Responses to Survey of Primary Dealers

Markets Group, Federal Reserve Bank of New York

September 2015

Responses to Survey of Primary Dealers
Distributed: 09/03/2015 – Received by: 09/08/2015

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 September FOMC statement. Limit your responses to changes you consider most likely.

Current economic conditions and the economic outlook:

Several dealers expected the September FOMC statement to note a continued moderate expansion in economic growth, while several dealers expected the statement to reflect an upgrade to the Committee's characterization of business fixed investment. Additionally, several dealers expected the statement to reference recent levels of low inflation, while several also expected it to acknowledge recent international developments and financial market volatility. Lastly, several dealers expected the statement to reference continued improvements in the labor market, while some dealers expected there to be no material changes to most aspects of the September FOMC statement.

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

Most dealers expected no change to the Committee's policy of reinvesting principal payments on Treasury and agency securities in the September FOMC statement.

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

Some dealers expected no change in the Committee's communication on the expected path of policy rates and/or forward guidance on the target federal funds rate. Several dealers expected the statement to include language that the expected pace of policy normalization will likely be gradual. Several dealers expected the statement to indicate that the Committee will remain data dependent in determining the appropriate stance of policy.

Other:
(10 responses)

Dealers did not provide substantial commentary in this section.

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

b) The July FOMC meeting minutes indicated that FOMC participants unanimously supported a proposal for publishing median values of all variables included in the Summary of Economic Projections (SEP) starting at the time of the September FOMC meeting. What are your expectations for the medians of FOMC participants' economic projections in the Summary of Economic Projections (SEP)?
(21 responses)

Change in real GDP

	2015	2016	2017	2018	Longer Run
25th Pctl	2.20%	2.50%	2.20%	2.10%	2.00%
Median	2.30%	2.50%	2.30%	2.15%	2.15%
75th Pctl	2.30%	2.50%	2.30%	2.30%	2.20%

Unemployment rate

	2015	2016	2017	2018	Longer Run
25th Pctl	5.00%	4.90%	4.80%	4.80%	5.00%
Median	5.05%	4.90%	4.90%	4.90%	5.00%
75th Pctl	5.10%	5.00%	5.00%	5.00%	5.10%

PCE inflation

	2015	2016	2017	2018	Longer Run
25th Pctl	0.50%	1.60%	1.90%	2.00%	2.00%
Median	0.60%	1.70%	1.90%	2.00%	2.00%
75th Pctl	0.70%	1.80%	1.90%	2.00%	2.00%

Core PCE inflation

	2015	2016	2017	2018
25th Pctl	1.30%	1.70%	1.90%	2.00%
Median	1.30%	1.70%	1.90%	2.00%
75th Pctl	1.40%	1.75%	1.95%	2.00%

Please explain:
(21 responses)

Some dealers expected that FOMC participants' economic projections for 2015 would be adjusted in response to recent data releases, with several noting their expectation that participants' forecasts for 2015 GDP growth would likely increase, while their forecasts for the 2015 unemployment rate would likely decline. Several dealers noted their expectation that FOMC participants' projections for PCE inflation would likely be lowered, citing the recent declines in energy prices and appreciation of the dollar. Additionally, several dealers suggested that participants' projections for growth in 2016 and 2017 may be lowered, with several pointing to various factors including recent dollar appreciation, weaker global growth as well as lower perceived trend growth in the United States. Relatedly, several dealers also suggested that participants' projections for longer run growth may also be lowered.

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

Federal Funds Rate	2015	2016	2017	2018	Longer Run
25th Pctl	0.38%	1.38%	2.38%	3.13%	3.50%
Median	0.38%	1.38%	2.56%	3.38%	3.50%
75th Pctl	0.50%	1.38%	2.63%	3.50%	3.50%

Please explain:
(21 responses)

Several dealers noted their expectation that FOMC participants' year-end 2015 target federal funds rate projections would reflect a delay in liftoff, with the median year-end rate expected to indicate one rate hike this year. Several dealers also expected that FOMC participants' year-end rate projections would continue to reinforce that the Committee expects a gradual pace of policy tightening following the first increase in the target range.

