# Responses to Survey of Primary Dealers

Markets Group, Federal Reserve Bank of New York October 2014

# Responses to Survey of Primary Dealers Distributed: 10/16/2014 – Received by: 10/20/2014

For most questions, median responses across dealers, 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 dealers 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 22 primary dealers. Except where noted, all 22 dealers responded to each question. In some cases, dealers 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**

 a) Provide below your expectations for changes, if any, to the language referencing each of the following topics in the October FOMC statement. Limit your responses to changes you consider most likely.

#### Current economic conditions and the economic outlook:

Some dealers anticipated that the October FOMC statement would note that economic conditions were little changed since the time of the last FOMC meeting. Several dealers expected that the statement would acknowledge slower global growth, while several others expected the statement to make reference to further improvement in labor market conditions. Several dealers anticipated the statement would highlight the recent declines in commodity prices and note increased downside risks to the inflation outlook. Several dealers noted an expectation for the statement to acknowledge recent financial market volatility.

Communication on the overall size, pace, and composition of asset purchases, and factors influencing them:

Nearly all dealers expected the statement to announce a reduction in the pace of asset purchases by \$15 billion.

Communication on the expected path of policy rates and forward guidance on the target federal funds rate:

Several dealers expected that the phrase "after the asset purchase program ends" would be removed from the forward-guidance language in the October statement. Several dealers anticipated that the reference to "considerable time" would remain in the October statement, while several others expected that it would be altered or removed. Several dealers expected that the forward-guidance language would be modified to further emphasize the data dependency of the policy outlook. Several dealers anticipated that there would be no significant change to the forward-guidance language.

Other: (7 responses)

Dealers did not provide substantial commentary in this section.

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

b) How do you expect the October 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<br>Monetary Policy |   |  |  |  |  |  |
|----------------------------------------|---|--|--|--|--|--|
| 25th Pctl                              | 2 |  |  |  |  |  |
| Median                                 | 3 |  |  |  |  |  |
| 75th Pctl                              | 3 |  |  |  |  |  |

#### Please explain:

Several dealers anticipated that that the end of the asset purchase program would be interpreted by the market as less-accommodative, while several others expected that a more pessimistic outlook for global growth would have a more-accommodative impact. Several dealers expected that there would not be a significant change in market perceptions of the stance of monetary policy, offering their view that an end to asset purchases and the maintenance of the current forward-guidance language would have largely offsetting effects.

2. How would you grade the Federal Reserve System's communication with the markets and with the public since the policy survey on September 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 | 1                       |
| 2               | 8                       |
| 3               | 10                      |
| 4               | 3                       |
| 5 - Effective   | 0                       |

#### Please explain:

#### (21 responses)

Some dealers indicated that Federal Reserve communication with the markets and the public would benefit from greater clarity. Several dealers noted their view that divergent messages from Federal Reserve officials were negatively impacting the effectiveness of communications. Several other dealers viewed Federal Reserve communications as clear and effective.

3. What announced purchase pace, effective following the upcoming FOMC meeting, do you believe would result in roughly no change in the price of the 10-year Treasury note, assuming no other policy action?

# Monthly Pace Resulting in No Change in 10-year Treasury Yield (\$ billions)

|           | Treasuries | Agency<br>MBS |
|-----------|------------|---------------|
| 25th Pctl | 0          | 0             |
| Median    | 0          | 0             |
| 75th Pctl | 0          | 0             |

4. 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.

|         | ≤2014 | 2015 | 2015 | 2015 | 2015 | 2016 | 2016 | ≥2016 |  |
|---------|-------|------|------|------|------|------|------|-------|--|
|         | Q4    | Q1   | Q2   | Q3   | Q4   | Q1   | Q2   | Q3    |  |
| Average | 1%    | 10%  | 28%  | 25%  | 18%  | 10%  | 5%   | 4%    |  |

Most Likely Meeting of First Increase in Target Rate or Range

| 25th Pctl | June 2015                 |
|-----------|---------------------------|
| Median    | June 2015                 |
| 75th Pctl | July 2015/September 2015* |
|           |                           |

<sup>\* 75</sup>th Pctl is between July 2015 and September 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.

