RESPONSES TO SURVEY OF PRIMARY DEALERS
Markets Group, Federal Reserve Bank of New York

MARCH 2019

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.

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

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

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

Current economic conditions:

> **Some dealers indicated that they expected the Committee to downgrade its characterization of, or note weakness in, household spending or consumption. Several dealers indicated that they expected the Committee to downgrade its characterization of the labor market, while several others indicated that they expected the Committee to note strength in the labor market or that the unemployment rate remains low. Several dealers indicated that they expected the Committee to weaken its characterization of investment and several indicated that they expected it to downgrade its characterization of economic activity from "solid". Finally, several dealers indicated that they expected the Committee to upgrade its characterization of market-based measures of inflation expectations, such as by indicating that these measures are no longer moving lower.**

Economic outlook:

> **Most dealers indicated that they expected no substantial changes to this section of the statement.**

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

> **Most dealers indicated that they expected no substantial changes to this section of the statement, with several noting in particular that they expect the Committee to reiterate language that it will be "patient".**

Other:
(12 responses)

> **Several dealers indicated that they expected communication related to balance sheet policy at the March FOMC meeting.**

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 the median of participants' projections for 2019 GDP growth to decline, and some dealers indicated that they expected the median of participants' projections for the 2019 unemployment rate to increase. Several dealers indicated that they expected the median of participants' projections for 2019 headline or core inflation to decline, while several others indicated that they expected the median of participants' projections for inflation to be unchanged. Finally, several dealers indicated that they expected the median of participants' projections for the unemployment rate in 2020 and/or 2021 to increase.**

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.

	Year-End 2019	Year-End 2020	Year-End 2021	Longer Run
25th Pctl	2.38%	2.68%	2.88%	2.75%
Median	2.63%	2.88%	2.88%	2.75%
75th Pctl	2.63%	2.88%	2.88%	2.75%

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

> **Several dealers indicated that they viewed the balance of risks to their forecasts as tilted to the downside, while several others indicated that they viewed the balance of risks as tilted to the upside.**

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

> **Some dealers indicated that they expected participants' target rate projections would become less dispersed; several indicated that they expected projections above the median to decline; and several indicated that they expected the average of participants' target rate projections to decline.**

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

> **Some dealers indicated that they expected the Chair to discuss the Fed's balance sheet, and some indicated that they expected him to emphasize patience during his press conference. In communicating their views, several dealers made reference to recent communication by the Chair. Several dealers indicated that they expected him to offer an upbeat baseline economic outlook and several indicated that they expected the Chair to emphasize data dependence and/or uncertainty.**

2)   How would you grade the Federal Reserve System's communication with the markets and with the public since the last policy survey? Please provide a rating between 1 and 5, with 1 indicating ineffectiveness and 5 indicating effectiveness.

	Number of Respondents
1 - Ineffective	3
2	2
3	3
4	13
5 - Effective	2

Please explain.

Some dealers indicated that they viewed communication as consistent, including several who viewed it as consistent on the theme of patience in particular, and several indicated that they viewed communication as clear or as having become clearer. Several dealers indicated that they perceived Fed communication as having shifted abruptly and/or with insufficient explanation, and several indicated that they viewed communication regarding balance sheet policy as inconsistent or insufficient.

3a) 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.

	Mar 19-20 2019	Apr 30-May 1 2019	Jun 18-19 2019	Jul 30-31 2019	Sep 17-18 2019	Oct 29-30 2019	Dec 10-11 2019
25th Pctl	2.38%	2.38%	2.38%	2.38%	2.38%	2.38%	2.38%
Median	2.38%	2.38%	2.38%	2.38%	2.38%	2.38%	2.63%
75th Pctl	2.38%	2.38%	2.38%	2.38%	2.63%	2.63%	2.63%
# of Responses	23	23	23	23	23	23	23
	2020 Q1	2020 Q2	2020 Q3	2020 Q4	2021 Q1	2021 Q2	2021 H2
25th Pctl	2.38%	2.63%	2.38%	2.38%	2.63%	2.63%	2.50%
Median	2.63%	2.63%	2.63%	2.63%	2.63%	2.63%	2.63%
75th Pctl	2.63%	2.88%	2.88%	2.88%	2.88%	2.88%	2.88%
# of Responses	22	22	22	22	17	17	16

3b) 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	2.50%	2.10%
Median	2.75%	2.50%
75th Pctl	2.88%	2.75%

3c) 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 2019</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 2019
Average	**50%**	**11%**	**39%**

3d) Conditional on the Committee's next policy action between now and the end of 2019 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 2019 being an increase.

