

Responses to Survey of Primary Dealers

Markets Group, Federal Reserve Bank of New York

December 2014

Responses to Survey of Primary Dealers

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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 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

1. a) **Provide below your expectations for changes, if any, to the language referencing each of the following 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 that the language in the FOMC statement would make note of further improvement in the labor market. Several dealers expected the statement to reflect a more optimistic tone with regard to current economic conditions and the economic outlook. Several dealers anticipated that the statement would reference continued energy price declines.

Communication on the Committee's policy of reinvesting principal payments on Treasury and agency securities:

Most dealers made note of their expectation that there would be no significant change to the Committee's policy of reinvesting Treasury and agency securities.

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

Many dealers expected that the Committee would alter or remove the language referencing "considerable time" in the December statement. Several dealers anticipated that the FOMC would note that the timing of liftoff continues to be data dependent.

Other: (5 responses)

Dealers did not provide substantial commentary in this section.

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

Many dealers anticipated that FOMC participants' economic projections would reflect higher expected near-term GDP growth and lower headline PCE inflation. Some dealers expected lower core PCE inflation projections and a lower projected path for the unemployment rate.

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

c) What are your expectations for the release of FOMC participants' year-end target federal funds rate projections in the advance materials of the Summary of Economic Projections (SEP)?

Some dealers expected that there would be no significant changes to FOMC participants' year-end target federal funds rate projections, with several of these dealers noting that the impact of improved growth and lower inflation would largely offset each other. Several dealers anticipated that there would be a shift upward in the median of FOMC participants' year-end target federal funds rate projections for 2015 and 2016, while several other dealers expected that there would be a shift downward in projections for this period.

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

Several dealers anticipated that if the language on "considerable time" were removed from the statement, the Chair would stress the Committee's desire to remain patient in determining the appropriate timing of liftoff. Several dealers expected that the Chair would emphasize a continued data-dependent approach to monetary policy normalization, and several expected the Chair to provide further detail on economic conditions that are expected to prevail at the time of liftoff. Several dealers noted their expectation for the Chair to provide an assessment of the impact of falling oil prices on the U.S. economy, while several others expected the Chair to note further improvement in labor market conditions.

e) How do you expect the December 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	
25th Pctl	2
Median	2
75th Pctl	3

Please explain:

Many dealers anticipated that, following the December FOMC events, the stance of monetary policy would be perceived by the market as being less accommodative. The potential for the Committee to alter or remove the reference to "considerable time", as well as the potential for the FOMC events to reinforce expectations for liftoff in mid-2015, were each cited by several dealers as a reason for this view. Several dealers noted that they did not expect any significant change in market perceptions following the December FOMC events.

2. 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.

	Dec. 16-17, 2014	Jan. 27-28, 2015	Mar. 17-18, 2015	Apr. 28-29, 2015	Jun. 16-17, 2015	Jul. 28-29, 2015	Sep. 16-17, 2015	Oct. 27-28, 2015	Dec. 15-16, 2015	≥2016
Average	0%	0%	7%	7%	26%	8%	19%	6%	12%	14%

**Most Likely Meeting of
First Increase in Target
Rate or Range**

25th Pctl	June 2015
Median	June 2015
75th Pctl	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.

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

25th Pctl	80%
Median	83%
75th Pctl	90%

First Year Following Liftoff*

	0 - 50 basis points	51 - 100 basis points	101 - 150 basis points	151 - 200 basis points	>200 basis points
Average	10%	33%	30%	20%	6%

**Conditional on not returning to ZLB*

Second Year Following Liftoff*

	0 - 50 basis points	51 - 100 basis points	101 - 150 basis points	151 - 200 basis points	>200 basis points
Average	9%	24%	27%	25%	14%

**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.

(20 Complete Responses)

Top of Target Range

	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 H1	2016 H2	2017 H1	2017 H2	2018 H1
25th Pctl	0.25%	0.25%	0.25%	0.50%	0.75%	1.25%	1.78%	2.30%	3.00%	3.28%
Median	0.25%	0.25%	0.50%	0.75%	1.00%	1.50%	2.25%	2.50%	3.25%	3.50%
75th Pctl	0.25%	0.25%	0.50%	0.75%	1.00%	1.75%	2.50%	3.25%	3.50%	3.88%
# of Responses	21	21	21	21	20	17	16	13	13	12