# Probability of Not Returning to ZLB within 2 Years Following Liftoff

| 25th Pctl | 80% |
|-----------|-----|
| Median    | 80% |
| 75th Pctl | 89% |

#### First Year Following Liftoff\*

0 - 50 51 - 100 101 - 150 151 - 200 >200 basis basis basis basis basis points points points points points 34% 28% 22% 10% 6%

Average

\*Conditional on not returning to ZLB

#### Second Year Following Liftoff\*

| 0 - 50 | 51 - 100 | 101 - 150 | 151 - 200 | >200   |
|--------|----------|-----------|-----------|--------|
| basis  | basis    | basis     | basis     | basis  |
| points | points   | points    | points    | points |
| 11%    | 26%      | 26%       | 25%       | 12%    |

Average

\*Conditional on not returning to ZLB

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.

# **Top of Target Range**

|                | 2014  | 2015  | 2015  | 2015  | 2015  | 2016  | 2016  | 2017  | 2017  | 2018  |
|----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                | Q4    | Q1    | Q2    | Q3    | Q4    | H1    | H2    | H1    | H2    | H1    |
| 25th Pctl      | 0.25% | 0.25% | 0.25% | 0.54% | 0.79% | 1.45% | 2.00% | 2.50% | 3.00% | 3.35% |
| Median         | 0.25% | 0.25% | 0.50% | 0.75% | 1.00% | 1.50% | 2.25% | 2.75% | 3.25% | 3.50% |
| 75th Pctl      | 0.25% | 0.25% | 0.50% | 0.75% | 1.00% | 1.75% | 2.50% | 3.25% | 4.00% | 4.00% |
| # of Responses | 21    | 21    | 21    | 20    | 19    | 16    | 15    | 14    | 14    | 14    |

# **Bottom of Target Range**

|                | 2014  | 2015  | 2015  | 2015  | 2015  | 2016  | 2016  | 2017  | 2017  | 2018  |
|----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| _              | Q4    | Q1    | Q2    | Q3    | Q4    | H1    | H2    | H1    | H2    | H1    |
| 25th Pctl      | 0.00% | 0.00% | 0.00% | 0.25% | 0.50% | 1.15% | 1.73% | 2.21% | 2.71% | 3.05% |
| Median         | 0.00% | 0.00% | 0.25% | 0.50% | 0.75% | 1.25% | 2.00% | 2.50% | 3.00% | 3.25% |
| 75th Pctl      | 0.00% | 0.00% | 0.25% | 0.50% | 0.75% | 1.50% | 2.25% | 3.00% | 3.75% | 3.75% |
| # of Responses | 21    | 21    | 21    | 20    | 19    | 16    | 15    | 14    | 14    | 14    |

| Targ | et | Ra | te |
|------|----|----|----|
|------|----|----|----|

|                | 2014<br>Q4 | 2015<br>Q1 | 2015<br>Q2 | 2015<br>Q3 | 2015<br>Q4 | 2016<br>H1 | 2016<br>H2 | 2017<br>H1 | 2017<br>H2 | 2018<br>H1 |
|----------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 25th Pctl      | 0.25%      | 0.25%      | 0.50%      | 0.75%      | 1.00%      | 1.56%      | 2.00%      | 2.50%      | 2.88%      | 3.25%      |
| Median         | 0.25%      | 0.25%      | 0.50%      | 0.75%      | 1.00%      | 1.75%      | 2.25%      | 2.88%      | 3.25%      | 3.63%      |
| 75th Pctl      | 0.25%      | 0.25%      | 0.50%      | 0.75%      | 1.13%      | 1.94%      | 2.50%      | 3.00%      | 3.50%      | 3.81%      |
| # of Responses | 1          | 1          | 1          | 2          | 3          | 6          | 7          | 8          | 8          | 8          |

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 | 10-yr           |  |  |  |  |
|-----------|--------|-----------------|--|--|--|--|
|           | Run    | Average FF Rate |  |  |  |  |
| 25th Pctl | 3.50%  | 2.64%           |  |  |  |  |
| Median    | 3.50%  | 2.88%           |  |  |  |  |
| 75th Pctl | 4.00%  | 3.18%           |  |  |  |  |

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 2014, 2015, 2016, and 2017. If you expect a target range for federal funds please use the midpoint of the range in providing your response.

