RESPONSES TO SURVEY OF PRIMARY DEALERS

Markets Group, Federal Reserve Bank of New York

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The **Survey of Primary Dealers** 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 participants are not involved in the survey's design.

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

Responses were received from 23 primary dealers. Except where noted, all 23 dealers responded to each question. In some cases, dealers may not have provided complete responses (e.g. 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.

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

List of Primary Dealers:
www.newyorkfed.org/markets/primarydealers

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

Current economic conditions:
(22 responses)

Many dealers indicated that they expected no change to the characterization of current economic conditions. However, several indicated that they expected the Committee to downgrade its characterization of economic activity.

Economic outlook:
(22 responses)

Many dealers indicated that they expected no change to the Committee's characterization of the economic outlook.

Communication on the expected path of the target federal funds rate:

Several dealers indicated that they expected no material changes to this section of the statement, while several others indicated that they expected the Committee to note an increase in the target federal funds range. With respect to the clause "[t]he stance of monetary policy remains accommodative," several dealers expected the Committee would remove this language, several expected it to be modified, and several expected it to remain unchanged.

Other:
(11 responses)

Dealers did not provide substantial commentary in this section.

1b) What are your expectations for the medians of FOMC participants' <u>economic</u> projections in the Summary of Economic Projections (SEP)?

Many dealers indicated that they expected an upward revision to the median 2018 GDP growth forecast. However, several specified that they did not expect revisions to the median forecasts for 2019, 2020 or longer-run GDP growth. In addition, several dealers indicated that they expected the median forecast for 2021 GDP growth to be lower than the 2020 median. Several dealers indicated that they did not expect revisions to median inflation forecasts, while several dealers indicated that they expected the median forecast for 2021 headline and/or core PCE inflation to be lower than the 2020 median. Several dealers indicated that they expected an upward revision to the median 2018 unemployment rate forecast, and several indicated that they expected the median 2021 unemployment rate forecast to be higher than the 2020 median. Several dealers indicated that they did not expect revisions to the 2018, 2019, 2020, or longer-run unemployment rate forecasts. Finally, several dealers indicated that they expected no change to participants' median economic projections for any indicator.

1c) What are your expectations for the most likely levels of the medians of FOMC participants' target federal funds rate projections in the SEP? Please provide your responses out to three decimal places.
(22 responses)

	Year-end 2018	Year-end 2019	Year-end 2020	Year-end 2021	Longer Run
25th Pctl	**2.375%**	**3.125%**	**3.375%**	**3.375%**	**2.875%**
Median	**2.375%**	**3.125%**	**3.375%**	**3.375%**	**2.875%**
75th Pctl	**2.375%**	**3.125%**	**3.375%**	**3.375%**	**2.875%**

Please comment on the balance of risks around your expectations.
(22 responses)

Some dealers indicated that they viewed the balance of risks around their expectations for the median target federal funds rate projections for year-end 2021 and the longer run as tilted to the upside, while several others indicated that they viewed the balance of risks around their expectations for the year-end 2021 median projection as tilted to the downside.

1d) Additionally, please describe any expected changes to the distributions of FOMC participants' target rate projections, if applicable.
(20 responses)

Several dealers indicated that they expected the distribution of participants' target federal funds rate projections for year-end 2018 to narrow, while several indicated that they expected the average of participants' projections for year-end 2018 to increase. Several dealers also indicated that they expected a wide distribution for projections for year-end 2021.

1e) What are your expectations for the Chairman's press conference?

Several dealers noted that they expected the Chairman's remarks to be consistent with his previous communications, including his speech at the Jackson Hole symposium. Some dealers indicated that they expected the Chairman to reiterate that the continued gradual removal of policy accommodation remains appropriate, and several also expected him to note that the path of policy remains data dependent. Additionally, several dealers expected the Chairman to discuss global developments, including trade policy developments and/or volatility in emerging market assets, and several dealers noted that they expected the Chairman to emphasize the uncertainty associated with FOMC participants' economic and target rate projections and/or the level of the neutral real federal funds rate. Moreover, several dealers expected him to discuss recent moves in the U.S. Treasury yield curve, and several expected the Chairman to acknowledge the continuation of

balance sheet normalization. Finally, several dealers expected that the Chairman would note that inflation is stable and/or near target, several expected him to note continued strength in the labor market, and several expected him to note continued strength in economic data over the intermeeting period.