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

Many dealers expected Chair Yellen to emphasize that the pace of tightening after the first rate hike will likely be gradual and that accommodative monetary policy will continue to be appropriate for some time after liftoff. Several dealers expected that the Chair would emphasize the likelihood of a rate hike occurring by the end of this year. Additionally, several dealers expected the Chair to discuss recent international and financial market developments, including how the Committee perceives any potential impacts from these developments on the U.S. economic outlook. Lastly, several dealers expected the Chair to emphasize the data dependency of the Committee and that policy normalization could begin at any future meeting.

e) How do you expect the September 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	3
75th Pctl	4

Please explain:
(20 responses)

Several dealers suggested that aspects of the September FOMC events could be perceived as more accommodative than expected. In explaining their views, several cited the possibility that the Committee does not raise the target range for the federal funds rate as well as the possibility that the September FOMC events could signal a more accommodative path of policy rates. However, several dealers also suggested that aspects of the September FOMC events would likely be perceived as less accommodative than expected, with several noting the possibility that the Committee raises the target range for the federal funds rate, as well as the possibility that the Committee strongly signals that a rate hike by the end of this year is likely.

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.**

	Sep. 16-17	Oct. 27-28	Dec. 15-16	Jan. 26-27	Mar. 15-16	Apr. 26-27	Jun. 14-15	≥ Jul. 26-27
Average	29%	15%	25%	9%	14%	3%	2%	3%

	Most Likely Meeting of First Increase in Target Rate or Range
25th Pctl	September 2015
Median	October/December 2015
75th Pctl	December 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	75%
Median	80%
75th Pctl	85%

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.

First Year Following Liftoff

	0 - 50 basis points	51 - 100 basis points	101 - 150 basis points	151 - 200 basis points	>200 basis points
Average	17%	45%	27%	9%	2%

Second Year Following Liftoff

	0 - 50 basis points	51 - 100 basis points	101 - 150 basis points	151 - 200 basis points	>200 basis points
Average	14%	35%	25%	20%	7%

c) **Provide your estimate of the most likely outcome (i.e., the mode) for the target federal funds rate or range, as applicable, immediately following the FOMC meetings and at the end of each quarter or half-year period below. If you expect a range, please provide both the top and bottom of the range in the specified fields below. If you expect a target rate, provide your response in the "Target rate" field only. (20 complete responses)**

Top of Target Range

	September 16-17	October 27-28	December 15-16	January 26-27 2016	March 15-16 2016	April 26-27 2016	June 14-15 2016	2016 Q3	2016 Q4	2017 Q1	2017 Q2	2017 H2	2018 H1	2018 H2
25th Pctl	0.25%	0.25%	0.50%	0.50%	0.75%	0.75%	1.00%	1.25%	1.25%	1.50%	1.75%	2.25%	2.25%	2.75%
Median	0.25%	0.38%	0.50%	0.50%	0.75%	0.75%	1.00%	1.25%	1.50%	1.75%	2.00%	2.50%	2.88%	3.00%
75th Pctl	0.50%	0.50%	0.75%	0.75%	1.00%	1.00%	1.25%	1.25%	1.63%	2.00%	2.38%	3.00%	3.50%	3.75%
# of Responses	22	22	22	22	22	22	22	21	20	17	16	16	16	13

Bottom of Target Range

	September 16-17	October 27-28	December 15-16	January 26-27 2016	March 15-16 2016	April 26-27 2016	June 14-15 2016	2016 Q3	2016 Q4	2017 Q1	2017 Q2	2017 H2	2018 H1	2018 H2
25th Pctl	0.00%	0.00%	0.25%	0.25%	0.50%	0.50%	0.75%	1.00%	1.00%	1.25%	1.50%	2.00%	2.00%	2.50%
Median	0.00%	0.13%	0.25%	0.25%	0.50%	0.50%	0.75%	1.00%	1.25%	1.50%	1.75%	2.25%	2.63%	2.75%
75th Pctl	0.25%	0.25%	0.50%	0.50%	0.75%	0.75%	1.00%	1.00%	1.38%	1.75%	2.13%	2.75%	3.25%	3.50%
# of Responses	22	22	22	22	22	22	22	21	20	17	16	16	16	13