# (21 Complete Responses)

|    |    | _   | _ |    |     |
|----|----|-----|---|----|-----|
| Y۵ | ar | -Fr | h | 20 | 114 |

|         | 0.00% -<br>0.25% | 0.26 -<br>0.50% | 0.51 -<br>1.00% | 1.01 -<br>1.50% | 1.51 -<br>2.00% | 2.01 -<br>2.50% | ≥2.51% |
|---------|------------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
| Average | 96%              | 3%              | 0%              | 0%              | 0%              | 0%              | 0%     |
|         |                  |                 | Y               | ear-End 201     | 5               |                 |        |
|         | 0.00% -<br>0.25% | 0.26 -<br>0.50% | 0.51 -<br>1.00% | 1.01 -<br>1.50% | 1.51 -<br>2.00% | 2.01 -<br>2.50% | ≥2.51% |
| Average | 13%              | 22%             | 40%             | 18%             | 6%              | 1%              | 0%     |

|         | Year End 2016 |                 |                 |                 |                 |                 |        |
|---------|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|         | ≤0.50%        | 0.51 -<br>1.00% | 1.01 -<br>1.50% | 1.51 -<br>2.00% | 2.01 -<br>2.50% | 2.51 -<br>3.00% | ≥3.01% |
| Average | 5%            | 9%              | 17%             | 26%             | 26%             | 12%             | 6%     |
|         |               |                 | Y               | ear-End 201     | 17              |                 |        |
|         | ≤2.00%        | 2.01 -<br>2.50% | 2.51 -<br>3.00% | 3.01 -<br>3.50% | 3.51 -<br>4.00% | 4.01 -<br>4.50% | ≥4.51% |
| Average | 11%           | 16%             | 22%             | 22%             | 15%             | 10%             | 3%     |

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):

Some dealers noted that their views on the timing of liftoff and path of the target rate were unchanged since the last survey. Several dealers noted that they now expect liftoff to occur earlier than in their prior surveys as a result of continued improvement in labor market indicators. Several others noted that risks to their forecast for the target rate or range had slightly shifted toward a later liftoff or a slower path of rate increases following liftoff.

- 5. The minutes of the September FOMC meeting indicated that, "Participants also discussed how the forward-guidance language might evolve once the Committee decides that the current formulation no longer appropriately conveys its intentions about the future stance of policy."
  - a) Provide the percent chance you attach to the Committee modifying the forward-guidance language prior to liftoff, over the time periods below. If you expect multiple changes to the forward-guidance language prior to liftoff, please provide your response for the first change only.

|         | No Change<br>Prior to Liftoff |     | December 2014<br>FOMC | January 2015<br>FOMC | > January 2015<br>FOMC |
|---------|-------------------------------|-----|-----------------------|----------------------|------------------------|
| Average | 1%                            | 23% | 41%                   | 18%                  | 18%                    |

b) If you see any possibility of changes to the forward-guidance language prior to liftoff, please describe the changes you believe most likely:

Many dealers expected that the reference to "considerable time" would be modified or removed. Some dealers anticipated that the forward-guidance language would be modified to place greater emphasis on the data-dependency of the policy outlook. Several dealers expected that the reference to "after the asset purchase program ends" would be removed from the October statement.

c) Conditional on the forward-guidance language being changed at the time and in the way you consider most likely, how do you expect this change to impact financial conditions?

### (21 Responses)

Some dealers anticipated that changes in the forward-guidance language would be perceived as less accommodative and contribute to a modest tightening of financial conditions. Several dealers expected that changes to the forward-guidance language would not result in any significant impact.

