Survey of Primary Dealers

Markets Group, Federal Reserve Bank of New York

April 2015

Policy Expectations Survey

Please respond by **Monday, April 20, at 5:00 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 April 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) How do you expect the April FOMC events 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: **Please Explain:**

2) How would you grade the Federal Reserve System's communication with the markets and with the public since the policy survey on March 9? Please provide a rating between 1 and 5, with 1 indicating ineffectiveness and 5 indicating effectiveness.

Rating: **Please Explain:**

3) 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.

2015 FOMC Meetings						
April 28-29	**June 16-17**	**July 28-29**	**September 16-17**	**October 27-28**	**December 15-16**	**≥ January 2016**

** Percentages across row should add to 100 percent.*

Estimate for most likely meeting for first increase in target rate or range:

The March FOMC minutes indicated that "further improvement in the labor market, a stabilization of energy prices and a leveling out of the foreign exchange value of the dollar were all seen as helpful in establishing confidence that inflation would turn up." Relatedly, the Chair recently indicated that she would be "uncomfortable raising the federal funds rate" if readings on core inflation or other indicators were to weaken. Please rate the importance of these factors in determining whether the Committee would be "reasonably confident" in the inflation outlook (5= very important, 1= unimportant).

	Further improvement in labor market	Stabilization in energy prices	Leveling out of the U.S. dollar	Absence of weakening in realized core inflation	Other factors (please explain)	Other factors
Rating of importance of factors on FOMC's confidence in inflation outlook:						

Please discuss what motivated your factor ratings.

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.

Probability of not returning to ZLB 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.

	0 - 50 basis points	51 - 100 basis points	101 - 150 basis points	151 - 200 basis points	>200 basis points
First year following liftoff:					
Second year following liftoff:					

** Percentages across rows should add to 100 percent.*

c) 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. 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.

	2015 FOMC meetings					
	April 28-29	**June 16-17**	**July 28-29**	**September 16-17**	**October 27-28**	**December 15-16**
Top of range:						
Bottom of range:						
Target rate:						

	Quarters				Half Years			
	2016 Q1	**2016 Q2**	**2016 Q3**	**2016 Q4**	**2017 H1**	**2017 H2**	**2018 H1**	**2018 H2**
Top of range:								
Bottom of range:								
Target rate:								

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: **Expectation for average federal funds rate over next 10 years:**

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.

	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 2015:							
	≤0.50%	**0.51 - 1.00%**	**1.01 - 1.50%**	**1.51 - 2.00%**	**2.01 - 2.50%**	**2.51 - 3.00%**	**≥3.01%**
Year-end 2016:							
	≤2.00%	**2.01 - 2.50%**	**2.51 - 3.00%**	**3.01 - 3.50%**	**3.51 - 4.00%**	**4.01 - 4.50%**	**≥4.51%**
Year-end 2017:							

** Percentages across rows should add to 100 percent.*

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):

f) In a recent speech Chair Yellen indicated that the "equilibrium real federal funds rate, the real rate consistent with the economy achieving maximum employment and price stability in the medium term, is currently quite low by historical standards." Conditioned on your expectations for the economy and the future stance of policy, what is your forecast for the level of the equilibrium real federal funds rate at each of the time periods below? Please also provide your estimate of the current level of the equilibrium real federal funds rate.

	Current Level	**Year-end 2015:**	**Year-end 2016:**	**Year-end 2017:**
Level of equilibrium real federal funds rate:				

4) a) 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.

	≤1.50%	**1.51 - 2.00%**	**2.01 - 2.50%**	**2.51 - 3.00%**	**3.01 - 3.50%**	**3.51 - 4.00%**	**>4.00%**
Year-end 2015:							
	≤2.50%	**2.51 - 3.00%**	**3.01 - 3.50%**	**3.51 - 4.00%**	**4.01 - 4.50%**	**4.51 - 5.00%**	**>5.00%**
Year-end 2016:							

** Percentages across rows should add to 100 percent.*

If you changed your expectations since the last time the question was asked, explain the factors that motivated you to make the change(s).

b) The 10-year Treasury yield decreased 16 basis points between March 17 and April 15. Please decompose this change into changes in the market's expected average real policy rate, expected average inflation rate, and the market-implied nominal term premium. Please ensure that your sum matches the change.