Target Rate

	September 16-17	October 27-28	December 15-16	January 26-27 2016	March 15-16 2016	April 26-27 2016	June 14-15 2016	2016 Q3	2016 Q4	2017 Q1	2017 Q2	2017 H2	2018 H1	2018 H2
25th Pctl								1.50%	1.75%	1.75%	2.13%	2.50%	2.75%	3.00%
Median								1.50%	1.75%	2.00%	2.38%	2.63%	3.00%	3.50%
75th Pctl								1.50%	1.75%	2.25%	2.50%	2.75%	3.13%	3.50%
# of Responses	0	0	0	0	0	0	0	1	2	3	4	4	4	7

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	3.00%	2.50%
Median	3.38%	2.69%
75th Pctl	3.75%	2.95%

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 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	30%	48%	21%	1%	0%	0%	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	9%	21%	34%	20%	13%	3%	1%

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	23%	26%	22%	15%	9%	3%	2%

If you changed your responses to parts a and/or c since the policy survey on July 20, please explain the factors that motivated you to make the change(s):
(21 responses)

In explaining changes to their responses, some dealers noted that recent global developments could lead to a delay in liftoff and/or a more gradual pace of expected rate hikes. Similarly, several dealers also noted the recent tightening in financial market conditions as informing the change in their responses. Several dealers noted that they made no significant changes to their responses since the last policy survey on July 20.

3. a) Of the possible outcomes below, provide the percent chance you attach to the 10-year Treasury yield falling in each of the following ranges at the end of 2015 and 2016.

Year-End 2015

	≤1.50%	1.51-2.00%	2.01-2.50%	2.51-3.00%	3.01-3.50%	3.51-4.00%	>4.00%
Average	5%	16%	44%	25%	8%	2%	1%

Year-End 2016

	≤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	21%	35%	26%	12%	5%	2%	1%

If you changed your expectations since the last policy survey on July 20, explain the factors that motivated you to make the change(s).
(18 responses)

Several dealers explained that increased concerns over the global growth outlook led them to lower their forecasts for the 10-year Treasury yield, while several other dealers cited increased global disinflationary pressures.

b) The 10-year Treasury yield decreased 12 basis points between July 28 and September 4. Please decompose this change into changes in the market's expected average real policy rate, expected average inflation rate, and the market-implied nominal term premium. Please ensure that your sum matches the change.

	Change in Market's Expected Average Real Policy Rate	Change in Market's Expected Average Inflation Rate	Change in Market-Implied Nominal Term Premium
Average (bps)	1	-9	-4

What factor or factors were most material in driving your estimate of the intermeeting change in each of the subcomponents listed above?
(20 responses)

Several dealers characterized the change in the 10-year Treasury yield over the intermeeting period as primarily being driven by a decline in the market's expected average inflation rate, with several specifically citing the recent declines in energy and commodity prices. In addition, several dealers indicated that the change was partly driven by a decrease in the market-implied nominal term premium over the period, with several citing increased concerns over global growth as well as recent market volatility. In contrast, several dealers highlighted that perceived recent sales of U.S. Treasury securities by foreign central banks may have also placed upward pressure on term premiums embedded in nominal Treasury yields over the period.

c) **From July 28 to September 4, various measures of the 5-year/5 year forward breakeven rate of inflation declined by roughly 24 basis points. Provide your estimate of the decomposition of this decline. Please ensure your signs are correct.**
(21 responses)

	Change in Expected Average Inflation	Change in Inflation Risk Premium	Change in Other Risk Premia
Average (bps)	-8	-10	-6

Please explain the factors contributing to any change in your estimate of the expected average CPI inflation rate:
(17 responses)

Some dealers cited the recent declines in commodity prices as contributing to declines in the market's expected average CPI rate. Further, several dealers specifically noted U.S. dollar strength, while several dealers cited recent developments in China as increasing the downside risks around average expected inflation.