6. Since the beginning of September, the Bloomberg measure of the 5-year/5 year forward breakeven rate of inflation has declined by roughly 20 basis points. Provide your estimate of the decomposition of this forward rate at the two dates cited.

### (21 Complete Responses)

#### September 2, 2014

|         | Expected Average CPI Inflation    | Inflation Risk<br>Premium | Other Risk<br>Premia | Sum   |
|---------|-----------------------------------|---------------------------|----------------------|-------|
| Average | 2.11%                             | 0.35%                     | 0.07%                | 2.53% |
|         |                                   | October 15, 2014          |                      |       |
|         | Expected Average CPI<br>Inflation | Inflation Risk<br>Premium | Other Risk<br>Premia | Sum   |
| Average | 2.02%                             | 0.30%                     | 0.04%                | 2.37% |

Please explain the factors contributing to any change in your estimate of the expected average inflation rate:

The decline in crude oil prices, increased concerns regarding global growth and inflation, and expectations for the Federal Reserve to begin reducing monetary policy accommodation were all cited by several dealers as contributing to a decline in the expected average inflation rate.

Please explain the factors contributing to any change in your estimate of the inflation risk premium:

Many dealers noted a perceived decline in the risks to higher inflation as a factor in the change in the 5-year/5 year forward breakeven rate of inflation. Global growth and inflation concerns, the decline in crude oil prices, the strength of the U.S. dollar, low realized domestic inflation, and the approach of monetary policy tightening in the U.S. were each cited by several dealers as contributing factors. Several other dealers perceived a slight increase in the inflation risk premium.

Please explain the factors contributing to any change in your estimate of other risk premia:

Some dealers noted liquidity conditions in the TIPS market as contributing to changes in their estimates of other risk premia, while several other dealers felt that recent risk aversion and heightened geopolitical concerns were factors which contributed to changes in their estimates.

7. 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.

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 -<br>1.74% | 1.75 -<br>2.24% | 2.25 -<br>2.74% | ≥ 2.75% |
|---------|---------|-----------------|-----------------|-----------------|---------|
| Average | 2%      | 18%             | 51%             | 24%             | 5%      |

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 September seasonally adjusted, was 139.4 million.

#### (20 Complete Responses)

|                     | Unemployment<br>Rate | Labor Force<br>Participation<br>Rate | Total NFP*     | 12-Month<br>Change in<br>Average Hourly<br>Earnings | Headline 12-<br>Month PCE<br>Inflation | Inflation<br>Between 1<br>and 2 Years<br>Ahead |
|---------------------|----------------------|--------------------------------------|----------------|-----------------------------------------------------|----------------------------------------|------------------------------------------------|
| 25th Pctl           | 5.5%                 | 62.7%                                | 141.1          | 2.4%                                                | 1.2%                                   | 2.0%                                           |
| Median<br>75th Pctl | 5.6%<br>5.6%         | 62.8%<br>63.0%                       | 141.5<br>141.7 | 2.5%<br>3.0%                                        | 1.6%<br>1.9%                           | 2.0%<br>2.2%                                   |

\*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".\*

#### (21 Complete Responses)

#### One Quarter Prior to Liftoff

| Target Federal |           |                      | Overnight      |              |          |              |               |
|----------------|-----------|----------------------|----------------|--------------|----------|--------------|---------------|
|                |           | <b>Funds Rate or</b> | Federal Funds  |              | 3M Libor | Treasury GCF | O/N RRP       |
|                | IOER Rate | Range                | Effective Rate | O/N RRP Rate | Rate     | Repo Rate    | Usage (\$ bn) |
| 25th Pctl      | 0.25%     | 0.13%                | 0.09%          | 0.05%        | 0.24%    | 0.08%        | 150           |
| Median         | 0.25%     | 0.13%                | 0.10%          | 0.05%        | 0.25%    | 0.09%        | 168           |
| 75th Pctl      | 0.25%     | 0.13%                | 0.13%          | 0.05%        | 0.30%    | 0.12%        | 200           |