	Change in Market's Expected Average Real Policy Rate	Change in Market's Expected Average Inflation Rate	Change in Market-Implied Nominal Term Premium	Your Sum	Change in 10-year Treasury Yield
Change in 10-year Treasury yield (bps):				0	-16

Please explain which factor or factors motivated your decomposition.

c) The March FOMC minutes noted that "market-based measures [of inflation compensation] had tracked quite closely the movements in crude oil over the intermeeting period." Please discuss which factor or factors you believe are most pertinent in explaining the correlation between changes in short-dated energy futures prices and TIPS-implied five-year inflation compensation, five years ahead.

Explanations for correlation between short-dated energy futures and forward inflation compensation measures:

5) 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.

	< 5.0 %	**5.0 - 5.4%**	**5.5 - 5.9%**	**6.0 - 6.5%**	**> 6.5%**
Unemployment rate:					

**Percentages across row should add up to 100 percent.*

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%**
Inflation between 1 and 2 years ahead at liftoff:					

**Percentages across row should add up to 100 percent.*

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 March, seasonally adjusted, was 141.2 million.

Unemployment rate:	
Labor force participation rate:	
Total U.S. employees on nonfarm payrolls (millions):	
12-month change in average hourly earnings:	
Core 12-month PCE Inflation:	
Headline 12-month PCE Inflation:	
Inflation between 1 and 2 years ahead (at liftoff):	

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". If you do not believe a cap on the O/N RRP will be employed at a particular time period, please write "No cap".

	1 Quarter Prior to Liftoff	Immediately Following Liftoff	1 Year Following Liftoff	3 Years Following Liftoff
Rate of interest on excess reserves (in percent):				
Target federal funds rate or range (in percent):				
Federal funds effective rate (in percent):				
O/N RRP rate (in percent):				
3-month LIBOR (in percent):				
Overnight Treasury GCF repo rate (in percent):				
Expected demand for O/N RRP ($ billions):				
Expected cap on O/N RRP ($ billions):				

Please note how you expect the Committee's approach to policy normalization to evolve over time. Additionally, 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.

e) The standard deviation of submitted bids to the O/N RRP over the first quarter of 2015, excluding month- and quarter-end dates, was approximately $32 billion. Please indicate whether you expect that the variation in submitted bids to the O/N RRP, excluding month- and quarter-end dates, will be higher, lower, or equal to this current level of variation, over the quarter ending at each of the time periods below.

	Immediately Following Liftoff	6 Months Following Liftoff	1 Year Following Liftoff	3 Years Following Liftoff
Expected variation in O/N RRP bid submissions:				

Please explain which factor or factors were most relevant in formulating your expectations for the variation in submitted bids to the O/N RRP.

f) At the March FOMC meeting the Committee augmented its Policy Normalization Principles and Plans, indicating that, at liftoff, it plans to "continue to target a range for the federal funds rate that is 25 basis points wide...set the IOER rate equal to the top of the target range...and set the offering rate associated with an ON RRP facility equal to the bottom of the target range." Please provide the percent chance* you attach to the average federal funds effective rate, excluding month- or quarter-end dates, falling within the following subsets relative to the 25 basis point target range in the first month immediately following liftoff.

	Below the range	Bottom 8 basis points of range	Middle 9 basis points of range	Top 8 basis points of range	Above the range
Expected level of average federal funds effective rate relative to 25 basis point target range:					

**Percentages across row should add up to 100 percent.*

Please explain which factor or factors were most relevant in formulating your expectations and any assumptions made.

6) Provide your estimate of the most likely quarter and year during which the FOMC will first cease reinvesting some or all payments of principal on Treasuries and/or agency debt and MBS. In addition, please provide your expectation for the timing, in months, relative to the first increase in the target rate or range. If you do not expect the FOMC to cease reinvestments for either or both asset classes during the process of policy normalization, please select "N/A". Please ensure your signs are correct.

