RESPONSES TO SURVEY OF PRIMARY DEALERS

Markets Group, Federal Reserve Bank of New York

MARCH 2020

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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 24 primary dealers. Except where noted, all 24 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

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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 they expected this section of the statement to address the impact of the coronavirus outbreak, with several indicating they expected this section to contain similar language to the Committee's statement on March 3. Several dealers indicated that they expected a downgrade to the Committee's characterization of market-based measures of inflation compensation. Several dealers indicated that they expected no material changes to this section of the statement.

Economic outlook:
(23 responses)

Some dealers indicated that they expected this section of the statement to discuss the outlook in terms of the coronavirus outbreak, with several indicating that they expected the Committee's characterization of the outlook to be downgraded due to the outbreak. Several indicated that they expected this section of the statement to highlight the uncertainty related to the outbreak, and several indicated they expected the Committee's characterization of the outlook to note that downside risks have increased.

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

Many dealers indicated they expected this section to contain similar language from the Committee's statement on March 3, such as by noting that the Committee will "act as appropriate" or as needed to support the economy, or that the Committee will closely monitor developments. Many indicated that they expected the Committee to announce a decrease in the target federal funds range.

Other:
(8 responses)

Dealers did not provide significant commentary in this section.

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

Many dealers indicated that they expected participants' median GDP growth projections for 2020 to decline from the previous SEP, and several indicated that they expected the median of participants' GDP growth projections for 2021 to increase from the previous SEP. Some indicated that they expected participants' median core PCE inflation projections for 2020 to decline from the previous SEP. In addition, several dealers indicated that they

expected participants' median unemployment rate projection for 2020 to increase from the previous SEP.

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.
(23 responses)

	Year-End 2020	Year-End 2021	Year-End 2022	Longer Run
25th Pctl	**0.44%**	**0.63%**	**1.13%**	**2.50%**
Median	**0.63%**	**0.94%**	**1.63%**	**2.50%**
75th Pctl	**0.63%**	**1.25%**	**1.88%**	**2.50%**

Please comment on the balance of risks around your own expectations for the median projections.
(23 responses)

Many dealers indicated that they viewed the balance of risks to their expectations for the median of participants' target federal funds rate projections as tilted to the downside.

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

Some dealers indicated that they expected the distribution of participants' target rate projections to widen or be more disperse for one or more year-ends. Several indicated that they expected the distribution of participants' target rate projections to shift lower, including several that indicated they expected participants' target rate projections to extend to the zero lower bound of the target range for the federal funds rate.

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

Most dealers indicated that they expected the Chair's remarks to be similar to those from the March 3 communications, with several indicating that they expected the Chair to reiterate that the Fed is "closely monitoring" the impact of the coronavirus outbreak and ready to "act as appropriate" and use all available tools to support the economy. Several indicated they expected the Chair to discuss the potential tools the Fed can use other than decreases in the target range in support of monetary policy or discuss the Fed's toolkit more broadly. Finally, several dealers indicated they expected the Chair to highlight the downside risks to the outlook.

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	7
3	8
4	8
5 - Effective	1

Please explain.
(23 responses)

Some dealers indicated that they generally viewed communication from Fed officials as mixed or inconsistent.

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. 17-18	Apr. 28-29	Jun. 9-10	Jul. 28-29	Sep. 15-16	Nov. 4-5	Dec. 15-16
25th Pctl	0.63%	0.13%	0.13%	0.13%	0.13%	0.13%	0.13%
Median	0.63%	0.38%	0.38%	0.38%	0.38%	0.38%	0.38%
75th Pctl	0.75%	0.63%	0.63%	0.63%	0.63%	0.63%	0.63%
# of Responses	24	24	24	24	24	24	24
	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2022 Q1	2022 Q2	2022 H2
25th Pctl	0.13%	0.25%	0.38%	0.63%	0.63%	0.63%	0.88%
Median	0.38%	0.50%	0.63%	0.63%	0.88%	1.13%	1.38%
75th Pctl	0.88%	0.88%	0.88%	1.13%	1.13%	1.38%	1.88%
# of Responses	24	24	24	24	19	19	19

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	2.06%	1.36%
Median	2.25%	1.81%
75th Pctl	2.56%	2.13%

3c) Please indicate the percent chance that you attach to the target federal funds rate or range falling in each of the following ranges immediately following the March and April FOMC meetings and at the end of 2020. If you expect a target range, please use the midpoint of that range in providing your response.