#### Immediately Following Liftoff

|           | Target Federal |                      |                |              | Overnight |              |               |
|-----------|----------------|----------------------|----------------|--------------|-----------|--------------|---------------|
|           |                | <b>Funds Rate or</b> | Federal Funds  |              | 3M Libor  | Treasury GCF | O/N RRP       |
|           | IOER Rate      | Range                | Effective Rate | O/N RRP Rate | Rate      | Repo Rate    | Usage (\$ bn) |
| 25th Pctl | 0.50%          | 0.38%                | 0.30%          | 0.25%        | 0.49%     | 0.29%        | 200           |
| Median    | 0.50%          | 0.38%                | 0.35%          | 0.25%        | 0.55%     | 0.32%        | 300           |
| 75th Pctl | 0.50%          | 0.38%                | 0.38%          | 0.29%        | 0.65%     | 0.35%        | 350           |

### 1 Year Following Liftoff

|           | Target Federal              |       |                |              | Overnight                     |           |               |
|-----------|-----------------------------|-------|----------------|--------------|-------------------------------|-----------|---------------|
|           | Funds Rate or Federal Funds |       |                |              | 3M Libor Treasury GCF O/N RRP |           |               |
|           | IOER Rate                   | Range | Effective Rate | O/N RRP Rate | Rate                          | Repo Rate | Usage (\$ bn) |
| 25th Pctl | 1.50%                       | 1.38% | 1.32%          | 1.25%        | 1.45%                         | 1.28%     | 150           |
| Median    | 1.50%                       | 1.50% | 1.50%          | 1.30%        | 1.75%                         | 1.45%     | 300           |
| 75th Pctl | 2.00%                       | 1.91% | 1.88%          | 1.75%        | 2.05%                         | 1.85%     | 406           |

#### 3 Years Following Liftoff

|           |                             | Target Federal | Overnight      |              |                             |           |               |
|-----------|-----------------------------|----------------|----------------|--------------|-----------------------------|-----------|---------------|
|           | Funds Rate or Federal Funds |                |                |              | 3M Libor Treasury GCF O/N R |           |               |
|           | IOER Rate                   | Range          | Effective Rate | O/N RRP Rate | Rate                        | Repo Rate | Usage (\$ bn) |
| 25th Pctl | 3.50%                       | 3.26%          | 3.30%          | 3.25%        | 3.50%                       | 3.30%     | 100           |
| Median    | 3.50%                       | 3.50%          | 3.50%          | 3.38%        | 3.75%                       | 3.55%     | 175           |
| 75th Pctl | 4.00%                       | 3.88%          | 3.95%          | 3.75%        | 4.15%                       | 3.90%     | 350           |

<sup>\*</sup>For dealers that submitted ranges, midpoints of the ranges are used. Complete responses only include responses that were specific numbers or ranges.

#### Please comment on your reaction to the release of the FOMC's Policy Normalization Principles and Plans.

#### (21 responses)

Many dealers noted that the Policy Normalization Principles and Plans were in line with prior Federal Reserve communications on the outlook for the normalization process. Several dealers noted that they had expected additional details on the O/N RRP facility, while several others noted that the document had been released earlier than they had expected.

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.

Several dealers expressed the view that a \$300 billion daily aggregate cap on O/N RRP usage would be insufficient during periods of elevated demand, and could compromise the facility's effectiveness in providing a floor under short-term interest rates. Some dealers highlighted their expectation that as interest rates increased and the level of excess reserves diminished, the facility would likely be phased out.

# 8. a) Provide your estimate for the most likely monthly pace of purchases that will be in effect after each of the below FOMC meetings.