	Quarter & Year	Number of months relative to liftoff
Treasuries:		
Agency debt and MBS:		

Please explain your assumptions for the timing, size, and pace of redemptions and sales of securities, if applicable. Please also explain the factors behind any change in your expectations since the last time the question was asked:

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)**
2015:				
2016:				
2017:				
Longer run:				

b) How would you characterize the overall balance of U.S. economic data over the intermeeting period? (5= significantly stronger than expected, 3= neutral/mixed, 1= significantly weaker than expected). Please explain which data were most relevant in formulating your characterization.

Characterization of overall balance of economic data: **Please Explain:**

c) Please provide an estimate of how the change in the value of the U.S. dollar since June 2014 has impacted your forecasts for average real GDP growth (Q4/Q4) and the change in the core PCE deflator (Q4/Q4) for 2015, if applicable. Please ensure that your signs are correct.

	2015 real GDP growth	**2015 core PCE**
Change in forecast due to U.S. dollar appreciation (bps):		

8) a) For the outcomes below, provide the percent chance* you attach to the annual average CPI inflation rate from April 1, 2015 - March 31, 2019. 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:	

** Percentages across 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 April 1, 2020 - March 31, 2024. 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:	

** Percentages across 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:**

**NBER-defined recession*

Dropdown Selections

1) **b)** How do you expect the April FOMC events 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:	1 -- Less Accommodative 2 3 -- Neutral 4 5 -- More Accommodative

2) How would you grade the Federal Reserve System's communication with the markets and with the public since the policy survey on March 9? Please provide a rating between 1 and 5, with 1 indicating ineffectiveness and 5 indicating effectiveness.

Rating:	5 -- Very Effective 4 3 2 1 -- Very Ineffective

3) **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.

Estimate for most likely meeting for first increase in target rate or range:	April 2015 June 2015 July 2015 September 2015 October 2015 December 2015 >=2016

The March FOMC minutes indicated that "further improvement in the labor market, a stabilization of energy prices and a leveling out of the foreign exchange value of the dollar were all seen as helpful in establishing confidence that inflation would turn up." Relatedly, the Chair recently indicated that she would be "uncomfortable raising the federal funds rate" if readings on core inflation or other indicators were to weaken. Please rate the importance of these factors in determining whether the Committee would be "reasonably confident" in the inflation outlook (5= very important, 1= unimportant).

Rating of importance of factors on FOMC's confidence in inflation outlook:	5 -- Very Important 4 3 2 1 -- Not Important

5) **e)** The standard deviation of submitted bids to the O/N RRP over the first quarter of 2015, excluding month- and quarter-end dates, was approximately $32 billion. Please indicate whether you expect that the variation in submitted bids to the O/N RRP, excluding month- and quarter-end dates, will be higher, lower, or equal to this current level of variation, over the quarter ending at each of the time periods below.

Expected variation in O/N RRP bid submissions:	Higher Lower Equal

6) Provide your estimate of the most likely quarter and year during which the FOMC will first cease reinvesting some or all payments of principal on Treasuries and/or agency debt and MBS. In addition, please provide your expectation for the timing, in months, relative to the first increase in the target rate or range. If you do not expect the FOMC to cease reinvestments for either or both asset classes during the process of policy normalization, please select "N/A". Please ensure your signs are correct.

Quarter & Year:	Q2 2015 Q3 2015 Q4 2015 Q1 2016 Q2 2016 Q3 2016 Q4 2016 Q1 2017 Q2 2017 Q3 2017 Q4 2017 >= Q1 2018 N/A

7) **b)** How would you characterize the overall balance of U.S. economic data over the intermeeting period? (5= significantly stronger than expected, 3= neutral/mixed, 1= significantly weaker than expected).

Characterization of overall balance of economic data:	1 -- Significantly weaker than expected 2 -- Moderately weaker than expected 3 -- Neutral/mixed 4 -- Moderately stronger than expected 5 -- Significantly stronger than expected