Survey of Primary Dealers

Markets Group, Federal Reserve Bank of New York

December 2016

Policy Expectations Survey

Please respond by **Monday, December 5 at 5:00 pm** to the questions below. Your time and input are greatly appreciated.

This survey is formulated by the Trading Desk at the Federal Reserve Bank of New York to enhance policymakers' understanding of market expectations on a variety of topics related to the economy, monetary policy and financial markets. The questions involve only topics that are widely discussed in the public domain and never presume any particular policy action. FOMC members are not involved in the survey's design.

Dealer:

1) a) Provide below your expectations for changes, if any, to the language referencing each of the following topics in the December FOMC statement.

Language Changes Expected

Current economic conditions:	
Economic outlook:	
Communication on the expected path of policy rates and forward guidance on the target federal funds rate:	
Communication on the Committee's policy of reinvesting principal payments on Treasury and agency securities:	
Other:	

b) What are your expectations for the medians of FOMC participants' <u>economic projections</u> in the Summary of Economic Projections (SEP)?

c) What are your expectations for the medians of FOMC participants' <u>target federal funds rate projections</u> in the SEP?

Year-end 2016:   **Year-end 2017:**   **Year-end 2018:**   **Year-end 2019:**

Longer Run:

Please explain any assumptions underlying your expectations.

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

2) a) Provide your estimate of the most likely outcome (i.e., the mode) for the target federal funds rate or range, as applicable, immediately following the FOMC meetings and at the end of each quarter or half-year period below. For the time periods at which you expect a target range, please indicate the midpoint of that range in providing your response.

	2016	2017					
	December 13-14	January 31 - February 1	March 14-15	May 2-3	June 13-14	July 25-26	September 19-20
Target rate / midpoint of target range:							

	Quarters					Half Years	
	2017 Q4	**2018 Q1**	**2018 Q2**	**2018 Q3**	**2018 Q4**	**2019 H1**	**2019 H2**
Target rate / midpoint of target range:							

b) In addition, provide your estimate of the longer-run target federal funds rate and your expectation for the average federal funds rate over the next 10 years.

Longer run: **Expectation for average federal funds rate over next 10 years:**

c) Please indicate the percent chance* that you attach to the following possible outcomes for the Committee's next policy action <u>between now and the end of 2017</u>.

Next Change is Increase in Target Rate or Range	**Next Change is Decrease in Target Rate or Range**	**No Change in Target Rate or Range Through the End of 2017**

Responses should add up to 100 percent.

d) Conditional on the Committee's next policy action <u>between now and the end of 2017</u> being an <u>increase</u> in the target federal funds rate or range, please indicate the percent chance* that you attach to the following possible outcomes for the timing of such a change. Only fill out this conditional probability distribution if you assigned a non-zero probability to the Committee's next policy action between now and the end of 2017 being an increase.

Increase Occurs at Dec. 2016 FOMC meeting	**Increase Occurs at Jan. 2017 FOMC meeting**	**Increase Occurs at Mar. 2017 FOMC meeting or later**

Responses should add up to 100 percent.

e) Please indicate the percent chance* that you attach to the target federal funds rate or range falling in each of the following ranges <u>at the end of 2017</u>, conditional on the following possible scenarios for the direction and timing of the Committee's next policy action <u>between now and the end of 2017</u>. Only fill out the conditional probability distributions for which you assigned a non-zero probability to the conditioning event occurring. If you expect a target range, please use the midpoint of that range in providing your response.

	≤0.50%	0.51 - 0.75%	0.76 - 1.00%	1.01 - 1.25%	1.26 - 1.50%	1.51 - 1.75%	1.76 - 2.00%	≥ 2.01%
Next change is an increase, occurs at Jan. 2017 FOMC meeting or earlier:								
Next change is increase, occurs at Mar. 2017 FOMC meeting or later:								

	< 0.0%	0.00 - 0.25%	0.26 - 0.50%	0.51 - 0.75%	0.76 - 1.00%	1.01 - 1.25%	1.26 - 1.50%	≥ 1.51%
Next change is a decrease:								

Responses across each row should add up to 100 percent.

f) i) Please indicate the percent chance* that you attach to the target federal funds rate or range falling in each of the following ranges <u>at the end of 2018 and 2019</u>, conditional on **not** moving to the zero lower bound (ZLB) at any point during 2016-2019. If you expect a target range, please use the midpoint of that range in providing your response.

	≤1.00%	1.01 - 1.50%	1.51 - 2.00%	2.01 - 2.50%	2.51 - 3.00%	3.01 - 3.50%	≥3.51%
Year-end 2018:							
Year-end 2019:							

Responses across each row should add up to 100 percent.

ii) Please indicate the percent chance that you attach to moving to the ZLB at some point in 2016-2019.

Probability of moving to the ZLB at some point in 2016-2019: [   ]

If you placed a non-zero probability on moving to the ZLB at some point in 2016-2019 above, please indicate your estimate for the most likely <u>timing</u> of such an event.