# Monthly Pace of Longer-Term Security Purchases (\$ billions)

|      |                  |           | Treasuries | Agency MBS |
|------|------------------|-----------|------------|------------|
|      |                  | 25th Pctl | 0          | 0          |
|      | October 28-29:   | Median    | 0          | 0          |
| 2014 |                  | 75th Pctl | 0          | 0          |
| 20   |                  | 25th Pctl | 0          | 0          |
|      | December 16-17:  | Median    | 0          | 0          |
|      |                  | 75th Pctl | 0          | 0          |
|      |                  | 25th Pctl | 0          | 0          |
|      | January 27-28:   | Median    | 0          | 0          |
|      |                  | 75th Pctl | 0          | 0          |
|      |                  | 25th Pctl | 0          | 0          |
|      | March 17-18:     | Median    | 0          | 0          |
|      |                  | 75th Pctl | 0          | 0          |
|      |                  | 25th Pctl | 0          | 0          |
|      | April 28-29:     | Median    | 0          | 0          |
|      |                  | 75th Pctl | 0          | 0          |
| 2    |                  | 25th Pctl | 0          | 0          |
| 2015 | June 16-17:      | Median    | 0          | 0          |
| •    |                  | 75th Pctl | 0          | 0          |
|      |                  | 25th Pctl | 0          | 0          |
|      | July 28-29:      | Median    | 0          | 0          |
|      |                  | 75th Pctl | 0          | 0          |
|      |                  | 25th Pctl | 0          | 0          |
|      | September 16-17: | Median    | 0          | 0          |
|      |                  | 75th Pctl | 0          | 0          |
|      |                  | 25th Pctl | 0          | 0          |
|      | October 27-28:   | Median    | 0          | 0          |
|      |                  | 75th Pctl | 0          | 0          |

Please explain any changes to your expectations for the increments of pace reduction and/or any changes in the expected composition of Treasury and agency MBS purchases since the last survey on September 8:

Dealers did not provide substantial commentary in this section.

b) Provide the percent chance you attach to a reduction in asset purchase pace being announced at the October FOMC meeting.

|           | <b>Percent Chance</b> |  |  |  |  |
|-----------|-----------------------|--|--|--|--|
|           | of Reduction          |  |  |  |  |
| 25th Pctl | 91%                   |  |  |  |  |
| Median    | 95%                   |  |  |  |  |
| 75th Pctl | 99%                   |  |  |  |  |

c) Provide your expectation for the most likely change in the amount of domestic securities held in the SOMA portfolio during each of the periods below. In the case of purchases, include settled and unsettled amounts.2

# (21 Complete Responses)

|                                                        |                     | 2014<br>H2 | 2015<br>H1 | 2015<br>H2 | 2016<br>H1 | 2016<br>H2 | 2017<br>CY* |
|--------------------------------------------------------|---------------------|------------|------------|------------|------------|------------|-------------|
|                                                        |                     |            |            | (\$ bill   | ions)      |            |             |
| Change in the estimated amount                         | 25th Pctl portfolio | 60         | 0          | 0          | -143       | -73        | -196        |
| Change in the estimated amount of Treasuries:          | Median portfolio    | 60         | 0          | 0          | -70        | -53        | -205        |
|                                                        | 75th Pctl portfolio | 60         | 0          | 0          | 0          | -90        | -115        |
| Change in the estimated amount of agency debt and MBS: | 25th Pctl portfolio | 40         | 0          | 0          | -102       | -96        | -191        |
|                                                        | Median portfolio    | 40         | 0          | 0          | -60        | -90        | -158        |
|                                                        | 75th Pctl portfolio | 40         | 0          | 0          | -36        | -54        | -145        |
|                                                        | *Calendar Vear      |            |            |            |            |            |             |

d) 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 leave the fields blank. Please ensure your signs are correct.

<sup>&</sup>lt;sup>2</sup> Dealers provided their expected change in the SOMA portfolio of Treasuries and agency debt and MBS at each time horizon. The data is constructed by creating a portfolio level for each respondent at each time horizon based upon their responses. The 25th percentile, median, and 75th percentile portfolio level are then sampled at each time horizon. The data represent the changes in these portfolios at each time horizon.