Federal Funds Rate or Range Immediately Following the March 2020 FOMC Meeting								
	≤ 0.25%	0.26 - 0.50%	0.51 - 0.75%	0.76 - 1.00%	1.01 - 1.25%	1.26 - 1.50%	1.51 - 1.75%	≥ 1.76%
Average	**13%**	**19%**	**42%**	**20%**	**7%**	**0%**	**0%**	**0%**

Federal Funds Rate or Range Immediately Following the April 2020 FOMC Meeting								
	≤ 0.25%	0.26 - 0.50%	0.51 - 0.75%	0.76 - 1.00%	1.01 - 1.25%	1.26 - 1.50%	1.51 - 1.75%	≥ 1.76%
Average	**37%**	**28%**	**21%**	**12%**	**2%**	**0%**	**0%**	**0%**

Unconditional Year-End 2020 Target Federal Funds Rate								
	≤ 0.25%	0.26 - 0.50%	0.51 - 0.75%	0.76 - 1.00%	1.01 - 1.25%	1.26 - 1.50%	1.51 - 1.75%	≥ 1.76%
Average	**38%**	**29%**	**17%**	**12%**	**3%**	**1%**	**0%**	**0%**

3d) 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 2021 and 2022. If you expect a target range, please use the midpoint of that range in providing your response.
(22 responses)

Federal Funds Rate or Range at the End of 2021									
	< 0.00%	0.00 - 0.50%	0.51 - 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%**	**34%**	**30%**	**20%**	**7%**	**5%**	**1%**	**0%**	**0%**

Federal Funds Rate or Range at the End of 2022									
	< 0.00%	0.00 - 0.50%	0.51 - 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	**2%**	**25%**	**23%**	**24%**	**14%**	**6%**	**3%**	**2%**	**1%**

3e-i) Please indicate the percent chance that you attach to moving to the ZLB at some point between now and the end of 2022.

	Probability of Moving to ZLB at Some Point between Now and the End of 2022
25th Pctl	**50%**
Median	**68%**
75th Pctl	**80%**

3e-ii) 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	**0.00%**
Median	**0.03%**
75th Pctl	**0.13%**

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

Most dealers noted the impact of the coronavirus outbreak as a factor behind changes to their expectations, and several dealers indicated the recent tightening of financial conditions as a factor.

4) According to the Implementation Note issued March 03, 2020, "In light of recent and expected increases in the Federal Reserve's non-reserve liabilities, the Committee directs the [Open Market Desk at the Federal Reserve Bank of New York] to continue purchasing Treasury bills at least into the second quarter of 2020 to maintain over time ample reserve balances at or above the level that prevailed in early September 2019. The Committee also directs the Desk to continue conducting term and overnight repurchase agreement operations at least through April 2020 to ensure that the supply of reserves remains ample even during periods of sharp increases in non-reserve liabilities, and to mitigate the risk of money market pressures that could adversely affect policy implementation."

In light of these directives, and given details published by the Desk on the Repurchase Agreement Operational Details site,* please provide your expectation ($ billions) for the amount of reserve management purchases of Treasury bills as well as the maximum offered amounts for overnight and total term repurchase agreements (repo) during each of the following months.** If you expect any of these amounts to be zero in a given period, please enter 0.
(23 responses)

Reserve Management Purchase of Treasury Bills ($ billions)				
	March 2020	April 2020	May 2020	June 2020
25th Pctl	**60**	**60**	**40**	**20**
Median	**60**	**60**	**48**	**40**
75th Pctl	**60**	**60**	**60**	**60**

Maximum Daily Overnight Repo Offered ($ billions)				
	March 2020	April 2020	May 2020	June 2020
25th Pctl	**150**	**125**	**100**	**80**
Median	**150**	**150**	**138**	**100**
75th Pctl	**150**	**150**	**150**	**150**

Maximum Daily Total Term Repo Offered ($ billions)				
	March 2020	April 2020	May 2020	June 2020
25th Pctl	**80**	**60**	**45**	**40**
Median	**150**	**138**	**100**	**70**
75th Pctl	**180**	**180**	**160**	**180**

