Responses to Survey of Primary Dealers

Markets Group, Federal Reserve Bank of New York December 2013

Responses to the Primary Dealer Policy Expectations Survey Distributed: 12/5/2013 – Received by: 12/9/2013

For most questions, median responses across dealers, along with the 25th and 75th percentiles, are reported. For questions that ask respondents to give a probability distribution, the average response across dealers for each potential outcome is reported.¹ For multiple choice questions, the number of responses for each option is reported. Brief summaries of the comments received in free response form have also been provided.

Except where noted, all primary dealers responded to each question. In some cases, dealers may not have forecasts extending to the same time horizon as requested in the survey. In these instances, the number of respondents who fully answered all parts of the question is provided.

Monetary Policy Expectations

1. a) The October FOMC statement contained information outlining the Committee's view on the economy as well as discussion of policy actions with regard to asset purchases and forward rate guidance. Provide below your expectations for changes, if any, to the language referencing each of these topics in the December FOMC statement. Limit your responses to changes you consider most likely.

Current economic conditions and the economic outlook:

Some dealers expected the language in the December FOMC statement to acknowledge better labor market data over the intermeeting period, while several dealers noted that the statement might contain a more positive outlook on the economy. Several dealers mentioned that the statement might make reference to the low level of inflation. Some other dealers expected no material changes.

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

Many dealers expected no changes to the language on the overall size, pace, and composition of asset purchases in the December FOMC statement. Several dealers expected the FOMC to introduce language regarding a reduction to the pace of asset purchases. Several others, who did not expect the pace to be reduced, thought that a timeline for the path of asset purchases would be provided.

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

Many dealers noted that they did not expect changes to the language on the expected path of policy rates and forward guidance on the target federal funds rate in the December FOMC statement. Several dealers believed that the statement would include changes to the current structure of forward guidance, with those dealers citing either the institution of an inflation floor, a lowering of the unemployment rate threshold, or further qualitative guidance on the path of policy rates.

Other: (3 responses)

Dealers did not provide substantial commentary in this section.

¹ Answers may not sum to 100 percent due to rounding.

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

Many dealers expected the range of unemployment projections in the Summary of Economic Projections (SEP) to be revised lower. Some dealers believed that there would be downward revisions to the inflation projections in the SEP, and several dealers expected upward revisions to the GDP projections. Dealers expected that the majority of these revisions would be to 2013 or 2014 projections. Several dealers noted that FOMC participants might project a later date for the first rate hike or a slower path of rate normalization thereafter.

c) What are your expectations for the Chairman's post-FOMC press conference?

Some dealers expected that the Chairman would provide additional information on how the pace of asset purchases could be reduced. Some dealers expected the Chairman to note that a reduction in the pace of asset purchases should not be interpreted as a tightening of monetary policy and that the FOMC employs multiple tools to provide monetary accommodation. Some dealers expected that the Chairman would discuss potential changes to the forward guidance for the federal funds rate. Several dealers noted that the press conference might include a more optimistic outlook for the economy. Several others stated that there might be mention of the low level of inflation in the context of the Federal Reserve's price stability mandate.

d) Taken together, how do you expect the FOMC events on December 18th (statement, SEP, press conference) 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 | | | | |
|--|---|--|--|--|
| 25th Pctl | 3 | | | |
| Median | 3 | | | |
| 75th Pctl | 3 | | | |

Several dealers noted that their expectations for the FOMC statement, SEP, and press conference, were in line with market beliefs and that the FOMC events would be perceived as neutral. Several dealers stated that any reduction in the pace of purchases would likely be offset by more accommodative forward guidance, leading to a neutral market reaction. Several others thought that a decision by the FOMC not to reduce the pace of purchases would be viewed as somewhat accommodative by the market, as they believed some probability of a reduction being announced at the December meeting was reflected in asset prices.