	Increase Occurs at March 2019 FOMC Meeting	Increase Occurs at April/May 2019 FOMC Meeting	Increase Occurs at June 2019 FOMC Meeting or Later
Average	**1%**	**4%**	**95%**

3e) 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, conditional on the following possible scenarios for the direction and timing of the Committee's next policy action between now and the end of 2019. 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. (22 responses)

Next Change is an Increase, Occurs at Apr./May 2019 FOMC Meeting or Earlier							
≤ 2.00%	2.01 - 2.25%	2.26 - 2.50%	2.51 - 2.75%	2.76 - 3.00%	3.01 - 3.25%	3.26 - 3.50%	≥ 3.51%
2%	**4%**	**7%**	**33%**	**35%**	**14%**	**4%**	**2%**

(Average)

Next Change is an Increase, Occurs at Jun. 2019 FOMC Meeting or Later							
≤ 2.00%	2.01 - 2.25%	2.26 - 2.50%	2.51 - 2.75%	2.76 - 3.00%	3.01 - 3.25%	3.26 - 3.50%	≥ 3.51%
2%	**3%**	**14%**	**51%**	**24%**	**5%**	**1%**	**1%**

(Average)

Next Change is a Decrease							
≤ 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%
6%	**4%**	**6%**	**9%**	**15%**	**18%**	**22%**	**20%**

(Average)

3f-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 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. (22 responses)

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%	3.51-4.00%	≥ 4.01%
Average	6%	7%	14%	25%	28%	15%	3%	1%

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%	3.51-4.00%	≥ 4.01%
Average	7%	12%	17%	19%	20%	18%	6%	2%

3f-ii) Please indicate the percent chance that you attach to moving to the ZLB at some point between <u>now and the end of 2021</u>.

	Probability of Moving to ZLB at Some Point between Now and the End of 2021
25th Pctl	25%
Median	30%
75th Pctl	35%

3f-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 2020 and 2021</u>, <u>conditional on moving to the ZLB at some point between now and the end of 2021</u>. Only fill out these conditional probability distributions if you assigned a non-zero 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.
(21 responses)

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	11%	43%	16%	10%	8%	8%	3%	3%

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%	16%	10%	7%	3%	1%	0%

3f-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%**

3g) For parts a-f, please explain the factors behind any change to your expectations, where applicable, since the last policy survey.
(21 responses)

> **Most dealers indicated that they placed a higher probability on fewer increases in the target range through the forecast horizon. In explaining the change to their forecasts, several dealers noted that their perception of a change in the Fed's policy stance caused them to revise downward their expectations. Several dealers also cited moderation in the strength of economic data, and several cited uncertainty about the global economic outlook.**

4) The following matrix lays out hypothetical scenarios in which the realized levels of the 2019 unemployment rate (Q4 average level) and 2019 core PCE inflation (Q4/Q4) are either 50 basis points above, below, or equal to the medians of FOMC participants' projections for these indicators in the June Summary of Economic Projections (SEP). For example, the upper left box represents a scenario in which the unemployment rate and core PCE inflation are both 50 basis points below the current SEP medians. The upper right box represents a scenario in which the unemployment rate is 50 basis points above the current SEP median, while core PCE inflation is 50 basis points below the current median.

For each of the following scenarios, please indicate the level of the target federal funds rate or range that you expect would prevail at the end of Q1 2020. If you expect a target range, please indicate the midpoint of that range in providing your response.