2a) 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 of the following quarters and half years below. For the time periods at which you expect a target range, please indicate the midpoint of that range in providing your response.

	Sep 25-26 2018	Nov 7-8 2018	Dec 18-19 2018	Jan 29-30 2019	Mar 19-20 2019	Apr 30-May 1 2019	Jun 18-19	
25th Pctl	**2.125%**	**2.125%**	**2.375%**	**2.375%**	**2.625%**	**2.625%**	**2.875%**	
Median	**2.125%**	**2.125%**	**2.375%**	**2.375%**	**2.625%**	**2.625%**	**2.875%**	
75th Pctl	**2.125%**	**2.125%**	**2.375%**	**2.375%**	**2.625%**	**2.625%**	**2.875%**	
# of Responses	**23**	**23**	**23**	**23**	**23**	**23**	**23**	
	2019 Q3	2019 Q4	2020 Q1	2020 Q2	2020 Q3	2020 Q4	2021 H1	2021 H2
25th Pctl	**2.875%**	**2.875%**	**2.875%**	**2.875%**	**2.875%**	**2.875%**	**2.875%**	**2.813%**
Median	**2.875%**	**2.875%**	**3.125%**	**3.125%**	**3.125%**	**3.000%**	**3.000%**	**2.938%**
75th Pctl	**3.125%**	**3.125%**	**3.125%**	**3.375%**	**3.375%**	**3.250%**	**3.125%**	**3.125%**
# of Responses	**23**	**23**	**19**	**19**	**19**	**19**	**16**	**16**

2b) 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	**2.500%**	**2.100%**
Median	**2.750%**	**2.500%**
75th Pctl	**3.000%**	**2.780%**

2c) Please indicate the percent chance that you attach to the following possible outcomes for the Committee's next policy action between now and the end of 2018.

	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 2018
Average	**96%**	**1%**	**3%**

2d) Conditional on the Committee's next policy action between now and the end of 2018 being an increase 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 2018 being an increase.

	Increase Occurs at September FOMC Meeting	Increase Occurs at November FOMC Meeting	Increase Occurs at December FOMC Meeting
Average	**95%**	**2%**	**3%**

2e) Please indicate the percent chance that you attach to the target federal funds rate or range falling in each of the following ranges at the end of 2018. If you expect a target range, please use the midpoint of that range in providing your response.

Federal Funds Rate or Range at the End of 2018								
	≤ 1.00%	1.01-1.25%	1.26 - 1.50%	1.51-1.75%	1.76-2.00%	2.01 - 2.25%	2.26 - 2.50%	≥2.51%
Average	**0%**	**0%**	**1%**	**1%**	**3%**	**27%**	**66%**	**2%**

2f-i) Please indicate the percent chance that you attach to the target federal funds rate or range falling in each of the following ranges at the end of 2019, 2020 and 2021, conditional on **not** moving to the zero lower bound (ZLB) at any point between now and the end of 2021. If you expect a target range, please use the midpoint of that range in providing your response.
(19 responses)

Year-end 2019							
	≤ 1.00%	1.01-1.50%	1.51-2.00%	2.01-2.50%	2.51-3.00%	3.01-3.50%	≥ 3.51%
Average	**3%**	**3%**	**5%**	**15%**	**38%**	**28%**	**8%**

Year-end 2020							
	≤ 1.00%	1.01-1.50%	1.51-2.00%	2.01-2.50%	2.51-3.00%	3.01-3.50%	≥ 3.51%
Average	**4%**	**6%**	**9%**	**15%**	**26%**	**27%**	**14%**

Year-end 2021							
	≤ 1.00%	1.01-1.50%	1.51-2.00%	2.01-2.50%	2.51-3.00%	3.01-3.50%	≥ 3.51%
Average	**6%**	**8%**	**13%**	**17%**	**21%**	**22%**	**13%**

2f-ii) Please indicate the percent chance that you attach to moving to the ZLB at some point between now and the end of 2021.