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

Several dealers cited recent commodity price volatility as driving the decline in inflation risk premium, while several dealers cited heightened downside risks to the growth outlooks in China and other emerging markets as another potential factor.

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

Several dealers noted liquidity conditions in the TIPS market as contributing to changes in their estimates of other risk premia.

4. a) **Provide the percent chance you attach to the unemployment rate falling within the following ranges at the time of the first increase in the target federal funds rate or range.**

	< 5.0%	5.0 - 5.4%	5.5 - 5.9%	6.0 - 6.5%	> 6.5%
Average	42%	55%	3%	0%	0%

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	6%	25%	51%	15%	4%

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 August, seasonally adjusted, was 142.3 million.**

	Unemployment Rate	Labor Force Participation Rate	Total NFP*	12-Month Change in Average Hourly Earnings	Core 12-Month PCE Inflation	Headline 12-Month PCE Inflation	Inflation Between 1 and 2 Years Ahead
25th Pctl	5.0%	62.6%	142.3	2.2%	1.2%	0.3%	1.8%
Median	5.1%	62.6%	142.7	2.2%	1.3%	0.4%	1.9%
75th Pctl	5.1%	62.6%	142.9	2.3%	1.5%	1.0%	2.0%

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

One Quarter Prior to Liftoff

	IOER Rate	Target Federal Funds Rate or Range	Federal Funds Effective Rate	O/N RRP Rate	3-month Libor Rate	Overnight Treasury GCF Repo Rate	O/N RRP Demand ($ bn)	O/N RRP Cap ($ bn)**
25th Pctl	0.25%	0.13%	0.13%	0.05%	0.30%	0.17%	105	300
Median	0.25%	0.13%	0.13%	0.05%	0.33%	0.20%	144	300
75th Pctl	0.25%	0.13%	0.15%	0.05%	0.33%	0.23%	150	300

† 1 dealer expected no O/N RRP cap.

Immediately Following Liftoff

	IOER Rate	Target Federal Funds Rate or Range	Federal Funds Effective Rate	O/N RRP Rate	3-month Libor Rate	Overnight Treasury GCF Repo Rate	O/N RRP Demand ($ bn)	O/N RRP Cap ($ bn)**
25th Pctl	0.50%	0.38%	0.33%	0.25%	0.50%	0.35%	162.5	500
Median	0.50%	0.38%	0.35%	0.25%	0.55%	0.45%	300	550
75th Pctl	0.50%	0.38%	0.38%	0.25%	0.60%	0.45%	500	750

† 5 dealers expected no O/N RRP cap.

1 Year Following Liftoff

	IOER Rate	Target Federal Funds Rate or Range	Federal Funds Effective Rate	O/N RRP Rate	3-month Libor Rate	Overnight Treasury GCF Repo Rate	O/N RRP Demand ($ bn)	O/N RRP Cap ($ bn)**
25th Pctl	1.25%	1.13%	1.13%	1.00%	1.43%	1.20%	150	300
Median	1.50%	1.38%	1.35%	1.25%	1.60%	1.35%	275	300
75th Pctl	1.50%	1.50%	1.50%	1.50%	1.75%	1.55%	400	500

† 1 dealer expected no O/N RRP cap.

3 Years Following Liftoff

	IOER Rate	Target Federal Funds Rate or Range	Federal Funds Effective Rate	O/N RRP Rate	3-month Libor Rate	Overnight Treasury GCF Repo Rate	O/N RRP Demand ($ bn)	O/N RRP Cap ($ bn)**
25th Pctl	2.75%	2.63%	2.62%	2.50%	2.80%	2.95%	75	200
Median	3.38%	3.19%	3.20%	3.13%	3.35%	3.30%	175	250
75th Pctl	3.50%	3.50%	3.50%	3.50%	3.55%	3.50%	250	400

† 1 dealer expected no O/N RRP cap.

