market metrics included in the economic assessment prior to liftoff.

5. a) The price on the front-month WTI futures contract has declined more than 50 percent since July to reach roughly \$45 per barrel. Please rate the importance of the following factors in motivating the declines in oil seen over the past six months (5 = very important, 1 = not important). (26 responses)

	Supply-related factors	Demand-related factors	Technical factors	Other (7 Responses)
Average	4.8	3.0	2.3	3.0

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

Participants did not provide substantial commentary in this section.

b) Please provide the percent chance you attach to the front-month WTI futures contract price at year-end 2015 falling within the following ranges. Please also provide your point estimate for the most likely price of the front-month contract at year-end 2015. For reference, the front-month contract at year-end 2015 is the February 2016 contract.

(26 responses)

	Year-End 2015 WTI Price/barrel									
	<\$40	\$40-49	\$50-59	\$60-69	≥\$70					
Average	11%	23%	31%	24%	11%					
			Most Like Outcome (\$/barrel	)						
	25	th Pctl	50							
	Me	edian	55							
	75	th Pctl	58							

c) Please provide an estimate of how the change in energy futures prices since July has impacted your forecasts for average real GDP growth for 2015 (Q4/Q4) and the change in the core PCE deflator for 2016 (Q4/Q4), if applicable. Please ensure your signs are correct. (24 responses)

	Impact on 2015 Real GDP (bps)		Impact on 2016 Core PCE (bps)
25th Pctl	20	25th Pctl	-15
Median	35	Median	-5
75th Pctl	50	75th Pctl	0

Please also discuss which other factors, if any, motivated a change in your forecasts for real GDP growth and core inflation. Other Factors: (8 responses)

#### 2015 Real GDP Growth

Several participants noted the impact of U.S. dollar strength on their forecasts for 2015 real GDP growth.

#### 2016 Core PCE

Several participants noted U.S. dollar strength as a factor contributing to changes in their 2016 core PCE forecasts.

6. a) Provide the percent chance you attach to the unemployment rate falling within the following ranges at the time of the first increase in the target federal funds rate or range.

	< 5.5%	5.5 - 5.9%	6.0 - 6.5%	> 6.5%
Average	61%	35%	4%	0%

b) Provide the percent chance you attach to inflation between 1 and 2 years ahead falling within the following ranges at the time of the first increase in the target federal funds rate or range.

	< 1.25%	1.25 - 1.74%	1.75 - 2.24%	2.25 - 2.74%	≥ 2.75%
Average	10%	31%	45%	11%	4%

c) Provide your estimate for the most likely value of the following indicators at the time of the first increase in the target federal funds rate or range. When specifying values below, where appropriate, provide your estimate consistent with the last published value prior to the announcement of liftoff. For reference, the level of total U.S. employees on nonfarm payrolls for December, seasonally adjusted, was 140.3 million. (25 complete responses)

	Unemployment Rate	Labor Force Participation Rate	Total NFP*	12-Month Change in Average Hourly Earnings	Headline 12- Month PCE Inflation	Inflation Between 1 and 2 Years Ahead
25th Pctl	5.2%	62.8%	141.4	2.1%	0.3%	1.6%
Median	5.3%	62.9%	141.7	2.4%	1.0%	1.9%
75th Pctl	5.4%	63.0%	142.0	2.6%	1.6%	2.0%

\*In millions

 d) Provide your forecast for the expected levels of the following indicators at the time periods provided below. If you expect a target range, please enter the range. If you do not believe a particular tool will be used during one or more of the time periods below, please enter "N/A"\*. (19 complete responses)

# One Quarter Prior to Liftoff

	Target Federal Funds Rate or Federal Funds IOER Rate Range Effective Rate O/N RRP Rat				Overnight 3M LIBOR Treasury GCF O/N RRP Rate Repo Rate Usage (\$ bn)		
25th Pctl	0.25%	0.13%	0.10%	0.05%	0.25%	0.10%	150
Median	0.25%	0.13%	0.10%	0.05%	0.25%	0.13%	213
75th Pctl	0.25%	0.13%	0.13%	0.10%	0.30%	0.20%	300

#### Immediately Following Liftoff

	Target Federal Funds Rate or Federal Funds IOER Rate Range Effective Rate O/N RRP Rate			O/N RRP Rate	Overnight 3M LIBOR Treasury GCF O/N RRP Rate Repo Rate Usage (\$ bn)		
25th Pctl	0.50%	0.38%	0.30%	0.25%	0.49%	0.28%	250
Median	0.50%	0.38%	0.35%	0.25%	0.51%	0.35%	300
75th Pctl	0.50%	0.38%	0.38%	0.30%	0.62%	0.40%	625

#### 1 Year Following Liftoff

	Target Federal Funds Rate or Federal Funds IOER Rate Range Effective Rate O/N RRP			O/N RRP Rate	Overnight 3M LIBOR Treasury GCF O/N RRP ite Rate Repo Rate Usage (\$ bn)			
25th Pctl	1.30%	1.13%	1.12%	1.13%	1.19%	1.22%	275	
Median	1.50%	1.38%	1.40%	1.30%	1.60%	1.36%	365	
75th Pctl	1.68%	1.50%	1.50%	1.50%	1.75%	1.53%	700	

# 3 Years Following Liftoff

	Target Federal Funds Rate or Federal Funds				3M LIBOR	O/N RRP	
	IOER Rate	Range	Effective Rate	O/N RRP Rate	Rate	Repo Rate	Usage (\$bn)
25th Pctl	2.38%	2.38%	2.20%	2.00%	2.50%	2.00%	225
Median	3.50%	3.38%	3.38%	3.25%	3.50%	3.35%	300
75th Pctl	3.68%	3.50%	3.50%	3.40%	3.81%	3.62%	750

\*For dealers that submitted ranges, midpoints of the ranges are used. (Complete responses only include responses that were specific numbers or ranges.)

Please note how you expect the Committee's approach to policy normalization to evolve over time. Additionally, please comment on any changes you expect over time in the relative levels of money market rates and the expected amount of O/N RRP usage. (21 responses)

Several participants noted that they expect usage of the O/N RRP to decline over time. Several participants also noted that they expect policy to normalize slowly, while several participants reported that they expect an end to reinvestments shortly after liftoff. Several other participants noted that they expect normalization to be consistent with prior communications.

7. a) For the outcomes below, provide the percent chance you attach to the annual average CPI inflation rate from January 1, 2015 - December 31, 2019. Please also provide your point estimate for the most likely outcome.

(26 responses)

	≤1.00%	1.01- 1.50%	1.51- 2.00%	2.01- 2.50%	2.51- 3.00%	≥3.01%
Average	9%	16%	35%	26%	10%	5%
			Most I Outc	•		
		25th Pctl	1.7	0%		
		Median	1.9	0%		
		75th Pctl	2.0	0%		

b) For the outcomes below, provide the percent chance you attach to the annual average CPI inflation rate from January 1, 2020 - December 31, 2024. Please also provide your point estimate for the most likely outcome.

(26 responses)

	≤1.00%	1.01- 1.50%	1.51- 2.00%	2.01- 2.50%	2.51- 3.00%	≥3.01%
Average	5%	11%	30%	32%	15%	7%
			Most Likely Outcome			
		25th Pctl	2.0	0%		
		Median	2.1	5%		
		75th Pctl	2.3	0%		