** Please see the Repurchase Agreement Operational Details site at https://www.newyorkfed.org/markets/domestic-market-operations/monetary-policy-implementation/repo-reverse-repo-agreements/repurchase-agreement-operational-details*

*** For term repo, please provide your expectation for the maximum total offered amount at any point during the period. If you expect multiple operations with overlapping terms (excluding overnight repo), please sum across all operations to arrive at the total offered amount. For example, in September 2019, 14-day term repo operations settled on September 24, 26, and 27 with offered amounts of $30 billion, $60 billion, and $60 billion, respectively, yielding a maximum total offered amount of $150 billion for that month (as of September 27).*

5) The table below lists the average spreads of money market rates* over the past week. Please provide your expectation for each of these rate spreads for the day after each of the FOMC meetings and the average for each of these rate spreads over December 2020 below. **Please ensure your signs are correct.**

	Top of target range minus IOER (in bps)				
	Mar. 17-18	Apr. 28-29	Jun. 9-10	Jul. 28-29	Average over Dec 2020
25th Pctl	**15.0**	**15.0**	**15.0**	**15.0**	**15.0**
Median	**15.0**	**15.0**	**15.0**	**15.0**	**15.0**
75th Pctl	**15.0**	**15.0**	**15.0**	**15.0**	**15.0**
# of Responses	**23**	**23**	**23**	**23**	**23**

	EFFR minus IOER (in bps)				
	Mar. 17-18	Apr. 28-29	Jun. 9-10	Jul. 28-29	Average over Dec 2020
25th Pctl	**-2.0**	**-2.0**	**-2.0**	**-2.0**	**-2.0**
Median	**-1.5**	**-2.0**	**-1.0**	**-1.0**	**-1.0**
75th Pctl	**-1.0**	**-1.0**	**-1.0**	**0.0**	**0.0**
# of Responses	**22**	**22**	**22**	**22**	**22**

	SOFR minus IOER (in bps)				
	Mar. 17-18	Apr. 28-29	Jun. 9-10	Jul. 28-29	Average over Dec 2020
25th Pctl	**-1.0**	**-2.0**	**-2.0**	**-1.0**	**-1.0**
Median	**0.0**	**-1.0**	**0.0**	**-1.0**	**0.0**
75th Pctl	**2.0**	**0.0**	**0.0**	**0.0**	**2.0**
# of Responses	**23**	**23**	**23**	**23**	**23**

	Bottom of target range minus ON RRP rate (in bps)				
	Mar. 17-18	Apr. 28-29	Jun. 9-10	Jul. 28-29	Average over Dec 2020
25th Pctl	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Median	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
75th Pctl	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
# of Responses	**23**	**23**	**23**	**23**	**23**

	3-Month U.S. Treasury bill yield minus 3-Month OIS (in bps)				
	Mar. 17-18	Apr. 28-29	Jun. 9-10	Jul. 28-29	Average over Dec 2020
25th Pctl	**-2.5**	**-5.0**	**-10.0**	**-5.0**	**-4.0**
Median	**1.0**	**-3.0**	**-1.5**	**-0.5**	**0.0**
75th Pctl	**3.0**	**2.0**	**1.0**	**0.0**	**0.0**
# of Responses	**22**	**22**	**22**	**22**	**22**

** Listed rates include the interest on excess reserves (IOER) rate, effective federal funds rate (EFFR), Secured Overnight Financing Rate (SOFR), overnight reverse repurchase (ON RRP) rate, and 3-month overnight index swap rate (3m OIS).*

6a) Please indicate any **changes** to your modal projections for U.S. and global real GDP growth in Q1 (annual rate) and 2020 (Q4/Q4) resulting from your assessment of the expected impact of the coronavirus outbreak. **Please ensure your signs are correct. Please enter zero if your projections are unchanged.**
(18 responses)

Percentage Point Change to Modal Projection for				
	U.S. 2020 Q1 GDP (Annual Rate)	U.S. 2020 GDP (Q4/Q4)	Global 2020 Q1 GDP (Annual Rate)	Global 2020 GDP (Q4/Q4)
25th Pctl	**-0.7**	**-0.6**	**-1.5**	**-0.9**
Median	**-0.4**	**-0.3**	**-1.0**	**-0.4**
75th Pctl	**-0.1**	**-0.2**	**-0.5**	**-0.3**