Most likely timing of moving to the ZLB at some point in 2016-2019 (in half years): [   ]

iii) Please indicate the percent chance* that you attach to the target federal funds rate or range falling in each of the following ranges <u>at the end of 2018 and 2019</u>, <u>conditional on moving to the ZLB at some point in 2016-2019</u>. Only fill out these conditional probability distributions if you assigned a non-zero probability to moving to the ZLB at some point in 2016-2019. If you expect a target range, please use the midpoint of that range in providing your response.

	<0.00%	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%
Year-end 2018:								
Year-end 2019:								

Responses across each row should add up to 100 percent.

iv) What is your estimate of the target federal funds rate or range at the effective lower bound?

Level of the target federal funds rate or range at the effective lower bound (in percent): [   ]

For parts a-f, please explain the factors behind any change to your expectations since the last policy survey.

[   ]

3) Previous FOMC communication has indicated that the economy's neutral real federal funds rate, which can be understood as the level of the real federal funds rate that would be neither expansionary nor contractionary if the economy were operating near its potential, is currently low by historical standards. Please provide your estimate for the current level of the neutral real federal funds rate and at each of the time periods below.

	Current level:	Year-end 2017:	Year-end 2018:	Year-end 2019:
Estimated level of neutral real federal funds rate:				

If you expect the neutral real federal funds rate to change over time, please provide the major factors underlying your expectation. Additionally, please explain any changes to your estimates since the last policy survey.

[   ]

4) Please indicate the percent chance* that you attach to the 10-year Treasury yield falling in each of the following ranges at the end of 2016 and 2017.

	≤1.00%	1.01 - 1.50%	1.51 - 2.00%	2.01 - 2.50%	2.51 - 3.00%	3.01 - 3.50%	≥3.51%
Year-end 2016:							
Year-end 2017:							

Responses across each row should add up to 100 percent.

Please explain the factors behind any change to your expectations since the last policy survey.

[   ]

5) a) The 10-year nominal Treasury yield increased 56 basis points from November 1 to November 30. Please decompose this change into the following components. Please ensure that your sum matches the change in the 10-year Treasury yield. Please also ensure your signs are correct.

Change in Market Expectations for Average Real Policy Rate (bps)	Change in Market Expectations for Average Inflation Rate (bps)	Change in Market-Implied Nominal Term Premium (bps)		Your Sum	Change in 10-Year Treasury Yield
		Change in Real Term Premium (bps)	Change in Inflation Risk Premium (bps)		
				0	56

b) Please rate the importance of the following factors in explaining the change in the 10-year nominal Treasury yield over the intermeeting period **(5=very important, 1=not important)**.

Changes in outlook for U.S. economic growth	Changes in outlook for U.S. inflation	Changes in perception of long-run neutral fed funds rate	Changes in perception of FOMC's reaction function	Changes in uncertainty around the path of the nominal fed funds rate	Changes in expected supply of Treasuries held by the public	Changes in market sentiment/safe-haven flows	Other (please explain)		If "Other", please explain

c) Please rate the importance of the following factors relating to market expectations for U.S. economic policies in explaining the change in the 10-year nominal Treasury yield over the intermeeting period **(5=very important, 1=not important)**.

Changes in outlook for federal government expenditures	Changes in outlook for tax policy	Changes in outlook for monetary policy	Changes in outlook for trade policy	Changes in outlook for financial regulatory policy	Changes in outlook for non-financial regulatory policy	Other (please explain)		If "Other", please explain

d) Do you view the drivers of the trade-weighted dollar and U.S. equity prices over the intermeeting period, as well as their importance, as the same as or different than indicated above? If different, please explain.

6) 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.

	Quarters					Half Years			
2016 Q4	**2017 Q1**	**2017 Q2**	**2017 Q3**	**2017 Q4**	**2018 H1**	**2018 H2**	**2019 H1**	**2019 H2**

Longer Run:

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.

	Quarters					Half Years			
2016 Q4	**2017 Q1**	**2017 Q2**	**2017 Q3**	**2017 Q4**	**2018 H1**	**2018 H2**	**2019 H1**	**2019 H2**

Longer Run:

7) a) How do you expect the relative levels of money market rates to evolve over the next intermeeting period? Additionally, please indicate your expectations for year-end dynamics in money markets.

b) Provide your forecast for the most likely level (in $ billions) of average aggregate ON RRP demand during each of the years below. If you do not believe the ON RRP facility will be in use during one or more of the years below, please enter "N/A."

2017	**2018**	**2019**

8) In its most recent FOMC statement, the Committee indicated that it anticipates continuing its existing policy of reinvesting principal payments from its holdings of agency debt and agency MBS, and of rolling over maturing Treasury securities at auction, until normalization of the level of the federal funds rate is "well under way."

a) What is your estimate for the most likely level of the target federal funds rate or range if and when the Committee first changes its reinvestment policy?

Level of target federal funds rate or range (in percent):

b) What is your estimate for the most likely timing (in months forward) of a change to the Committee's policy of reinvesting payments of principal on Treasuries and/or agency debt and MBS? If you do not expect the FOMC to change its policy on reinvestments for either or both asset classes during the process of policy normalization, please enter "N/A."