2. a) Of the possible outcomes below, provide the percent chance you attach to the timing of the first target federal funds rate increase.

| | H2 | H1 | H2 | H1 | H2 | H1 | H2 | H1 | ≥ H2 |
|---------|------|------|------|------|------|------|------|------|------|
| | 2013 | 2014 | 2014 | 2015 | 2015 | 2016 | 2016 | 2017 | 2017 |
| Average | 0% | 1% | 6% | 19% | 29% | 24% | 12% | 4% | 4% |

| | Most Likely Quarter and Year of First Target Rate Increase: |
|-----------|---|
| 25th Pctl | Q3 2015 |
| Median | Q4 2015 |
| 75th Pctl | Q1 2016 |

b) Provide your estimate of the most likely outcome (i.e., the mode) for the target federal funds rate or range at the end of each half-year period. 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.

| | H2 2013 | H1 2014 | H2 2014 | H1 2015 | H2 2015 | H1 2016 | H2 2016 | H1 2017 | H2 2017 | Longer Run | 10-yr Average FF Rate |
|-----------|------------|------------|------------|------------|------------|------------|------------|------------|------------|---------------|-----------------------------|
| 25th Pctl | 025% | 025% | 025% | 025% | 025% | 0.75% | 1.50% | 2.00% | 2.50% | 3.75% | 2.50% |
| Median | 025% | 025% | 025% | 025% | 0.50% | 1.25% | 1.75% | 2.50% | 3.00% | 4.00% | 2.75% |
| 75th Pctl | 025% | 025% | 025% | 025% | 0.75% | 1.50% | 2.25% | 3.00% | 3.75% | 4.00% | 2.90% |

c) If you changed your expectations for the most likely timing of the first target rate increase or the most likely path of the target rate since the last survey on October 22, explain the factors that motivated you to make the change(s).

(17 responses)

Some dealers made no change to their expectations for their most likely timing of the first target rate increase. Some dealers pushed out the most likely timing for the first target rate increase or revised lower the most likely path of the target rate. These dealers cited persistently low inflation, recent communications from FOMC participants, and research papers released by Federal Reserve staff as driving these changes.

3. 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, as well as your estimate for the most likely value. Assume that the rate of inflation between one and two years ahead remains below 2.5 percent and longer-term inflation expectations remain well anchored prior to the first increase. Consider all possible conditions that may be associated with these scenarios in formulating your responses.

| | | | | | Most Likely Value for UNR at Liftoff |
|---------|---------|-------|---------|-----------|--------------------------------------|
| | < 6.0% | 6.0 - | > 6 5% | 25th Pctl | 5.8% |
| | < 0.070 | 6.5% | > 0.370 | Median | 6.0% |
| Average | 45% | 48% | 7% | 75th Pctl | 6.1% |

4. a) The minutes of the October 2013 FOMC meeting noted that the Committee discussed, "the potential for clarifying or strengthening the Committee's forward guidance for the federal funds rate," and cited the options listed below. Provide the percent chance you attach to the Committee clarifying or strengthening its current forward guidance for the target federal funds rate in any of the following ways at some point in the future.

. .

| | Option 1 | Option 2 | Option 3 | Option 4 | Other | |
|-----------|---|----------------------|----------|----------|-------|--|
| 25th Pctl | 30% | 30% | 40% | 40% | 0% | |
| Median | 50% | 40% | 60% | 55% | 0% | |
| 75th Pctl | 60% | 55% | 75% | 80% | 0% | |
| Option 1: | Lowering the unemp | oyment rate threshol | d. | | | |
| Option 2: | Stating that the target for the federal funds rate would not be raised so long as the inflation rate is expected to run below a given level. | | | | | |
| Option 3: | Providing further guidance on information relevant to determining the appropriate timing of the first rate hike after the UNR threshold is reached. | | | | | |

Option 4: Indicating in the statement that the Committee anticipates keeping target rate below its longer-run equilibrium value for some time after the first rate hike.

If 'Other', please explain:

Dealers did not provide substantial commentary in this section.

b) If you see any possibility of the FOMC statement clarifying or strengthening the forward guidance for the federal funds rate as described above, provide your estimate of the most likely meeting at which the change would occur. If you expect multiple changes, provide the timing of the first change only.

| | Most Likely Meeting: |
|-----------|----------------------|
| 25th Pctl | December 2013 |
| Median | January 2014 |
| 75th Pctl | March 2014 |

c) The minutes of the October FOMC meeting noted that most FOMC participants thought that a reduction in the interest rate paid on excess reserves (IOER) could be, "worth considering at some stage..." Provide the probability you assign to the Board of Governors cutting the IOER rate from its current level.