	Probability of Moving to ZLB at Some Point between Now and the End of 2021
25th Pctl	**20%**
Median	**25%**
75th Pctl	**33%**

Please comment on the change, if any, to your response compared to question 3f, part ii in the survey on July 23, as well as the degree to which this arises from a change in your outlook, the change to the question's forecast horizon, or both.
(18 responses)

Many dealers indicated that the changes to their responses arose from the change to the question's forecast horizon, while several others noted that their responses had not materially changed from the survey on July 23.

2f-iii) Please indicate the percent chance that you attach to the target federal funds rate or range falling in each of the following ranges at the end of 2019, 2020 and 2021, conditional on moving to the ZLB at some point between now and the end of 2021. Only fill out these conditional probability distributions if you assigned a nonzero probability to moving to the ZLB at some point between now and the end of 2021. If you expect a target range, please use the midpoint of that range in providing your response.
(19 responses)

Year-end 2019	< 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%
Average	7%	33%	16%	10%	9%	6%	6%	13%

Year-end 2020	< 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%
Average	12%	41%	17%	10%	6%	5%	3%	6%

Year-end 2021	< 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%
Average	12%	51%	17%	9%	7%	4%	1%	0%

2f-iv) What is your estimate of the target federal funds rate or range at the effective lower bound?

	Level of Target Federal Funds Rate or Range at ELB
25th Pctl	-0.25%
Median	0.00%
75th Pctl	0.13%

2g) For parts a-f, please explain the factors behind any change to your expectations, where applicable, since the last policy survey.
(18 responses)

Several dealers indicated no material changes to their expectations. In addition, several dealers indicated that they had revised their answers to questions that are conditional on a return

to the zero lower bound due to the change in the condition's forecast horizon.

3a) 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.

	2018 Q3	2018 Q4	2019 Q1	2019 Q2	2019 H2
25th Pctl	**2.95%**	**3.00%**	**3.10%**	**3.00%**	**3.00%**
Median	**3.00%**	**3.10%**	**3.15%**	**3.20%**	**3.30%**
75th Pctl	**3.05%**	**3.25%**	**3.35%**	**3.45%**	**3.50%**
# of Responses	**23**	**23**	**23**	**23**	**22**

	2020 H1	2020 H2	2021 H1	2021 H2	Longer Run
25th Pctl	**3.00%**	**3.00%**	**3.00%**	**3.00%**	**3.00%**
Median	**3.30%**	**3.38%**	**3.25%**	**3.13%**	**3.40%**
75th Pctl	**3.50%**	**3.45%**	**3.45%**	**3.50%**	**3.50%**
# of Responses	**17**	**17**	**17**	**17**	**20**

3b) 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.

	2018 Q3	2018 Q4	2019 Q1	2019 Q2	2019 H2
25th Pctl	**4.58%**	**4.60%**	**4.68%**	**4.70%**	**4.70%**
Median	**4.60%**	**4.75%**	**4.81%**	**4.88%**	**5.00%**
75th Pctl	**4.68%**	**4.84%**	**4.93%**	**5.05%**	**5.23%**
# of Responses	**20**	**20**	**20**	**20**	**19**

	2020 H1	2020 H2	2021 H1	2021 H2	Longer Run
25th Pctl	**4.70%**	**4.73%**	**4.65%**	**4.58%**	**4.60%**
Median	**5.05%**	**4.99%**	**4.83%**	**4.76%**	**4.88%**
75th Pctl	**5.24%**	**5.28%**	**5.25%**	**5.27%**	**5.25%**
# of Responses	**16**	**16**	**16**	**16**	**18**

4a) Please indicate the percent chance that you attach to the following possible outcomes for the par value of the SOMA portfolio at the end of 2021, conditional on **not** moving to the ZLB at any point between now and the end of 2021. For reference, the level of the SOMA portfolio on September 5, 2018 was $4020 billion, including inflation compensation and settled and unsettled agency MBS, according to the most recent H.4.1 release. Levels referenced below are in $ billions.