**For dealers that submitted ranges, midpoints of the ranges are used.*
***Only dealers who forecasted a cap were included in the calculation for the expected size of the O/N RRP cap.*

Please note how you expect the Committee's approach to policy normalization to evolve over time. Additionally, comment on any changes you expect over time in the relative levels of money market rates and the expected amount of O/N RRP usage.

Several dealers noted that they expect the cap for overnight RRP operations to be temporarily raised at liftoff. Several dealers noted that demand for overnight RRP operations may increase significantly in the near to medium term following liftoff.

e) Please provide the percent chance you attach to the average effective federal funds rate, excluding month- or quarter-end dates, falling within the following subsets relative to the 25 basis point target range in the first month immediately following liftoff.

	Below the Range	Bottom 8 Basis Points of Range	Middle 9 Basis Points of Range	Top 8 Basis Points of Range	Above the Range
Average	4%	35%	45%	13%	2%

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

Several dealers indicated their expectation that the effective federal funds rate will likely trade close to the middle of the target range after liftoff, similar to current trading dynamics. Several dealers also highlighted various risks that may lead the effective federal funds rate to trade toward the lower end of the target range.

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

	Most Likely Quarter and Year of End to Reinvestments			Relative to Liftoff	
	Treasuries*	Agency Debt and MBS**		Treasuries	Agency Debt and MBS
25th Pctl	Q2 2016	Q1 2016	25th Pctl	6	6
Median	Q3 2016	Q3 2016	Median	11	7
75th Pctl	Q1 2017	Q4 2016	75th Pctl	13	12

**One dealer expected no end to reinvestments of Treasury securities.*
***One dealer expected no end to reinvestments of Agency Debt and MBS securities.*

b) In its Policy Normalization Principles and Plans, the Committee indicated that it "expects to cease or commence phasing out reinvestments" after liftoff. For Treasuries and agency debt and MBS, please indicate the percent chance 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.

	Treasuries		
	No Change to Reinvestments	Reinvestments Ceased All at Once	Reinvestments Phased Out Over Time
Average	13%	23%	64%

	Agency Debt and MBS		
	No Change to Reinvestments	Reinvestments Ceased All at Once	Reinvestments Phased Out Over Time
Average	13%	27%	60%

c) If you placed a non-zero probability on reinvestments being phased out over time, please indicate the number of months over which you expect this to occur.
(20 responses)

	Anticipated Duration of Phase-Out (in Months)	
	Treasuries	Agency Debt and MBS
25th Pctl	6	6
Median	12	11
75th Pctl	12	12

Please explain the factors behind any change in your expectations in either parts a, b and/or c since the policy survey on July 20.
(16 responses)

Several dealers cited no significant changes to their expectations since the last policy survey on July 20.

6. a) Provide your estimate of the most likely outcome for output, inflation, and unemployment.
(18 complete responses)

		Q4/Q4 2015	Q4/Q4 2016	Q4/Q4 2017	Q4/Q4 2018	Longer Run
GDP:	25th Pctl	2.29%	2.40%	2.20%	2.00%	2.00%
	Median	2.40%	2.55%	2.40%	2.28%	2.10%
	75th Pctl	2.50%	2.80%	2.60%	2.40%	2.30%
Core PCE Deflator:	25th Pctl	1.40%	1.70%	1.90%	2.00%	
	Median	1.45%	1.80%	2.00%	2.00%	
	75th Pctl	1.50%	2.00%	2.10%	2.10%	
Headline PCE Deflator:	25th Pctl	0.50%	1.70%	2.00%	2.00%	2.00%
	Median	0.60%	1.90%	2.10%	2.00%	2.00%
	75th Pctl	0.80%	2.10%	2.10%	2.20%	2.00%
Unemployment Rate*:	25th Pctl	4.90%	4.50%	4.50%	4.60%	5.00%
	Median	5.00%	4.65%	4.70%	4.80%	5.00%
	75th Pctl	5.10%	4.90%	4.80%	4.90%	5.35%

**Average level of the unemployment rate over Q4.*

b) **What are the most significant risks to your 2016 GDP forecast?**

Most significant upside risk:

Some dealers noted that stronger-than-expected consumer spending was one of the most significant upside risks to their 2016 GDP forecast, while several other dealers cited continued improvement in the housing market.