| | Probability of a Reduction in IOER |
|-----------|---------------------------------------|
| 25th Pctl | 10% |
| Median | 20% |
| 75th Pctl | 25% |

5) 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 2014 and 2015.

| | Year End 2014 | | | | | | |
|---------|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|---------|
| | < 2.00% | 2.00 - 2.50% | 2.51 - 3.00% | 3.01 - 3.50% | 3.51 - 4.00% | 4.01 - 4.50% | > 4.50% |
| Average | 3% | 8% | 19% | 32% | 24% | 9% | 4% |
| | | | Y | ear End 201 | 15 | | |
| | < 2.50% | 2.51 - 3.00% | 3.01 - 3.50% | 3.51 - 4.00% | 4.01 - 4.50% | 4.51 - 5.00% | > 5.00% |
| Average | 7% | 11% | 18% | 27% | 24% | 10% | 4% |

- 6) In the October FOMC statement, the Committee announced it will continue purchasing additional agency mortgage-backed securities at a pace of \$40 billion per month and longer-term Treasury securities at a pace of \$45 billion per month, and also stated that decisions about the pace, "will remain contingent on the Committee's economic outlook as well as its assessment of the likely efficacy and costs of such purchases."
 - 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 | | |
| ო _ | | 25th Pctl | 45 | 40 | | |
| 2 | December 17-18: | Median | 45 | 40 | | |
| | | 75th Pctl | 45 | 40 | | |
| | | 25th Pctl | 35 | 35 | | |
| | January 28-29: | Median | 45 | 40 | | |
| | | 75th Pctl | 45 | 40 | | |
| | | 25th Pctl | 30 | 30 | | |
| | March 18-19: | Median | 35 | 35 | | |
| | | 75th Pctl | 35 | 35 | | |
| | | 25th Pctl | 25 | 25 | | |
| | April 29-30: | Median | 30 | 30 | | |
| | | 75th Pctl | 35 | 35 | | |
| | | 25th Pctl | 15 | 15 | | |
| | June 17-18: | Median | 20 | 20 | | |
| 14 | | 75th Pctl | 25 | 25 | | |
| 20 | | 25th Pctl | 10 | 5 | | |
| | July 29-30: | Median | 15 | 15 | | |
| | | 75th Pctl | 20 | 20 | | |
| | | 25th Pctl | 0 | 0 | | |
| | September 16-17: | Median | 0 | 0 | | |
| | | 75th Pctl | 10 | 15 | | |
| | | 25th Pctl | 0 | 0 | | |
| | October 28-29: | Median | 0 | 0 | | |
| | | 75th Pctl | 5 | 10 | | |
| | December 16-17 | 25th Pctl | 0 | 0 | | |
| | (1 year ahead) | Median | 0 | 0 | | |
| _ | | 75th Pctl | 0 | 0 | | |

Please explain any changes to your assumptions behind the increments of pace reduction and any changes in the expected composition of Treasury and agency MBS purchases since the last survey on October 22.

(20 responses)

Some dealers made no change to their expectations for the most likely pace of purchases; however, several of these dealers noted they changed the distribution of probabilities they assigned to the timing of the first reduction in purchase pace. Several other dealers did move forward their expectation for the timing of the first cut in pace. Several dealers expected that the FOMC would reduce the pace of Treasury purchases more rapidly than MBS purchases.

b) Provide the percent chance you attach to the first reduction in pace being announced at each of the FOMC meetings below.

| | Dec 13 | Jan 14 | Mar 14 | Apr 14 | > Apr 14 |
|-----------------------|--------|--------|--------|--------|----------|
| Treasuries, average : | 25% | 27% | 30% | 10% | 8% |
| Agency MBS, average : | 18% | 27% | 31% | 13% | 11% |

c) What is your estimate for the realized values of the following economic indicators at the time you expect the FOMC to announce the first reduction in the pace of asset purchases and at the time you expect asset purchases to be completed? When specifying values below, provide your estimate consistent with the last published value prior to the announcement of the two events.