	≤ 3000	3001 - 3500	3501 - 4000	4001 - 4500	≥ 4501
Average	**21%**	**34%**	**31%**	**12%**	**2%**

4b) Please indicate the percent chance that you attach to the following possible outcomes for the par value of the SOMA portfolio at the end of 2021, conditional on moving to the ZLB at any point between now and the end of 2021. Only fill out this conditional probability distribution if you assigned a non-zero probability to moving to the ZLB at some point between now and the end of 2021 in question 2. Levels referenced below are in $ billions.

	≤ 4000	4001 - 4500	4501 - 5000	5001 - 5500	≥ 5501
Average	**29%**	**33%**	**22%**	**11%**	**5%**

4c) For parts a and b, please comment on the change, if any, to your responses compared to questions 4a and 4b in the survey on June 4, as well as the degree to which this arises from a change in your outlook, the change to the questions' forecast horizons, or both.
(18 responses)

Several dealers indicated that changes to their responses reflected the change to the question's forecast horizon, while several dealers indicated that they had raised the probability they assigned to an earlier conclusion of balance sheet normalization and/or a larger balance sheet following the conclusion of normalization. Finally, several dealers noted that their responses had not materially changed from the survey on June 4.

5a) In the June 2017 addendum to the Policy Normalization Principles and Plans, the Committee outlined its approach for reducing the Federal Reserve's holdings of Treasury and agency securities. Please provide your estimates for the effects (in basis points), if any, on the 10-year Treasury yield and 30-year production coupon MBS option-adjusted spread from the implementation of reinvestment caps on maturing securities last year through the end of this month (October 2017 through September 2018), as well as from October 2018 through September 2019 and from October 2019 through September 2020.
(20 responses)

	10-Year Treasury Yield			30-Year MBS Option-Adjusted Spread		
	Oct 2017-Sep 2018	Oct 2018-Sep 2019	Oct 2019-Sep 2020	Oct 2017-Sep 2018	Oct 2018-Sep 2019	Oct 2019-Sep 2020
25th Pctl	**5**	**5**	**0**	**3**	**5**	**1**
Median	**7**	**10**	**8**	**5**	**5**	**5**
75th Pctl	**15**	**15**	**10**	**10**	**10**	**9**

5b) Please explain any assumptions underlying your responses in part a.
(20 responses)

Several dealers indicated that the majority of the overall impact of reinvestment caps on maturing securities had already occurred. In determining their estimates, several dealers cited rule of thumb

approaches based on previous research, which they applied to realized and expected changes in the size of the balance sheet.

5c) Please describe how your views have changed since October 2017, if at all, regarding the financial market effects of the Committee's approach for reducing the Federal Reserve System's holdings of Treasury and agency securities. In addition, please indicate whether any changes in your views resulted from changes to your expectations for the size and composition of the Federal Reserve System's balance sheet, changes to your expectations for the impact of a given change in the size or composition of the balance sheet, or both.

Several dealers indicated that their views had changed because they now expect an earlier conclusion of balance sheet normalization and/or a larger balance sheet following the conclusion of normalization, while several others indicated that their views had not changed significantly since October 2017. Finally, several dealers highlighted the U.S. Treasury's debt management decisions as a factor affecting their views on recent and future moves in U.S. Treasury yields.

6a) Recently, emerging market currencies and other emerging market assets have exhibited an increase in volatility. Please comment on your views regarding the factor(s) you think were most important in driving this price action.
(22 responses)

Many dealers cited idiosyncratic factors or fundamental vulnerabilities in some emerging market economies, including country-specific political risk, as contributing to the increase in volatility. In addition, many dealers cited tighter U.S. monetary policy, rising U.S. interest rates, and/or U.S. dollar strength. Some dealers cited concerns over trade policy developments, and several dealers cited tightening global liquidity conditions.

6b) Please comment on how you expect the recent volatility in emerging market assets to evolve over the remainder of the year.
(21 responses)

Some dealers indicated that they expected volatility in emerging market assets to remain elevated, while several others indicated that they expected it to subside. Several dealers indicated that they viewed the evolution of volatility in these assets as depending on expectations for U.S. monetary policy, uncertainty surrounding trade policy, and/or foreign exchange rates.