	Months forward:
Treasuries:	
Agency debt and MBS:	

c) In its Policy Normalization Principles and Plans, the Committee indicated that it "expects to cease or commence phasing out reinvestments" after liftoff. Of the possible outcomes below, please indicate the percent chance* that you attach to the Committee during the process of policy normalization ceasing its reinvestments all at once, phasing out its reinvestments over time, or not changing its reinvestments.

	No Change to Reinvestments	Reinvestments Ceased All at Once	Reinvestments Phased Out Over Time
Treasuries:			
Agency debt and MBS:			

Responses across each row should add up to 100 percent.

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

Treasuries:	
Agency debt and MBS:	

e) i) Please indicate the percent chance* that you attach to the following possible outcomes for the par value of the SOMA portfolio <u>at the end of 2019</u>, <u>conditional on **not** moving to the ZLB at any point in 2016-2019</u>. For reference, the current level of the SOMA portfolio, including inflation compensation and settled and unsettled agency MBS, according to the November 25, 2016 H.4.1, was $4270 billion. Levels referenced below are also in $ billions.

≤ 3000	3001 - 3500	3501 - 4000	4001 - 4500	≥ 4501

Responses should add up to 100 percent.

ii) Please indicate the percent chance* that you attach to the following possible outcomes for the par value of the SOMA portfolio <u>at the end of 2019</u>, <u>conditional on moving to the ZLB at any point in 2016-2019</u>. Levels referenced below are in $ billions. Only fill out this probability distribution if you assigned a non-zero probability to moving to the ZLB at some point in 2016-2019.

≤ 4000	4001 - 4500	4501 - 5000	5001 - 5500	≥ 5501

Responses should add up to 100 percent.

Please explain the factors behind any change to your expectations, where applicable, since the last policy survey.

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

	GDP (Q4/Q4 Growth)	Core PCE Deflator (Q4/Q4 Growth)	Headline PCE Deflator (Q4/Q4 Growth)	Unemployment Rate (Q4 Average Level)
2016:				
2017:				
2018:				
2019:				
Longer run:				

Please explain any changes to your forecasts since the last policy survey.

b) Please indicate any changes to your estimates (in percentage points) for the U.S. federal fiscal deficit as a percentage of GDP, and any changes in the total contribution to your forecasts (in percentage points) for GDP growth (Q4/Q4) in 2017 and 2018 from U.S. federal fiscal policy, combining direct and indirect effects, since the last policy survey. Please ensure your signs are correct.

	2017	2018
Change in estimate for U.S. fiscal deficit (in percentage points):		
Change in GDP contribution of fiscal policy (in percentage points):		

If you view the change in the contribution of U.S. federal fiscal policy to your forecasts for GDP growth in either 2017 or 2018 as significant, please explain your response.

10) a) For the outcomes below, provide the percent chance* you attach to the annual average <u>CPI inflation</u> rate from December 1, 2016 - November 30, 2021 falling in each of the following ranges. Please also provide your point estimate for the most likely outcome.

≤1.00%	1.01 - 1.50%	1.51 - 2.00%	2.01 - 2.50%	2.51 - 3.00%	≥3.01%

Point estimate for most likely outcome:

Responses should add up to 100 percent.

b) For the outcomes below, provide the percent chance* you attach to the annual average <u>CPI inflation</u> rate from December 1, 2021 - November 30, 2026 falling in each of the following ranges. Please also provide your point estimate for the most likely outcome.

≤1.00%	1.01 - 1.50%	1.51 - 2.00%	2.01 - 2.50%	2.51 - 3.00%	≥3.01%

Point estimate for most likely outcome:

* Responses should add up to 100 percent.

c) For the outcomes below, provide the percent chance* you attach to the <u>PCE inflation</u> rate from December 1, 2018 - November 30, 2019 falling in each of the following ranges. Please also provide your point estimate for the most likely outcome.

≤1.50%	1.51 - 1.75%	1.76 - 2.00%	2.01 - 2.25%	2.26 - 2.50%	≥2.51%

Point estimate for most likely outcome:

Responses should add up to 100 percent.

11) a) What percent chance do you attach to the U.S. economy **currently** being in a recession*?

Recession currently:

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

Recession in 6 months:

c) What percent chance do you attach to the global economy being in a recession** **in 6 months**?

Global recession in 6 months:

Please explain the factors behind any change to your expectations in parts a-c since the last policy survey.

*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.

2)

f) ii) If you placed a non-zero probability on moving to the ZLB at some point in 2016-2019 above, please indicate your estimate for the most likely <u>timing</u> of such an event.

Most likely timing of moving to the ZLB at some point in 2016-2019 (in half years):

                    H2 2016
                    H1 2017
                    H2 2017
                    H1 2018
                    H2 2018
                    H1 2019
                    H2 2019

5)

b) Please rate the importance of the following factors in explaining the change in the 10-year nominal Treasury yield over the intermeeting period **(5=very important, 1=not important)**.

Rating:

                    5
                    4
                    3
                    2
                    1

c) Please rate the importance of the following factors relating to market expectations for U.S. economic policies in explaining the change in the 10-year nominal Treasury yield over the intermeeting period **(5=very important, 1=not important)**.

Rating:

                    5
                    4
                    3
                    2
                    1