RESPONSES TO SURVEY OF PRIMARY DEALERS

Markets Group, Federal Reserve Bank of New York

MAY 2018

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

Current economic conditions:

Some dealers expected the Committee to upgrade its assessment of inflation in its characterization of current economic conditions and some dealers expected the Committee to note that economic activity had expanded at a slower pace during the first quarter of 2018. Several other dealers expected no change to the characterization of current economic conditions. Several dealers expected the language in the statement to be adjusted to reflect a recent moderation in employment growth, while several others expected the Committee to reiterate its positive characterization of the labor market, including by noting that job gains remain strong and the unemployment rate remains low.

Economic outlook:

Many dealers expected no change to the Committee's characterization of the economic outlook, while several expected its assessment of the inflation outlook to be upgraded. Several dealers expected the Committee to note that the slowing of economic activity in the first quarter is likely to be temporary.

Communication on the expected path of the target fed funds rate:
(22 responses)

Many dealers expected no significant changes to this section of the statement.

Other:
(10 responses)

Dealers did not provide substantial commentary in this section.

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	0
2	1
3	4
4	16
5 - Effective	2

Please explain:
(21 responses)

Some dealers indicated that the Federal Reserve System's communication has been consistent or clear. Specifically, several dealers cited the Chairman's press conference following the March FOMC meeting and/or his subsequent comments as an example of effective communication. Several dealers also noted that the policy outlook had been effectively communicated.

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.

	May 1-2 2018	Jun. 12-13 2018	Jul. 31 - Aug. 1 2018	Sep. 25-26 2018	Nov. 7-8 2018	Dec. 18-19 2018	Jan. 29-30 2019
25th Pctl	**1.63%**	**1.88%**	**1.88%**	**2.13%**	**2.13%**	**2.13%**	**2.13%**
Median	**1.63%**	**1.88%**	**1.88%**	**2.13%**	**2.13%**	**2.38%**	**2.38%**
75th Pctl	**1.63%**	**1.88%**	**1.88%**	**2.13%**	**2.13%**	**2.38%**	**2.38%**
# of Responses	**23**	**23**	**23**	**23**	**23**	**23**	**22**
	2019 Q1	2019 Q2	2019 Q3	2019 Q4	2020 Q1	2020 Q2	2020 H2
25th Pctl	**2.38%**	**2.63%**	**2.63%**	**2.88%**	**2.88%**	**2.88%**	**2.88%**
Median	**2.63%**	**2.75%**	**2.88%**	**2.88%**	**2.88%**	**3.13%**	**3.06%**
75th Pctl	**2.63%**	**2.88%**	**3.13%**	**3.13%**	**3.13%**	**3.38%**	**3.25%**
# of Responses	**22**	**22**	**22**	**22**	**18**	**18**	**18**

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.
(22 responses)

	Longer Run	10-yr Average FF Rate
25th Pctl	**2.50%**	**2.00%**
Median	**2.75%**	**2.50%**
75th Pctl	**3.00%**	**2.75%**

3c) 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	**93%**	**2%**	**5%**

3d) 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 May FOMC meeting	Increase Occurs at June FOMC meeting	Increase Occurs at Jul./Aug. FOMC Meeting or later
Average	**3%**	**86%**	**11%**

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 2018, conditional on the following possible scenarios for the direction and timing of the Committee's next policy action between now and the end of 2018. 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.

Next change is an increase, occurs at June FOMC meeting or earlier								
	≤ 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	**1%**	**1%**	**2%**	**4%**	**11%**	**32%**	**42%**	**7%**

Next change is an increase, occurs at Jul./Aug. FOMC meeting or later								
	≤ 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	**1%**	**2%**	**4%**	**9%**	**29%**	**40%**	**13%**	**2%**

Next change is a decrease								
	< 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%
Average	**2%**	**19%**	**16%**	**19%**	**16%**	**13%**	**14%**	**1%**

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 2019 and 2020, conditional on **not** moving to the zero lower bound (ZLB) at any point between now and the end of 2020. If you expect a target range, please use the midpoint of that range in providing your response.

