## Survey of Market Participants

Markets Group, Federal Reserve Bank of New York

July 2016

## **Policy Expectations Survey**

Please respond by Monday, July 18, at 2:00 pm to the questions below. Your time and input are greatly appreciated.

This survey is formulated by the Trading Desk at the Federal Reserve Bank of New York to enhance policymakers' understanding of market expectations on a variety of topics related to the economy, monetary policy and financial markets. The questions involve only topics that are widely discussed in the public domain and never presume any particular policy action. FOMC members are not involved in the survey's design.

Participant :

1) Provide below your expectations for changes, if any, to the language referencing each of the following topics in the July FOMC statement.

	Language Changes Expected
Current economic conditions:	
Economic outlook:	
Communication on the expected path of policy rates and forward guidance on the target federal funds rate:	
Communication on the Committee's policy of reinvesting principal payments on Treasury and agency securities:	
Other:	

2) How would you grade the Federal Reserve System's communication with the markets and with the public since the policy survey on June 6? Please provide a rating between 1 and 5, with 1 indicating ineffectiveness and 5 indicating effectiveness.

Rating:		]	Please Explain:						
3) a) Provide your estimate of the most likely outcome (i.e., the mode) for the target federal funds rate or range, as applicable, immediately following the FOMC meetings and at the end of each quarter or half-year period below. For the time periods at which you expect a target range, please indicate the midpoint of that range in providing your response.									
		2016				2017			
	July 26-27	September 20-21	November 1-2	December 13-14	January 31 - February 1	March 14-15	May 2-3		
Target rate / midpoint of target range:									

Target rate / midpoint of target range:

Quarters	Half Years
Ullaneis	

	2017 Q2	2017 Q3	2017 Q4	2018 H1	2018 H2	2019 H1	2019 H2	
Target rate / midpoint of target range:								
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:

Expectation for average federal funds rate over next 10 years:

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
*Responses should a	add up to 100 perce	nt

Responses should add up to 100 percent.

ii) Conditional on the Committee's next policy action in 2016 being an increase in the target federal funds rate or range, please indicate the percent chance\* that you attach to the following possible outcomes for the timing of such a change. Only fill out this conditional probability distribution if you assigned a non-zero probability to the next change in the target rate or range being an increase.

		Increase Occurs
Increase Occurs at	Increase Occurs	at November
July FOMC	at September	FOMC meeting or
meeting	FOMC meeting	later

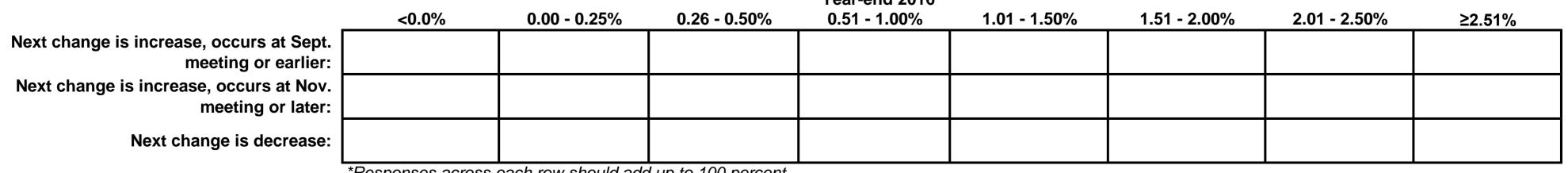
\*Responses should add up to 100 percent.

iii) Conditional on the Committee's next policy action in 2016 being a decrease in the target federal funds rate or range, please indicate the percent chance\* that you attach to the following possible outcomes for the timing of such a change. Only fill out this conditional probability distribution if you assigned a non-zero probability to the next change in the target rate or range being a decrease.

		Decrease Occurs
<b>Decrease Occurs</b>	<b>Decrease Occurs</b>	at November
at July FOMC	at September	FOMC Meeting or
meeting	FOMC Meeting	Later

\*Responses should add up to 100 percent.

iv) Of the possible outcomes below, please indicate the percent chance\* that you attach to the target federal funds rate or range falling in each of the following ranges at the end of 2016, conditional on the following possible scenarios for the direction and timing of the Committee's next policy action in 2016. 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.



\*Responses across each row should add up to 100 percent.

d) i) Of the possible outcomes below, please indicate the percent chance\* that you attach to the target federal funds rate or range falling in each of the following ranges at the end of 2017 and 2018, conditional on **not** moving to the zero lower bound (ZLB) at any point during 2016-2018. If you expect a target range, please use the midpoint of that range in providing your response.

	≤1.00%	1.01 - 1.50%	1.51 - 2.00%	2.01 - 2.50%	2.51 - 3.00%	3.01 - 3.50%	≥3.51%
Year-end 2017:							
Year-end 2018:							

\*Responses across each row should add up to 100 percent.

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

Probability of moving to the ZLB at some point in 2016-2018:

If you placed a non-zero probability on moving to the ZLB at some point in 2016-2018 above, please indicate your estimate for the most likely timing of such an event.

Most likely timing of moving to the ZLB at some point in 2016-2018 (in half years):

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</u> and 2018, <u>conditional on moving to the ZLB at some point in 2016-2018</u>. <u>Only fill out these conditional probability distributions if you assigned a non-zero probability to moving to the ZLB at some point in 2016-2018</u>. <u>Only fill out these conditional probability distributions if you assigned a non-zero probability to moving to the ZLB at some point in 2016-2018</u>. <u>If you expect a target range, please use the midpoint of that range in providing your response</u>.

	<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%
Year-end 2017:								
Year-end 2018:								

\*Responses across each row should add up to 100 percent.