25th Percentile Responses		2019 Unemployment rate (Q4 average level)		
		- 50 bps	Current SEP median 3.5%	+ 50 bps
2019 Core PCE inflation (Q4/Q4)	- 50 bps	**2.38%**	**2.13%**	**1.63%**
	Current SEP median 2.0%	**2.63%**	**2.38%**	**2.13%**
	+ 50 bps	**2.88%**	**2.63%**	**2.63%**

Median Responses		2019 Unemployment rate (Q4 average level)		
		- 50 bps	Current SEP median 3.5%	+ 50 bps
2019 Core PCE inflation (Q4/Q4)	- 50 bps	**2.38%**	**2.38%**	**2.13%**
	Current SEP median 2.0%	**2.88%**	**2.63%**	**2.38%**
	+ 50 bps	**3.13%**	**2.88%**	**2.88%**

75th Percentile Responses		2019 Unemployment rate (Q4 average level)		
		- 50 bps	Current SEP median 3.5%	+ 50 bps
2019 Core PCE inflation (Q4/Q4)	- 50 bps	**2.40%**	**2.38%**	**2.13%**
	Current SEP median 2.0%	**2.88%**	**2.63%**	**2.63%**
	+ 50 bps	**3.38%**	**3.13%**	**2.88%**

Please explain any assumptions underlying your responses.
(19 responses)

> **Some dealers indicated that they expected the Committee would react more to deviations in inflation than to deviations in the unemployment rate. Also, several dealers noted that they expected the Committee would tolerate a slight overshoot of the 2 percent inflation target without increasing the target range.**

5a) The minutes of the January 2019 FOMC meeting noted that "[a]lmost all participants thought that it would be desirable to announce before too long a plan to stop reducing the Federal Reserve's asset holdings later this year."

Please provide your estimate for the most likely timing of each of the following events, <u>conditional on **not** moving to the ZLB at any point between now and the end of 2025</u>.

	Announcement of a plan to stop reducing the Federal Reserve's asset holdings*	Initial implementation of a plan to stop reducing the Federal Reserve's asset holdings**	Quarter in which the par value of the domestic SOMA portfolio first reaches its lowest level between now and the end of 2025***	Quarter in which the par value of the domestic SOMA portfolio first exhibits material quarter-over-quarter growth***
25th Pctl	**March 2019 FOMC**	**June 2019**	**Q3 2019**	**Q2 2020**
Median	**March 2019 FOMC**	**September 2019**	**Q4 2019**	**Q3 2020**
75th Pctl	**May 2019 FOMC**	**October 2019**	**Q1 2020**	**Q1 2021**

5b)   Please indicate the lowest average weekly level ($ billions) you expect reserve balances to reach between now and the end of 2025, <u>conditional on **not** moving to the ZLB at any point between now and the end of 2025,</u> as reported in the weekly H.4.1 release. For reference, the average level of reserve balances for the week ended February 27, 2019 was $1641 billion according to the most recent H.4.1 release.

Lowest Average Weekly Level of Reserve Balances Between Now and the End of 2025 Conditional on Not Moving to the Zero Lower Bound	
25th Pctl	1100
Median	1200
75th Pctl	1300

5c)   Please provide your estimate for the level of the par value of the SOMA portfolio <u>at the end of 2019,</u> conditional on the target federal funds rate or range at the end of 2019 falling in each of the ranges below. If you expect a range for the federal funds target, please use the midpoint of that range in providing your response. For reference, the level of the SOMA portfolio on February 27, 2019 was $3792 billion, including inflation compensation and settled and unsettled agency MBS, according to the most recent H.4.1 release.
(21 responses)

Level of the Par Value of the SOMA Portfolio at Year-End 2019, Conditional on Different Levels of the Target Federal Funds Range ($ Billions)					
	≤ 1.75%	1.76-2.25%	2.26-2.75%	2.76 - 3.25%	≥3.26%
25th Pctl	3600	3500	3425	3419	3400
Median	3700	3621	3500	3500	3500
75th Pctl	3800	3700	3600	3600	3600
# of Responses	21	21	21	21	21

6)   The previous policy survey asked respondents to rate the importance of different factors in driving the increase in various measures of interest rate and equity market volatility in the fourth quarter of 2018, as well as in late December in particular.