(22 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%**	**5%**	**10%**	**17%**	**33%**	**24%**	**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	**6%**	**8%**	**10%**	**14%**	**24%**	**29%**	**10%**

3f-ii) Please indicate the percent chance that you attach to moving to the ZLB at some point between now and the end of 2020.

	Probability of Moving to ZLB at Some Point between Now and the End of 2020
25th Pctl	**15%**
Median	**20%**
75th Pctl	**25%**

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 at the end of 2019 and 2020, conditional on moving to the ZLB at some point between now and the end of 2020. 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 2020. If you expect a target range, please use the midpoint of that range in providing your response.
(21 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	**9%**	**43%**	**19%**	**13%**	**8%**	**4%**	**1%**	**3%**

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	**14%**	**46%**	**19%**	**11%**	**5%**	**2%**	**1%**	**2%**

3f-iv) What is your estimate of the target federal funds rate or range at the effective lower bound?
(22 responses)

	Level of Target Fed 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.
(19 responses)

Several dealers noted that their expected level of the target federal funds rate at year-end 2018 or 2019 had increased, while several dealers indicated that there had been no material changes to their expectations.

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 2018 and 2019.
(22 responses)

Year-end 2018							
	≤ 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	**2%**	**5%**	**13%**	**31%**	**31%**	**14%**	**4%**

Year-end 2019							
	≤ 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	**3%**	**7%**	**13%**	**21%**	**29%**	**18%**	**10%**

5a) Since the beginning of April, the spread between interest on excess reserves (IOER) and the effective federal funds rate (EFFR) has averaged +6 basis points, and the spread between the Tri-party General Collateral Rate (TGCR) and the overnight reverse repurchase (ON RRP) rate has averaged +21 basis points. Please provide your estimate for the IOER-EFFR and TGCR-ON RRP rate spreads on each of the following dates.
(19 responses)

	IOER minus EFFR (in bps)		
	Dec. 28, 2018*	Jun. 27, 2019*	Dec. 30, 2019*
25th Pctl	**4.0**	**2.0**	**0.0**
Median	**5.0**	**4.0**	**2.0**
75th Pctl	**5.5**	**5.0**	**5.0**

**These dates are not period-end reporting dates.*

	TGCR minus ON RRP rate (in bps)		
	Dec. 28, 2018*	Jun. 27, 2019*	Dec. 30, 2019*
25th Pctl	**19.0**	**20.0**	**20.0**
Median	**20.0**	**22.0**	**22.0**
75th Pctl	**21.0**	**25.0**	**27.0**

These dates are not period-end reporting dates.

5b) Please rate the importance of the following factors in influencing the change, if any, in the spread between IOER and EFFR between now and December 30, 2019. (5=very important, 1=not important).

Factors Influencing the Change, If Any, in the IOER-EFFR Spread through Dec. 30, 2019						
	Change in level of reserve balances	Reduction in FDIC fees	Change in regulatory constraints	Treasury securities supply dynamics	Change in amount of IOER arbitrage	Other (please explain)
1 - Not Important	**3**	**4**	**4**	**2**	**5**	**0**
2	**1**	**3**	**3**	**4**	**5**	**0**
3	**5**	**6**	**7**	**4**	**6**	**1**
4	**3**	**5**	**3**	**7**	**3**	**1**
5 - Very Important	**9**	**3**	**4**	**4**	**2**	**0**
# of Responses	**21**	**21**	**21**	**21**	**21**	**2**

If "Other", please explain:
(2 responses)

Dealers did not provide substantial commentary in this section.