| | First Reduction in Monthly Pace of Asset Purchases | | | | | |
|-----------|---|--|---|--|--|--|
| | Total U.S. employees on nonfarm payrolls (in millions): | Level of the unemployment rate (in ppt): | Annual rate of change in PCE deflator (in ppt): | | | |
| 25th Pctl | 137.0 | 6.9% | 0.9% | | | |
| Median | 137.3 | 7.0% | 1.0% | | | |
| 75th Pctl | 137.5 | 7.0% | 1.2% | | | |

| | | Completion of Asset Purchases | |
|-----------|---|--|---|
| | Total U.S. employees on nonfarm payrolls (in millions): | Level of the unemployment rate (in ppt): | Annual rate of change in PCE deflator (in ppt): |
| 25th Pctl | 138.6 | 6.4% | 1.4% |
| Median | 138.8 | 6.6% | 1.5% |
| 75th Pctl | 139.2 | 6.7% | 1.7% |

d) 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 | | | | | | | |
|--|------------|---------------|--|--|--|--|--|
| | Treasuries | Agency MBS | | | | | |
| 25th Pctl | 40 | 40 | | | | | |
| Median | 45 | 40 | | | | | |
| 75th Pctl | 45 | 40 | | | | | |

Several dealers noted that no change in the purchase pace was expected at the December meeting, and that such an outcome would not result in significant yield movements. If a small reduction in purchase pace were announced, several dealers expected limited price action given that market expectations for such an action at upcoming meetings had increased. Several other dealers stated that any reduction in the pace of purchases would increase Treasury yields modestly; some noted, however, that pairing a pace reduction with strengthened forward guidance would limit the overall impact on yields.

e) 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

| | | 2015 H1 | 2015 H2 | 2016 CY* | 2017 CY* | 2018 CY* |
|--------------------------------|---------------------|------------|------------|-------------|-------------|-------------|
| | | | (9 | \$ billion | s) | |
| Change in the estimated amount | 25th Pctl portfolio | -1 | -2 | -217 | -213 | -349 |
| of Treasuries: | Median portfolio | 3 | -3 | -197 | -199 | -330 |
| or measures. | 75th Pctl portfolio | 14 | -17 | -159 | -170 | -356 |
| Change in the estimated amount | 25th Pctl portfolio | -13 | -46 | -211 | -196 | -191 |
| of agency debt and MBS. | Median portfolio | -20 | -50 | -155 | -128 | -142 |
| or agoney debt and MDC. | 75th Pctl portfolio | -8 | -43 | -120 | -118 | -138 |
| | *Calendar Year | | | | | |

Please explain your assumptions behind your projections for the timing, size, and pace of redemptions and sales of securities, if applicable. Please note if your assumptions have changed since the last survey:

(19 responses)

Several dealers expected purchases to end in the second half of 2014. Some dealers expected the level of the SOMA portfolio to start declining in 2015, while several others expected declines to begin in 2016. Some dealers also provided details regarding their assumptions behind the pace and magnitude of portfolio declines. Some dealers stated that they believed asset sales were unlikely during the process of balance sheet normalization. Some dealers had no changes from their prior survey.

7) a) The FOMC's September 2013 Summary of Economic Projections shows the central tendency of expectations for the unemployment rate at the end of 2014 ranging from 6.4 to 6.8 percent. Provide the percent chance you attach to the unemployment rate corresponding to the following hypothetical scenarios at year-end 2014: 1) it declines to less than 6.4 percent; 2) it falls within the 6.4 to 6.8 percent range; and 3) it remains above 6.8 percent. Consider all possible conditions that may be associated with these scenarios in providing your responses.

b) Provide the percent chance you attach to the dollar level of the SOMA portfolio falling within the following ranges at year-end 2015 for each of three hypothetical unemployment rate scenarios described in part a). For your reference, the level of the SOMA portfolio including inflation accretion and settled and unsettled agency MBS according to the October 3, 2013 H.4.1 release was \$3,567 billion (the H.4.1 closest to the end of Q3 2013).