Most significant downside risk:

Several dealers noted weakening global growth as the most significant downside risk to their 2016 GDP forecast. Several dealers specifically highlighted slowing Chinese growth as the most significant downside risk. Several dealers suggested that weaker net exports or other negative impacts from a stronger dollar were the most significant risks, while several dealers cited a further tightening of financial conditions as the most significant downside risk. Lastly, several cited weaker-than-expected business fixed investment.

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

Characterization of overall balance of economic data:

Characterization of Balance of U.S. Economic Data over Intermeeting Period	
25th Pctl	3
Median	3
75th Pctl	4

Please Explain:
(21 responses)

Several dealers characterized the upward revision to second quarter GDP as better than expected, and specifically cited retail sales, auto sales and housing data over the period as positive. Several dealers contrasted these releases with ongoing weakness in other economic growth indicators, including recent manufacturing-related data. Several dealers also pointed to aspects of recent labor market data as below expectations. Lastly, several dealers pointed to lower than expected realized inflation as informing their mixed interpretation of the data.

7. a) **For the outcomes below, provide the percent chance you attach to the annual average CPI inflation rate from July 1, 2015 - June 30, 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%	2.51-3.0%	≥3.01%
Average	4%	12%	32%	34%	13%	5%

Point estimate for most likely outcome:

	Most Likely Outcome
25th Pctl	2.00%
Median	2.10%
75th Pctl	2.20%

b) For the outcomes below, provide the percent chance you attach to the annual average CPI inflation rate from July 1, 2020 - June 30, 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%
Average	3%	9%	25%	40%	16%	7%

Point estimate for most likely outcome:

	Most Likely Outcome
25th Pctl	2.20%
Median	2.30%
75th Pctl	2.40%

8. a) What percent chance do you attach to the U.S. economy currently being in a recession*?
b) What percent chance do you attach to the U.S. economy being in a recession* in 6 months?
c) What percent chance do you attach to the global economy being in a recession in 6 months?**

	Currently in NBER Recession
25th Pctl	1%
Median	5%
75th Pctl	5%

	NBER Recession in 6 Months
25th Pctl	5%
Median	10%
75th Pctl	15%

	Global Recession in 6 Months
25th Pctl	10%
Median	20%
75th Pctl	30%

**NBER-defined recession.*
***Previous IMF staff work has suggested that a "global recession" can be characterized as a period during which there is a decline in annual per-capita real global GDP, backed up by a decline or worsening in one or more of the following global macroeconomic indicators: industrial production, trade, capital flows, oil consumption and unemployment.*

Please explain the factors underlying your responses for parts a, b and c. Please also comment on any changes to your expectations over the intermeeting period.
(15 responses)

Several dealers suggested that the risks of a recession occurring in the U.S. and/or globally generally remain low. However, several dealers also highlighted a slight increase in the percent change they attach to the global economy being in a recession in 6 months, citing an increase in the perceived risks around a potential Chinese and/or emerging-market led slowdown in global growth.

Appendix: Updates to the Survey

Updated as of September 21, 2015

Following the September FOMC Meeting (September 16-17), primary dealers were asked to update their responses to questions 2 (parts a, c, and e) and 4 (parts a and b).

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.