6c) Please indicate to what degree volatility in emerging market assets has impacted your outlook for the U.S. economy or U.S. monetary policy, if at all. If you expect an impact, please describe the channel(s) through which you would expect this impact to operate.

Most dealers indicated that volatility in emerging market assets had had little to no impact on their U.S. outlook. However, several dealers indicated that they would expect any impact on the U.S. economy or monetary policy to operate through financial market conditions, a stronger U.S. dollar, and/or slower global growth.

7a) Provide your estimate of the most likely outcome for output, inflation, and unemployment.
(16 responses)

		2018	2019	2020	2021	Longer Run
Real GDP (Q4/Q4 Growth)	25th Pctl	**3.00%**	**2.00%**	**1.50%**	**1.50%**	**1.70%**
	Median	**3.10%**	**2.30%**	**1.75%**	**1.70%**	**1.80%**
	75th Pctl	**3.10%**	**2.50%**	**2.00%**	**1.90%**	**2.05%**
Core PCE Inflation (Q4/Q4)	25th Pctl	**1.90%**	**2.10%**	**2.00%**	**1.90%**	**-**
	Median	**2.00%**	**2.20%**	**2.05%**	**2.00%**	**-**
	75th Pctl	**2.00%**	**2.24%**	**2.20%**	**2.15%**	**-**
Headline PCE Inflation (Q4/Q4)	25th Pctl	**2.00%**	**1.90%**	**2.00%**	**1.95%**	**2.00%**
	Median	**2.10%**	**2.10%**	**2.05%**	**2.00%**	**2.00%**
	75th Pctl	**2.20%**	**2.10%**	**2.20%**	**2.10%**	**2.00%**
Unemployment Rate (Q4 Average Level)	25th Pctl	**3.60%**	**3.30%**	**3.40%**	**3.50%**	**4.15%**
	Median	**3.70%**	**3.50%**	**3.70%**	**3.90%**	**4.40%**
	75th Pctl	**3.80%**	**3.80%**	**4.10%**	**4.23%**	**4.55%**

7b) Provide your estimate of the most likely outcome for the U.S. federal fiscal deficit (as a percent of GDP) for fiscal years 2019, 2020 and 2021.
(16 responses)

	FY 2019	FY 2020	FY 2021
25th Pctl	**4.30%**	**4.60%**	**4.85%**
Median	**4.75%**	**4.96%**	**5.05%**
75th Pctl	**5.00%**	**5.05%**	**5.25%**

7c) Please explain changes, if any, to your estimates in parts a and b since the last time this question was asked.
(21 responses)

Several dealers indicated that they had increased their forecast for GDP growth in 2018, and several noted that they had increased their forecasts for headline and/or core PCE inflation in at least one forecast period.

8a) For the outcomes below, provide the percent chance you attach to the annual average CPI inflation rate from September 1, 2018 - August 31, 2023 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%
Average	**3%**	**12%**	**27%**	**38%**	**15%**	**5%**

	Most Likely Outcome
25th Pctl	**2.10%**
Median	**2.20%**
75th Pctl	**2.30%**

8b) For the outcomes below, provide the percent chance you attach to the annual average CPI inflation rate from September 1, 2023 - August 31, 2028 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%
Average	**4%**	**10%**	**28%**	**41%**	**13%**	**5%**

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

9a) What percent chance do you attach to the U.S. economy **currently** being in a recession*?

9b) What percent chance do you attach to the U.S. economy being in a recession* **in 6 months**?

9c) What percent chance do you attach to the global economy being in a recession** **in 6 months**?

	Currently in U.S. Recession		U.S. Recession in 6 Months		Global Recession in 6 Months
25th Pctl	**0%**	25th Pctl	**5%**	25th Pctl	**10%**
Median	**2%**	Median	**10%**	Median	**12%**
75th Pctl	**5%**	75th Pctl	**10%**	75th Pctl	**15%**

***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.*

9d) Please explain the factors behind any change to your expectations in parts a-c since the last policy survey.
(19 responses)

Some dealers indicated that there had been no change to their expectations, while several dealers noted that they had increased their recession probabilities due to trade policy developments.