5c) Please provide your estimate of the most likely level of the spread between the level of interest on excess reserves (IOER) and the effective federal funds rate (EFFR) conditional on each of the following levels of reserve balances.
(21 responses)

		Reserves ($ billions)*						
		2000	1750	1500	1250	1000	750	500
IOER minus EFFR (in bps)	25th Pctl	**5.0**	**4.0**	**3.0**	**0.0**	**0.0**	**-2.0**	**-4.0**
	Median	**6.0**	**5.0**	**4.0**	**3.0**	**2.0**	**1.0**	**0.0**
	75th Pctl	**6.0**	**5.0**	**5.0**	**5.0**	**4.0**	**3.0**	**3.0**

**The most recent observed level of reserves as reported in the H.4.1 release prior to the date of the survey was $2129 billion; IOER minus EFFR averaged +6 bps between the beginning of April and the date of the survey.*

6) Since the September 2017 FOMC meeting, 2-year and 10-year U.S. Treasury yields have increased about 100 and 65 basis points, respectively. Please provide your estimate of how much of the change in yields over this time period, if any, is attributable to changes in expectations for net Treasury issuance to the private sector (excluding impacts from changes in the Federal Reserve's balance sheet).

In addition, please provide your estimate of the amount of future changes in 2-year and 10-year Treasury yields by year-end 2018 and over calendar year 2019, if any, that are attributable to expected Treasury issuance.
(20 responses)

	2-Year Treasury Yield		
	25th Pctl	Median	75th Pctl
Change in yield since September 2017 FOMC meeting attributable to changes in issuance expectations (in bps)	7.3	17.5	30.0
Expected change in yield by year-end 2018 attributable to expected Treasury issuance (in bps)	5.0	10.0	10.0
Expected change in yield over calendar year 2019 attributable to expected Treasury issuance (in bps)	5.0	8.5	20.0

	10-Year Treasury Yield		
	25th Pctl	Median	75th Pctl
Change in yield since September 2017 FOMC meeting attributable to changes in issuance expectations (in bps)	5.0	10.0	12.5
Expected change in yield by year-end 2018 attributable to expected Treasury issuance (in bps)	5.0	10.0	15.0
Expected change in yield over calendar year 2019 attributable to expected Treasury issuance (in bps)	9.0	10.0	17.5

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

		Q4/Q4 2018	Q4/Q4 2019	Q4/Q4 2020	Longer Run
Real GDP	25th Pctl	**2.50%**	**1.90%**	**1.60%**	**1.70%**
	Median	**2.70%**	**2.40%**	**1.80%**	**1.80%**
	75th Pctl	**2.90%**	**2.60%**	**2.20%**	**2.00%**
Core PCE Inflation	25th Pctl	**1.90%**	**1.90%**	**2.00%**	**-**
	Median	**2.00%**	**2.10%**	**2.00%**	**-**
	75th Pctl	**2.10%**	**2.20%**	**2.20%**	**-**
Headline PCE Inflation	25th Pctl	**1.90%**	**1.90%**	**2.00%**	**2.00%**
	Median	**2.07%**	**2.00%**	**2.10%**	**2.00%**
	75th Pctl	**2.20%**	**2.20%**	**2.20%**	**2.00%**
Unemployment Rate*	25th Pctl	**3.60%**	**3.20%**	**3.50%**	**4.30%**
	Median	**3.70%**	**3.50%**	**3.80%**	**4.50%**
	75th Pctl	**3.80%**	**3.80%**	**4.10%**	**4.80%**

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

7b) Provide your estimate of the most likely outcome for the U.S. federal fiscal deficit (as a percent of GDP) for fiscal years 2018, 2019 and 2020.
(19 responses)

	FY 2018	FY 2019	FY 2020
25th Pctl	**3.70%**	**4.70%**	**5.00%**
Median	**4.00%**	**4.90%**	**5.10%**
75th Pctl	**4.20%**	**5.22%**	**5.20%**

7c) Please explain changes to your estimates in parts a and b since the last policy survey, where applicable.
(20 responses)

Several dealers indicated that they incorporated the latest CBO estimates into their projections for the U.S. federal fiscal deficit, and several dealers indicated that they revised their inflation estimates higher.

8a) For the outcomes below, provide the percent chance you attach to the annual average CPI inflation rate from April 1, 2018 – March 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%**	**11%**	**29%**	**39%**	**14%**	**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 April 1, 2023 – March 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%**	**32%**	**37%**	**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	**8%**
Median	**2%**	Median	**10%**	Median	**10%**
75th Pctl	**5%**	75th Pctl	**10%**	75th Pctl	**10%**

***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.
(12 responses)

Some dealers noted that they had made no change to their recession probabilities.