Bottom of Target Range

	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 H1	2016 H2	2017 H1	2017 H2	2018 H1
25th Pctl	0.00%	0.00%	0.00%	0.25%	0.50%	1.00%	1.60%	2.20%	2.75%	3.10%
Median	0.00%	0.00%	0.25%	0.50%	0.75%	1.25%	2.00%	2.25%	3.00%	3.25%
75th Pctl	0.00%	0.00%	0.25%	0.50%	0.75%	1.50%	2.25%	3.00%	3.25%	3.63%
# of Responses	21	21	21	21	20	17	16	13	13	12

Target Rate

	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 H1	2016 H2	2017 H1	2017 H2	2018 H1
25th Pctl	0.25%	0.25%	0.50%	0.75%	1.00%	1.50%	2.00%	2.50%	2.75%	3.00%
Median	0.25%	0.25%	0.50%	0.75%	1.00%	1.75%	2.25%	3.00%	3.25%	3.63%
75th Pctl	0.25%	0.25%	0.50%	0.75%	1.00%	2.00%	2.88%	3.00%	3.50%	3.88%
# of Responses	1	1	1	1	2	5	6	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 Run	10-yr Average FF Rate
25th Pctl	3.50%	2.50%
Median	3.50%	2.84%
75th Pctl	4.00%	3.20%

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.

		Year-End 2015						
		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%
Average		15%	24%	37%	17%	5%	1%	0%
		Year-End 2016						
		≤0.50%	0.51 - 1.00%	1.01 - 1.50%	1.51 - 2.00%	2.01 - 2.50%	2.51 - 3.00%	≥3.01%
Average		4%	9%	19%	22%	26%	15%	4%
		Year-End 2017						
		≤2.00%	2.01 - 2.50%	2.51 - 3.00%	3.01 - 3.50%	3.51 - 4.00%	4.01 - 4.50%	≥4.51%
Average		12%	20%	22%	19%	16%	9%	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):

Many dealers noted that their expectations had not materially changed since the prior survey.

3. 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.

(19 complete responses)

		Year-End 2014						
		≤2.00%	2.01-2.50%	2.51-3.00%	3.01-3.50%	3.51-4.00%	4.01-4.50%	>4.50%
Average		10%	63%	24%	3%	0%	0%	0%

		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%
Average		18%	36%	29%	11%	4%	1%	1%

If you changed your expectations for question 3 since the last time the question was asked on September 4, explain the factors that motivated you to make the changes.

Several dealers noted that the current low level of the 10-year Treasury yield and the approach of year-end led them to revise down their expectations for the level of yields at year-end. Several dealers cited heightened global growth concerns and low domestic inflation as contributing to downward revisions in their expectations for the 10-year Treasury yield at the end of 2014 and 2015.

4. a) Provide your estimate of the most likely outcome for the 10-year Treasury yield at the end of each period below. In addition, provide your estimate of the longer-run level of the 10-year Treasury yield.

(20 complete responses)

		10-Year Treasury Yield										
		2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 H1	2016 H2	2017 H1	2017 H2	2018 H1	Longer Run
25th Pctl		2.25%	2.50%	2.63%	2.70%	2.80%	3.00%	3.08%	3.20%	3.25%	3.50%	3.75%
Median		2.30%	2.60%	2.78%	2.88%	2.93%	3.13%	3.44%	3.65%	3.75%	4.00%	4.00%
75th Pctl		2.40%	2.65%	2.90%	3.00%	3.20%	3.45%	3.65%	3.85%	4.10%	4.00%	4.25%

- b) Provide your estimate of the most likely outcome for the 30-year fixed primary mortgage rate at the end of each period below. In addition, provide your estimate of the longer-run level of the 30-year fixed primary mortgage rate.

(20 complete responses)

		30-Year Fixed Primary Mortgage Rate										
		2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 H1	2016 H2	2017 H1	2017 H2	2018 H1	Longer Run
25th Pctl		3.91%	4.00%	4.20%	4.25%	4.40%	4.65%	4.85%	5.00%	5.00%	5.10%	5.30%
Median		4.00%	4.25%	4.35%	4.45%	4.50%	4.75%	5.00%	5.25%	5.45%	5.63%	5.65%
75th Pctl		4.10%	4.30%	4.46%	4.66%	4.79%	5.10%	5.33%	5.50%	5.75%	5.70%	6.00%

5. Following the release of the advance materials of the September Summary of Economic Projections, the path of the federal funds rate as implied by futures contracts was below the median target rates (or midpoints of

the target ranges) provided in the overview of FOMC participants' assessments of appropriate monetary policy.

Please rate the importance of each of the following factors in explaining the difference between the medians in the SEP and the market-implied rate path (1 = not important, 5 = very important).