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

Level of the target federal funds rate or range at the effective lower bound (in percent):

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

4) Of the possible outcomes below, please indicate the percent chance\* that you attach to the 10-year Treasury yield falling in each of the following ranges at the end of 2016 and 2017.

	<b>≤1.00%</b>	1.01 - 1.50%	1.51 - 2.00%	2.01 - 2.50%	2.51 - 3.00%	3.01 - 3.50%	≥3.51%
Year-end 2016:							
Year-end 2017:							

\*Responses across each row should add up to 100 percent.

5) Previous FOMC communication has indicated that the economy's neutral (i.e. equilibrium) 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 and is likely to rise only gradually over time. Please provide your estimate for the level of the neutral real federal funds rate at each of the time periods below.

Estimated level of neutral real federal funds rate:

Year-end 2016:

Year-end 2017:

Year-end 2018:

If you expect the neutral real federal funds rate to change over time, please provide the major factors underlying your expectation.

Please explain any changes to your estimates since the last time this set of questions was asked on October 19.

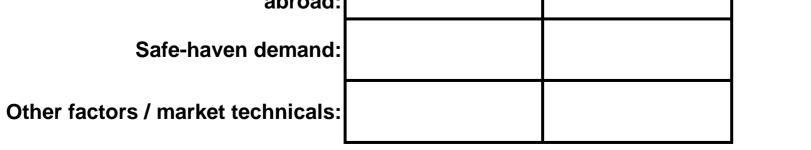
6) a) Measures of the 5-year/5-year forward nominal Treasury rate declined around 75 basis points between January 1 and June 14, and around 15 basis points between June 15 and July 12. Please decompose these changes into changes in the market's expected average nominal short-term interest rate over the 5-year period starting 5 years forward and the market-implied nominal term premium. Please ensure that your sum matches the change. Please also ensure your signs are correct.

	Change in Market's Expected Nominal Rate (bps)	Change in Market- Implied Nominal Term Premium (bps)	Sum of Changes (bps)	Change in 5-Year/5- Year Forward Nominal Treasury Yield
<u>Jan. 1 - Jun. 14</u> : Change in 5-year/5-year forward nominal Treasury rate			0	-75
<u>Jun. 15 - Jul. 12</u> : Change in 5-year/5-year forward nominal Treasury rate			0	-15

b) Please rate the importance of the following factors in explaining the decline in the 5-year/5-year forward nominal Treasury rate from January 1 to June 14 as well as from June 15 to July 12 (5=very important, 1=not important).

Jan. 1 - Jun. 14 Jun. 15 - Jul. 12

Changes in the outlook for U.S. economic growth:	
Changes in the outlook for U.S. inflation:	
Changes in perceptions of the neutral real federal funds rate:	
Changes in perceptions of the FOMC's reaction function:	
Spillovers from low/declining yields	



If "Other factors / market technicals," please explain.

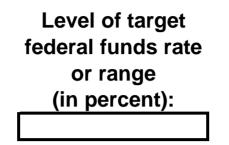
7) What are your expectations for the ON RRP facility over the next year?

8) 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:	

**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?



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.

	No Change to Reinvestments	Reinvestments Ceased All at Once	Reinvestments Phased Out Over Time	
Treasuries:				
Agency debt and MBS:				
_	*Deenenees eenees eene were ekselde delem te 100 mensent			

\*Responses across each row should add up to 100 percent.

d) i) Conditional on **not** moving to the ZLB at any point in 2016-2018, 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 July 6, 2016, H.4.1, was \$4268 billion.\*

Expected value of SOMA at year-end 2018, Conditional on Not Moving to the ZLB (\$ billions):

ii) <u>Conditional on mo</u>	oving to the ZLB at sor	<u>me point in 2016-201</u>	8, what is your mear	n expectation for the	par value of the SO	MA portfolio at the end of 2018?
	Expected val	ue of SOMA at year	r-end 2018, Conditio	onal on Moving to t	he ZLB (\$ billions):	
Please explain the f	actors behind any cha	nge to your expectat	tions in parts a-d sind	e the last policy surv	/ey.	
*This level references	the most recent H.4.1 rel	ease at the time this su	urvey was sent out to re	spondents.		
• •	s below, provide the pe your point estimate fo	•		verage <u>CPI inflation</u>	rate from July 1, 201	6 - June 30, 2021 falling in each of the following ranges.
≤1.00%	1.01-1.50%	1.51-2.00%	2.01-2.50%	2.51-3.00%	≥3.01%	Point estimate for most likely
	add up to 100 percen					outcome:
Please also provide	your point estimate fo	r the most likely outo	come.			21 - June 30, 2026 falling in each of the following ranges.
<u>≤1.00%</u>	1.01-1.50%	1.51-2.00%	2.01-2.50%	2.51-3.00%	≥3.01%	Point estimate for most likely outcome:
* Responses should	d add up to 100 perce	nt.				
• <b>0)</b> For the outcomes be		ent chance* you atta	ich to the <u>PCE inflations in the inflation of the provident of the provid</u>	on rate from July 1, 2	2018 - June 30, 2019	falling in each of the following ranges. Please also provide
≤1.50%	1.51-1.75%	1.76-2.00%	2.01-2.25%	2.26-2.50%	≥2.51%	Point estimate for most likely outcome:

\*Responses should add up to 100 percent.

## Dropdown Selections

2) How would you grade the Federal Reserve System's communication with the markets and with the public since the policy survey on June 6? Please provide a rating between 1 and 5, with 1 indicating ineffectiveness and 5 indicating effectiveness.

Rating:	5
	4
	3
	2
	1

3) d) ii) If you placed a non-zero probability on moving to the ZLB at some point in 2016-2018 above, please indicate your estimate for the most likely timing of such an event.

H2	2016
H1	2017
H2	2017
H1	2018
H2	2018