	Oct. 27-28	Dec. 15-16	Jan. 26-27	Mar. 15-16	Apr. 26-27	Jun. 14-15	≥ Jul. 26-27
Average	14%	42%	12%	21%	4%	4%	3%

	Most Likely Meeting of First Increase in Target Rate or Range
25th Pctl	December 2015
Median	December 2015
75th Pctl	December 2015

c) Provide your estimate of the most likely outcome (i.e., the mode) for the target federal funds rate or range, as applicable, immediately following the FOMC meetings and at the end of each quarter or half-year period below. If you expect a range, please provide both the top and bottom of the range in the specified fields below. If you expect a target rate, provide your response in the "Target rate" field only. (21 complete responses)

Top of Target Range

	October 27-28	December 15-16	January 26-27 2016	March 15-16 2016	April 26-27 2016	June 14-15 2016	2016 Q3	2016 Q4	2017 Q1	2017 Q2	2017 H2	2018 H1	2018 H2
25th Pctl	0.25%	0.50%	0.50%	0.50%	0.75%	0.75%	1.00%	1.13%	1.25%	1.75%	2.25%	2.25%	2.25%
Median	0.25%	0.50%	0.50%	0.75%	0.75%	1.00%	1.25%	1.50%	1.75%	2.00%	2.50%	3.00%	3.13%
75th Pctl	0.25%	0.50%	0.50%	0.75%	0.75%	1.00%	1.25%	1.50%	1.75%	2.00%	2.50%	3.00%	3.75%
# of Responses	22	22	22	22	22	22	22	20	19	18	18	17	14

Bottom of Target Range

	October 27-28	December 15-16	January 26-27 2016	March 15-16 2016	April 26-27 2016	June 14-15 2016	2016 Q3	2016 Q4	2017 Q1	2017 Q2	2017 H2	2018 H1	2018 H2
25th Pctl	0.00%	0.25%	0.25%	0.25%	0.50%	0.50%	0.75%	0.88%	1.00%	1.50%	2.00%	2.00%	2.00%
Median	0.00%	0.25%	0.25%	0.50%	0.50%	0.75%	1.00%	1.25%	1.50%	1.75%	2.25%	2.75%	2.88%
75th Pctl	0.00%	0.25%	0.25%	0.50%	0.50%	0.75%	1.00%	1.25%	1.50%	1.75%	2.25%	2.75%	3.50%
# of Responses	22	22	22	22	22	22	22	20	19	18	18	17	14

Target Rate

	October 27-28	April 26-27	January 26-27 2016	March 15-16 2016	April 26-27 2016	June 14-15 2016	2016 Q3	2016 Q4	2017 Q1	2017 Q2	2017 H2	2018 H1	2018 H2
25th Pctl								1.50%	1.75%	2.00%	2.25%	2.50%	2.75%
Median								1.50%	1.88%	2.25%	2.50%	2.50%	3.00%
75th Pctl								1.50%	2.00%	2.50%	2.75%	2.88%	3.50%
# of Responses	0	0	0	0	0	0	0	2	2	3	3	4	7

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 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	42%	54%	4%	0%	0%	0%	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	11%	26%	40%	16%	5%	2%	1%

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	25%	31%	24%	12%	4%	2%	2%

If you changed your responses to parts a and/or c since the policy survey on July 20, please explain the factors that motivated you to make the change(s):
(18 responses)

Several dealers noted that they made modest adjustments to their responses in parts a and/or c to reflect the fact that the Committee did not raise the target range for the federal funds rate at the September FOMC meeting. Several dealers also pointed to their interpretation of the September FOMC events as driving the change in their expectations, with several specifically noting their perception that the press conference and statement reflected increased concerns on the part of the Committee about global and financial market developments as well as the outlook for inflation. Lastly, several dealers directly cited ongoing global growth concerns and the recent tightening in financial conditions as motivating the change in their expectations.

4. a) Provide the percent chance you attach to the unemployment rate falling within the following ranges at the time of the first increase in the target federal funds rate or range.

	< 5.0%	5.0 - 5.4%	5.5 - 5.9%	6.0 - 6.5%	> 6.5%
Average	51%	47%	2%	0%	0%

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	6%	22%	52%	16%	4%