	Possibility of Target Rate Remaining at the Zero Lower Bound	Market Rates Incorporate Negative Term Premia	The SEP Median Does Not Necessarily Reflect the Committee's Forecast	Differences in the Outlook for the U.S. Economy	Technical Factors	Other (8 Responses)
Average	3.3	2.1	3.5	3.6	2.2	4.1

If other, please explain: (8 responses)

Dealers did not provide substantial commentary in this section.

6. a) Provide the percent chance you attach to the Committee further modifying the forward-guidance language on the path of the policy rate prior to liftoff, as appropriate, 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 Prior to Liftoff	December 2014 FOMC	January 2015 FOMC	March 2015 FOMC	> March 2015 FOMC
Average	1%	52%	18%	22%	8%

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

Many dealers anticipated that the FOMC would remove the language referencing "considerable time" prior to liftoff.

- 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?

Many dealers anticipated that financial conditions would tighten modestly if the forward guidance is changed in the way they consider most likely. Several dealers expected that there would not be a significant impact from a change to the forward guidance.

7. Since September 2, various measures of the 5-year/5 year forward breakeven rate of inflation have declined roughly 35 basis points. Provide your estimate of the decomposition of this decline. Please ensure your signs are correct.

(21 responses)

	Expected Average CPI Inflation	Inflation Risk Premium	Other Risk Premia	Sum
Average	-17	-13	-5	-35

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

Many dealers cited the decline in energy prices as driving the decline in the expected average CPI inflation rate. Several dealers noted U.S. dollar strength, while several other dealers cited global growth concerns.

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

Some dealers noted the decline in energy prices as driving the decline in the inflation risk premium, while several other dealers cited heightened downside risk to the global growth and inflation outlook.

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

Some dealers noted liquidity conditions in the TIPS market as contributing to changes in their estimates of other risk premia. Several other dealers noted global factors, such as continued concerns over the global economic outlook and geopolitical concerns, as contributing to changes in their estimates.

8. 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.

	< 5.5%	5.5 - 5.9%	6.0 - 6.5%	> 6.5%
Average	51%	42%	6%	1%

- 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%
Average	4%	18%	51%	23%	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 October, seasonally adjusted, was 139.7 million. For your calculations, please take into account the November data to be released on December 5.

	Unemployment Rate	Labor Force Participation Rate	Total NFP*	12-Month Change in Average Hourly Earnings	Headline 12-Month PCE Inflation	Inflation Between 1 and 2 Years Ahead
25th Pctl	5.3%	62.8%	141.4	2.3%	1.0%	2.0%
Median	5.4%	62.8%	141.6	2.5%	1.2%	2.0%
75th Pctl	5.6%	63.0%	142.1	2.8%	1.6%	2.1%

*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"*.

(19 complete responses)

	One Quarter Prior to Liftoff						
	IOER Rate	Target Federal Funds Rate or Range	Federal Funds Effective Rate	O/N RRP Rate	3M LIBOR Rate	Overnight Treasury GCF Repo Rate	O/N RRP Usage (\$ bn)
	25th Pctl	0.25%	0.13%	0.10%	0.05%	0.24%	0.08%
Median	0.25%	0.13%	0.12%	0.05%	0.25%	0.10%	155
75th Pctl	0.25%	0.13%	0.13%	0.08%	0.30%	0.15%	200

	Immediately Following Liftoff						
	IOER Rate	Target Federal Funds Rate or Range	Federal Funds Effective Rate	O/N RRP Rate	3M LIBOR Rate	Overnight Treasury GCF Repo Rate	O/N RRP Usage (\$ bn)
	25th Pctl	0.50%	0.38%	0.30%	0.25%	0.50%	0.30%
Median	0.50%	0.38%	0.35%	0.25%	0.55%	0.30%	275
75th Pctl	0.50%	0.38%	0.38%	0.25%	0.64%	0.36%	300

	1 Year Following Liftoff						
	IOER Rate	Target Federal Funds Rate or Range	Federal Funds Effective Rate	O/N RRP Rate	3M LIBOR Rate	Overnight Treasury GCF Repo Rate	O/N RRP Usage (\$ bn)
	25th Pctl	1.50%	1.38%	1.35%	1.25%	1.50%	1.30%
Median	1.75%	1.50%	1.50%	1.35%	1.95%	1.45%	250
75th Pctl	2.00%	1.88%	1.90%	1.75%	2.15%	1.85%	325

	3 Years Following Liftoff						
	IOER Rate	Target Federal Funds Rate or Range	Federal Funds Effective Rate	O/N RRP Rate	3M LIBOR Rate	Overnight Treasury GCF Repo Rate	O/N RRP Usage (\$ bn)
	25th Pctl	3.25%	2.94%	3.15%	3.20%	3.15%	3.10%
Median	3.50%	3.38%	3.40%	3.25%	3.50%	3.35%	150
75th Pctl	4.00%	3.56%	3.95%	3.75%	4.05%	3.90%	300

*For dealers that submitted ranges, midpoints of the ranges are used. (Complete responses only include responses that were specific numbers or ranges.)