² Respondents provided their expected change in the SOMA portfolio of Treasuries and agency debt and MBS at each time horizon. The above 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 above data represent the changes in these portfolios at each time horizon.

| | | Year End 2015 (\$ billions) | | | | | | | |
|---------------------------------------|---------|-----------------------------|---------------|---------------|---------------|---------------|---------------|---------------|-------|
| Unemployment rate at year-end 2014 | | <3500 | 3500 -3750 | 3750- 4000 | 4000- 4250 | 4250- 4500 | 4500- 4750 | 4750- 5000 | >5000 |
| Less than 6.4 percent | Average | 1% | 3% | 12% | 36% | 36% | 10% | 2% | 1% |
| Between 6.4 and 6.8 percent | Average | 0% | 1% | 8% | 31% | 41% | 15% | 3% | 1% |
| Greater than 6.8 percent | Average | 0% | 0% | 4% | 21% | 45% | 22% | 6% | 2% |

c) Of the possible outcomes below, provide the percent chance you attach to the SOMA portfolio level falling in each of the following ranges at year-end 2014. Probabilities for the year-end 2015 level of the SOMA portfolio are automatically calculated using the responses you provided in parts a) and b) and the rules of conditional probability. These probabilities should be consistent with your views; if they are not, verify your responses from parts a) and b).

| | | | | Year En | d 2014 | | | |
|---------|-------|---------------|---------------|---------------|---------------|---------------|---------------|-------|
| | <3500 | 3500- 3750 | 3750- 4000 | 4000- 4250 | 4250- 4500 | 4500- 4750 | 4750- 5000 | >5000 |
| Average | 0% | 1% | 7% | 30% | 39% | 18% | 4% | 1% |
| | | | | Year En | d 2015 | | | |
| | <3500 | 3500- 3750 | 3750- 4000 | 4000- 4250 | 4250- 4500 | 4500- 4750 | 4750- 5000 | >5000 |
| Average | 0% | 1% | 9% | 31% | 40% | 14% | 3% | 1% |

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

(15 complete responses)

| | | Q4/Q4 2013 | Q4/Q4 2014 | Q4/Q4 2015 | Q4/Q4 2016 | Longer Run |
|---------------------|-----------|---------------|---------------|---------------|---------------|---------------|
| | 25th Pctl | 2.10% | 2.40% | 2.60% | 2.65% | 2.20% |
| GDP: | Median | 2.10% | 2.80% | 2.80% | 2.80% | 2.25% |
| | 75th Pctl | 2.20% | 3.00% | 3.00% | 3.00% | 2.50% |
| | 25th Pctl | 1.20% | 1.50% | 1.70% | 1.90% | |
| Core PCE: | Median | 1.20% | 1.60% | 1.80% | 2.00% | |
| | 75th Pctl | 1.20% | 1.80% | 1.90% | 2.00% | |
| | 25th Pctl | 0.90% | 1.50% | 1.70% | 1.90% | 2.00% |
| Headline PCE: | Median | 1.00% | 1.70% | 1.80% | 2.00% | 2.00% |
| | 75th Pctl | 1.00% | 1.80% | 2.00% | 2.20% | 2.00% |
| | 25th Pctl | 7.10% | 6.40% | 5.90% | 5.60% | 5.50% |
| Unemployment Rate*: | Median | 7.10% | 6.50% | 6.00% | 5.80% | 5.80% |
| | 75th Pctl | 7.10% | 6.60% | 6.10% | 6.00% | 6.00% |

*Average level of the unemployment rate over Q4.

9) For the outcomes below, provide the percent chance you attach to the annual average CPI inflation rate from 2018-2023. Please also provide your point estimate for the most likely outcome.

| _ | ≤1.0% | 1.01-1.5% | 1.51-2.0% | 2.01-2.5% | 2.51-3.0% | ≥3.01% |
|---------|-------|-----------|------------|-----------|-----------|--------|
| Average | 4% | 10% | 25% | 33% | 19% | 9% |
| | | | | | | |
| | | _ | Point Esti | mate | | |
| | | 25th Pctl | 2.00% | 6 | | |
| | | Median | 2.10% | 6 | | |
| | | 75th Pctl | 2.38% | 6 | | |
| | | | | | | |

10) a) *and* b) What percent chance do you attach to the US economy currently being in a recession (NBERdefined)? What percent chance would you attach to the US economy being in a recession in 6 months (NBER-defined)?

| | Currently in | | NBER Recession |
|-----------|----------------|-----------|----------------|
| | NBER Recession | | in 6 Months |
| 25th Pctl | 1% | 25th Pctl | 8% |
| Median | 5% | Median | 10% |
| 75th Pctl | 5% | 75th Pctl | 15% |