Survey of Primary Dealers

Markets Group, Federal Reserve Bank of New York

March 2016

Policy Expectations Survey

Please respond by **Monday, March 7, 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.

***Dealer*:**

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.

	Language Changes Expected
Current economic conditions and the economic outlook:	
Communication on the Committee's 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:	
Other:	

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

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

Year-end 2016:		**Year-end 2017:**		**Year-end 2018:**		**Longer Run:**	

Please explain any assumptions underlying your expectations.

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

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.

	2016						
	March 15-16	**April 26-27**	**June 14-15**	**July 26-27**	**September 20-21**	**November 1-2**	**December 13-14**
Target rate/midpoint of target range:							

	Quarters				Half Years		
	2017 Q1	**2017 Q2**	**2017 Q3**	**2017 Q4**	**2018 H1**	**2018 H2**	**2019 H1**
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 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 at March FOMC meeting	**Increase Occurs at April FOMC meeting**	**Increase Occurs at June FOMC meeting or 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 at March FOMC meeting	**Decrease Occurs at April FOMC Meeting**	**Decrease Occurs at June FOMC Meeting or 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. 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.**

				Year-end 2016				
	<0.0%	**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%**
Next change is increase, occurs at Apr. meeting or earlier:								
Next change is increase, occurs at Jun. meeting or later:								
Next change is decrease:								

**Responses across each row should add up to 100 percent.*
***Bins were adjusted based on responses to question 3d, part ii, in the January SPD and SMP.*

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** returning 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 returning to the ZLB at some point in 2016-2018.

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

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 level of the target federal funds rate or range at the ZLB (i.e. the effective lower bound), as well as the most likely timing of such an event.

Level of the target federal funds rate or range at the ZLB (in percent):
Most likely timing of a return 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 at the end of 2017 and 2018, conditional on returning to the ZLB at some point in 2016-2018. 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.**

	<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.*
***Bins were adjusted based on responses to question 3d, part ii, in the January SPD and SMP.*

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

3) a) 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.

	≤1.50%	1.51 - 2.00%	2.01 - 2.50%	2.51 - 3.00%	3.01 - 3.50%	3.51 - 4.00%	≥4.01%
Year-end 2016:							
Year-end 2017:							

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

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 (bps)	Change in Inflation Risk Premium (bps)	Change in other Risk Premia (bps)	Sum of Changes (bps)	Change in 5y5y Breakevens
			0	-100

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)**.

	Change in Expected Average CPI Inflation (bps)	Change in Inflation Risk Premium (bps)	Change in other Risk Premia (bps)
Change in component of 5-year/5-year forward breakeven rate since mid-2014:	0	0	0
Changes in the outlook for U.S. economic growth:			
Changes in household inflation expectations:			
Realized inflation data:			
Changes in labor market dynamics:			
Changes in oil and commodity prices:			
Changes in the U.S. dollar exchange rate:			
Changes in risk asset prices:			
Changes in perception of future FOMC reaction function:			
Market technicals:			

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.

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)**.

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)	If "Other", please explain

Please explain your response, including any assumptions or underlying views.

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.

	Next FOMC meeting:	6 months forward:	1 year forward:
Aggregate demand for ON RRP ($ billions):			

Please explain any assumptions underlying your responses.

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?

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?*

Most likely timing of reduction in aggregate ON RRP capacity (in months forward):

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

Most likely level to which aggregate ON RRP capacity will be reduced ($ billions):

Please explain any assumptions underlying your expectations regarding the Committee's future strategy for managing the ON RRP facility, as well as any changes to your expectations since the last policy survey.

*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 1/4 to 1/2 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 policy domestic policy directive.

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:	

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 federal funds rate or range (in percent):

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:			

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

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.

Treasuries:	
Agency debt and MBS:	

Please explain the factors behind any change to your expectations in parts a-d since the last policy survey.

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

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

ii) Conditional on returning to the ZLB at some point in 2016-2018, what is your mean expectation for the par value of the SOMA portfolio at the end of 2018?

Expected value of SOMA at year-end 2018, Conditional on Returning to the ZLB ($ billions):

Economic Indicator Forecasts

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

	GDP (Q4/Q4 Growth)	Core PCE Deflator (Q4/Q4 Growth)	Headline PCE Deflator (Q4/Q4 Growth)	Unemployment Rate (Q4 Average Level)
2016:				
2017:				
2018:				
Longer run:				

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 percent at year-end 2016:

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:

Please explain any assumptions underlying your responses to part b.

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%	2.51-3.00%	≥3.01%

Point estimate for most likely outcome:

**Responses across this row should add up to 100 percent.*

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%

Point estimate for most likely outcome:

** Responses across this row should add up to 100 percent.*

9) a) What percent chance do you attach to the U.S. economy currently being in a recession*? **Recession currently:**

b) What percent chance do you attach to the U.S. economy being in a recession* **in 6 months**? **Recession in 6 months:**

c) What percent chance do you attach to the global economy being in a recession** **in 6 months**? **Global recession in 6 months:**

Please comment on any changes to your expectations over the intermeeting period, if applicable.

*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 tl following global macroeconomic indicators: industrial production, trade, capital flows, oil consumption and unemployment.

Dropdown Selections

2) **d)** ii) 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 level of the target federal funds rate or range at the ZLB (i.e. the effective lower bound), as well as the most likely timing of such an event.

Most likely timing of a return to the ZLB in 2016-2018 (in half years):

H1 2016
H2 2016
H1 2017
H2 2017
H1 2018
H2 2018

3) **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)**.

Rating:

5
4
3
2
1

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 decline in some risk asset prices since the start of the year **(5=very important, 1=not important)**.

Rating:

5
4
3
2
1