# Survey of Market Participants

Markets Group, Federal Reserve Bank of New York

January 2016

## *Policy Expectations Survey*

Please respond by **Tuesday, January 19, 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:**

***Monetary Policy Expectations***

**1) a)** Provide below your expectations for changes, if any, to the language referencing each of the following topics in the January 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:** | |

**2)** How would you grade the Federal Reserve System's communication with the markets and with the public since the policy survey on December 7? 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. 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.

| | 2016 | | | | | | |
|---|---|---|---|---|---|---|---|
| | **January 26-27** | **March 15-16** | **April 26-27** | **June 14-15** | **July 26-27** | **September 20-21** | **November 1-2** |
| **Top of range:** | | | | | | | |
| **Bottom of range:** | | | | | | | |
| **Target rate:** | | | | | | | |

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

**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 <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 next change in the target rate or range being an increase.

| **Increase Occurs at January FOMC meeting** | **Increase Occurs at March FOMC meeting** | **Increase Occurs at April FOMC meeting or later** |
|---|---|---|
| | | |

**Responses should add up to 100 percent.*

iii) Conditional on the Committee's next policy action in 2016 being a <u>decrease</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 next change in the target rate or range being a decrease.

| **Decrease Occurs at January FOMC meeting** | **Decrease Occurs at March FOMC Meeting** | **Decrease Occurs at April 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 timing and direction 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 | | | |
|---|---|---|---|---|---|---|---|
| | **≤0.25%** | **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 Mar. meeting or earlier:** | | | | | | | |
| **Next change is increase, occurs at Apr. meeting or later:** | | | | | | | |
| **Next change is decrease, occurs at Mar. meeting or earlier:** | | | | | | | |
| **Next change is decrease, occurs at Apr. meeting or later:** | | | | | | | |

**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** 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.

| | **≤0.25%**** | **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.*
***This bucket should incorporate the probability you associate with still being at the ZLB at this point in time.*

**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.

| | **≤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.*

**5) a)** In the first two columns, please indicate your expectations for the most likely levels (excluding month-end and quarter-end dates) of the following indicators during the intermeeting period immediately following the next FOMC meeting, conditional on the below two hypothetical outcomes for the target federal funds rate or range. In the second two columns, please indicate your expectations for the most likely levels of these indicators 6 months and 1 year from now.

| | **No change in target rate or range at next FOMC meeting:** | **Increase in target rate or range at next FOMC meeting:** | **6 months forward** | **1 year forward** |
|---|---|---|---|---|
| **Rate of interest on excess reserves (in percent):** | | | | |
| **Target federal funds rate or range (in percent):** | | | | |
| **Effective federal funds rate (in percent):** | | | | |
| **ON RRP rate (in percent):** | | | | |
| **Overnight Treasury GCF repo rate (in percent):** | | | | |
| **Overnight Treasury tri-party repo rate (in percent):** | | | | |
| **1-month LIBOR rate (in percent):** | | | | |
| **4-week U.S. Treasury bill rate (in percent):** | | | | |
| **Aggregate demand for ON RRP ($ billions):** | | | | |
| **Aggregate cap on ON RRP ($ billions):** | | | | |

Please explain any assumptions underlying your responses. How do you expect moving further away from the zero lower bound (ZLB) to impact current relationships between money market rates, as well as where they trade relative to the target rate or range, if at all?

**b)** Aggregate demand for RRP operations (ON and term) over the December 31, 2015, year-end date was approximately $475 billion, compared to roughly $450 billion over the September 30, 2015 quarter-end date. What are your expectations for the most likely levels of aggregate demand for RRP operations (ON and term, as applicable) over the following 2016 quarter-end dates?

| | **Mar. 31** | **Jun. 30** | **Sept. 30** | **Dec. 31** |
|---|---|---|---|---|
| **Aggregate demand for RRPs on quarter-end dates ($ billions):** | | | | |

Please explain any assumptions underlying your responses. How do you expect the Fed's offerings of RRP operations (ON and term, as applicable) over quarter-end dates to evolve in 2016?

| |
|---|
| |

**c)** In the March 2015 FOMC meeting minutes, it was reported that FOMC participants "...generally saw some advantages to a temporarily elevated aggregate [ON RRP] cap...to ensure that the facility would have sufficient capacity to support policy implementation at the time of liftoff, but they also indicated that they expected that it would be appropriate to reduce ON RRP capacity fairly soon after the Committee begins firming the stance of policy."

What is your estimate for the most likely timing of when the Committee will reduce aggregate ON RRP capacity from its current level?* Please frame your response in terms of a forward timeframe (days, weeks, months, years, as applicable).

| | |
|---|---|
| **Most likely timing of reduction in aggregate ON RRP capacity:** | |

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

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

Please explain any assumptions underlying your responses.

| |
|---|
| |

*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 ¼ to ½ 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) and by a per-counterparty limit of $30 billion per day."

**6)** In the December 2015 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, c and d since the last policy survey.

| |
|---|
| |

***Economic Indicator Forecasts***

**7) a)** For the outcomes below, provide the percent chance* you attach to the annual average CPI inflation rate from January 1, 2016 - December 31, 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 January 1, 2021 - December 31, 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.*

***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 December 7? Please provide a rating between 1 and 5, with 1 indicating ineffectiveness and 5 indicating effectiveness.

**Communication grade:**

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

**3)** **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