Please rate the importance of the following factors in driving risk asset prices <u>since the beginning of 2019</u>. **(5=very important, 1=not important)**

Factors Driving Risk Asset Prices Since the Beginning of 2019						
	Changes in outlook for U.S. economy	Changes in uncertainty around outlook for U.S. economy	Changes in outlook for foreign economies	Changes in uncertainty around outlook for foreign economies	Changes in perception of the FOMC's reaction function for interest rate policy	Changes in perception of the FOMC's reaction function for balance sheet policy
1-Not Important	3	1	1	1	1	1
2	9	5	5	4	1	1
3	5	11	10	9	1	4
4	5	4	5	6	7	9
5-Very Important	1	2	2	3	13	8
# of Responses	23	23	23	23	23	23

	Realized change in aggregate size of global central banks' balance sheets	Changes in global political uncertainty	Automated/ quantitative trading strategies	Changes in seasonal factors	Other (please explain)
1-Not Important	9	1	6	11	1
2	10	10	12	6	0
3	3	5	3	2	0
4	1	7	2	4	2
5-Very Important	0	0	0	0	2
# of Responses	23	23	23	23	5

If "Other", please explain
(6 responses)

Dealers did not provide substantial commentary in this section.

7a) For the outcomes below, provide the percent chance you attach to the annual average CPI inflation rate from March 1, 2019 – February 29, 2024 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%	11%	29%	37%	13%	5%

	Most Likely Outcome
25th Pctl	2.00%
Median	2.10%
75th Pctl	2.25%

7b) For the outcomes below, provide the percent chance you attach to the annual average <u>CPI inflation</u> rate from March 1, 2024 – February 28, 2029 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%	11%	28%	38%	13%	6%

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

8a) What percent chance do you attach to:
- the U.S. economy currently being in a recession*?
- the U.S. economy being in a recession* **in 6 months**?
- 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	2%	25th Pctl	10%	25th Pctl	15%
Median	5%	Median	15%	Median	20%
75th Pctl	5%	75th Pctl	20%	75th Pctl	25%

*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.*

8b) What percent chance do you attach to the U.S. economy first entering a recession* in each of the following periods?

	2019 or earlier	2020	2021	2022	2023 or later
Average	16%	26%	26%	16%	15%

NBER-defined recession

8c) Please explain the factors behind any change to your expectations in parts a and b since the last policy survey.
(17 responses)

> **Several dealers indicated no substantial changes to their expectations since the last policy survey. Several others noted that they had increased the probability they assigned to a U.S. being in a recession currently, in 6 months, and/or by the end of 2019, with**

several of these dealers citing economic data as influencing this change. Additionally, several dealers indicated that they had increased the probability they assigned to a global recession currently and/or in 6 months.

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

		2019	2020	2021	Longer Run
Real GDP (Q4/Q4 Growth)	25th Pctl	1.80%	1.60%	1.50%	1.75%
	Median	2.10%	1.80%	1.65%	1.90%
	75th Pctl	2.20%	2.00%	2.00%	2.00%
Core PCE Inflation (Q4/Q4)	25th Pctl	1.90%	2.00%	2.00%	-
	Median	2.10%	2.10%	2.00%	-
	75th Pctl	2.10%	2.20%	2.10%	-
Headline PCE Inflation (Q4/Q4)	25th Pctl	1.70%	2.00%	2.00%	2.00%
	Median	1.80%	2.00%	2.00%	2.00%
	75th Pctl	2.00%	2.10%	2.10%	2.00%
Unemployment Rate (Q4 Average Level)	25th Pctl	3.40%	3.50%	3.50%	4.10%
	Median	3.60%	3.70%	3.87%	4.40%
	75th Pctl	3.70%	3.90%	4.20%	4.60%

9b) Please explain changes, if any, to your estimates in part a since the last time this question was asked.
(19 responses)

Several dealers indicated that they had revised lower their GDP growth estimates for 2019, and several noted that they had revised lower their headline and/or core PCE estimates for 2019.