# Most Likely Quarter and Year of **End to Reinvestments**

#### to Liftoff Agency Debt **Treasuries** 25th Pctl 5 Median 6

10

**Number of Months Relative** 

and MBS

4

6

7

| 25th | Pctl |
|------|------|
| Medi | an   |
| 75th | Pctl |

| Treasuries* | Agency Debt and |         |  |  |
|-------------|-----------------|---------|--|--|
|             | rreasuries      | MBS     |  |  |
|             | Q4 2015         | Q4 2015 |  |  |
|             | Q1 2016         | Q1 2016 |  |  |
|             | Q2 2016         | Q1 2016 |  |  |

\*Two dealers expect no end to reinvestments of Treasury securities

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 survey on September 8:

75th Pctl

### (19 responses)

Several dealers noted that they expect the size of the SOMA portfolio to be reduced through the cessation of reinvestments and that they do not expect outright sales of securities. Several other dealers noted that their expectations for the SOMA portfolio were unchanged from the prior survey.

9. Provide your estimate of the most likely outcome for output, inflation, and unemployment.

# (14 Complete Responses)

|                     |                                                 | Q4/Q4 | Q4/Q4 | Q4/Q4 | Q4/Q4 | Longer |
|---------------------|-------------------------------------------------|-------|-------|-------|-------|--------|
|                     |                                                 | 2014  | 2015  | 2016  | 2017  | Run    |
|                     | 25th Pctl                                       | 2.00% | 2.70% | 2.50% | 2.50% | 2.08%  |
| GDP:                | Median                                          | 2.10% | 2.95% | 2.80% | 2.60% | 2.23%  |
|                     | 75th Pctl                                       | 2.20% | 3.10% | 3.00% | 2.90% | 2.33%  |
|                     | 25th Pctl                                       | 1.50% | 1.80% | 1.90% | 2.00% |        |
| Core PCE:           | Median                                          | 1.55% | 1.90% | 2.00% | 2.05% |        |
|                     | 75th Pctl                                       | 1.60% | 2.08% | 2.20% | 2.20% |        |
|                     | 25th Pctl                                       | 1.30% | 1.73% | 2.00% | 2.00% | 2.00%  |
| Headline PCE:       | Median                                          | 1.60% | 1.85% | 2.00% | 2.15% | 2.00%  |
|                     | 75th Pctl                                       | 1.74% | 2.08% | 2.30% | 2.24% | 2.05%  |
|                     | 25th Pctl                                       | 5.80% | 5.20% | 5.00% | 5.00% | 5.40%  |
| Unemployment Rate*: | Median                                          | 5.90% | 5.40% | 5.20% | 5.30% | 5.50%  |
|                     | 75th Pctl                                       | 5.90% | 5.50% | 5.40% | 5.50% | 5.70%  |
|                     | *Average level of the unemployment rate ever O4 |       |       |       |       |        |

<sup>\*</sup>Average level of the unemployment rate over Q4.

10. For the outcomes below, provide the percent chance you attach to the annual average CPI inflation rate from 2019 - 2024. Please also provide your point estimate for the most likely outcome.

|         | ≤1.0% | 1.01- | 1.51- | 2.01- | 2.51- | ≥3.01% |
|---------|-------|-------|-------|-------|-------|--------|
|         |       | 1.5%  | 2.0%  | 2.5%  | 3.0%  |        |
| Average | 3%    | 11%   | 24%   | 35%   | 18%   | 9%     |

|           | Most Likely |  |  |  |
|-----------|-------------|--|--|--|
|           | Outcome     |  |  |  |
| 25th Pctl | 2.20%       |  |  |  |
| Median    | 2.20%       |  |  |  |
| 75th Pctl | 2.39%       |  |  |  |

# 11. a and b) What percent chance do you attach to the U.S. economy currently being in a recession? What percent chance do you attach to the U.S. economy being in a recession in 6 months?

|           | Currently in NBER Recession | ·         | NBER Recession in 6 Months |
|-----------|-----------------------------|-----------|----------------------------|
| 25th Pctl | 1%                          | 25th Pctl | 7%                         |
| Median    | 5%                          | Median    | 10%                        |
| 75th Pctl | 5%                          | 75th Pctl | 14%                        |