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.

(19 Responses)

Several dealers noted that their expectations for the normalization process were largely consistent with the Committee's Policy Normalization Principles and Plans released following the September FOMC meeting. Several dealers noted their expectation that the size of the O/N RRP facility will continue to remain limited, that usage will decline over time, and that eventually the facility will be phased out. Several dealers noted the potential for segregated accounts to be used during the normalization process.

e) On December 1, the Desk released a statement indicating that it would conduct a series of term RRP operations maturing on January 5, 2015, in order to examine how term RRP operations might work as a supplementary tool to help control the federal funds rate. Please discuss how you expect these operations to impact money market functioning and your expectations for various money market rates at year-end.

Many dealers expected that term RRP operations will ease funding conditions around year-end. While some of these dealers still expected year-end to exert downward pressure on short term-rates, these dealers expected term RRP

operations to support a higher level of short-term interest rates than would otherwise be the case. Several dealers expected that the term RRP operations would be fully subscribed.

9. 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.

	Most Likely Quarter and Year of End to Reinvestments			Number of Months Relative to Liftoff	
	Treasuries*	Agency Debt and MBS		Treasuries	Agency Debt and MBS
25th Pctl	Q4 2015/Q1 2016**	Q4 2015	25th Pctl	6	4
Median	Q1 2016	Q1 2016	Median	6	6
75th Pctl	Q2/Q3 2016**	Q1 2016	75th Pctl	11	7

*Two dealers expect no end to reinvestments of Treasury securities
 **25th pctl is between Q4 2015 and Q1 2016.
 **75th pctl is between Q2 2016 and Q3 2016.

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 October 20:

Several dealers noted that there was no change in their expectations from the prior survey. Several other dealers noted that they did not anticipate the sale of securities during the process of policy normalization.

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

(17 complete responses)

		Q4/Q4 2014	Q4/Q4 2015	Q4/Q4 2016	Q4/Q4 2017	Longer Run
GDP:	25th Pctl	2.10%	2.70%	2.50%	2.50%	2.00%
	Median	2.20%	2.85%	2.70%	2.50%	2.25%
	75th Pctl	2.30%	3.20%	2.90%	2.80%	2.35%
Core PCE Deflator:	25th Pctl	1.50%	1.70%	1.90%	1.90%	
	Median	1.60%	1.85%	2.00%	2.00%	
	75th Pctl	1.60%	2.00%	2.10%	2.20%	
Headline PCE Deflator:	25th Pctl	1.20%	1.40%	1.90%	2.00%	2.00%
	Median	1.30%	1.60%	2.00%	2.05%	2.00%
	75th Pctl	1.40%	1.90%	2.20%	2.20%	2.00%
Unemployment Rate*:	25th Pctl	5.70%	5.00%	4.90%	4.80%	5.20%
	Median	5.80%	5.30%	5.00%	5.10%	5.34%
	75th Pctl	5.80%	5.40%	5.20%	5.30%	5.50%

*Average level of the unemployment rate over Q4.

11. a) For the outcomes below, provide the percent chance you attach to the annual average CPI inflation rate from January 1, 2015 - December 31, 2019. 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%	13%	30%	34%	14%	6%

	Most Likely Outcome
25th Pctl	2.00%
Median	2.15%
75th Pctl	2.20%

b) For the outcomes below, provide the percent chance you attach to the annual average CPI inflation rate from January 1, 2020 - December 31, 2024. 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	3%	10%	25%	38%	17%	7%

	Most Likely Outcome
25th Pctl	2.00%
Median	2.20%
75th Pctl	2.30%

12. a, b, and c) 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?
 What percent chance do you attach to the U.S. economy being in a recession sometime over the next 3 years? (NBER-defined)

	Currently in NBER Recession	NBER Recession in 6 Months	NBER Recession in 3 Years
25th Pctl	0%	5%	20%
Median	2%	10%	30%
75th Pctl	5%	10%	30%