6b) Please provide the percent chance you attach to the following outcomes for the **impact** of the coronavirus outbreak on U.S. and global real GDP growth in 2020 (Q4/Q4) (listed in percentage points).
(21 responses)

Impact from Coronavirus Outbreak on 2020 U.S. Real GDP Growth (Q4/Q4)					
	≤ -1.51 ppt	-1.50 - -1.01 ppt	-1.00 - -0.51 ppt	-0.50 - -0.01 ppt	≥ 0 ppt
Average	**11%**	**18%**	**30%**	**40%**	**1%**

Impact from Coronavirus Outbreak on 2020 Global Real GDP Growth (Q4/Q4)					
	≤ -1.51 ppt	-1.50 - -1.01 ppt	-1.00 - -0.51 ppt	-0.50 - -0.01 ppt	≥ 0 ppt
Average	**17%**	**22%**	**30%**	**30%**	**1%**

7) In light of the statement* by the G7 Finance Ministers and Central Bank Governors on March 3, 2020, please describe your expectations for any global monetary and/or fiscal measures in response to the coronavirus outbreak.

Many dealers indicated that they expected the adoption of some form of fiscal measures globally in response to the coronavirus outbreak and several indicated they expected these measures to not be coordinated globally. Many dealers indicated that they expected the adoption of accommodative monetary policy globally as a response to the outbreak, with several indicating they expected coordinated responses from central banks while several others indicating they did not expect global coordination.

** Please see the statement at https://home.treasury.gov/news/press-releases/sm927*

8a) For the outcomes below, provide the percent chance you attach to the annual average CPI inflation rate from March 1, 2020 – February 28, 2025 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%**	**13%**	**30%**	**35%**	**14%**	**5%**

	Most Likely Outcome
25th Pctl	**2.00%**
Median	**2.10%**
75th Pctl	**2.23%**

8b) For the outcomes below, provide the percent chance you attach to the annual average CPI inflation rate from March 1, 2025 – February 28, 2030 falling in each of the following ranges. Please also provide your point estimate for the most likely outcome.
(23 responses)

	≤ 1.00%	1.01 - 1.50%	1.51 - 2.00%	2.01 - 2.50%	2.51 - 3.00%	≥ 3.01%
Average	**4%**	**11%**	**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*?
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	**5%**	25th Pctl	**30%**	25th Pctl	**37%**
Median	**10%**	Median	**40%**	Median	**45%**
75th Pctl	**28%**	75th Pctl	**50%**	75th Pctl	**50%**

**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.*

9b) What percent chance do you attach to the U.S. economy first entering a recession* in each of the following periods?

	2020 or earlier	2021	2022	2023	2024 or later
Average	**44%**	**20%**	**13%**	**10%**	**13%**

**NBER-defined recession*

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

In explaining increases in one or more of their near-term recession probabilities, many dealers cited the impact of the coronavirus outbreak and several cited the recent tightening in financial conditions.

10a) Provide your estimate of the most likely outcome for output, inflation, and unemployment.
(17 responses)

		2020	2021	2022	Longer Run
Real GDP (Q4/Q4 Growth)	25th Pctl	**1.20%**	**1.80%**	**1.70%**	**1.80%**
	Median	**1.50%**	**2.00%**	**1.90%**	**1.90%**
	75th Pctl	**1.75%**	**2.40%**	**2.20%**	**2.10%**
Core PCE Inflation (Q4/Q4)	25th Pctl	**1.70%**	**1.80%**	**1.90%**	**-**
	Median	**1.80%**	**1.95%**	**2.00%**	**-**
	75th Pctl	**1.91%**	**2.00%**	**2.00%**	**-**
Headline PCE Inflation (Q4/Q4)	25th Pctl	**1.40%**	**1.78%**	**1.80%**	**2.00%**
	Median	**1.60%**	**1.90%**	**2.00%**	**2.00%**
	75th Pctl	**1.80%**	**2.10%**	**2.00%**	**2.00%**
Unemployment Rate (Q4 Average Level)	25th Pctl	**3.50%**	**3.40%**	**3.50%**	**3.90%**
	Median	**3.70%**	**3.60%**	**3.85%**	**4.10%**
	75th Pctl	**3.95%**	**4.05%**	**4.30%**	**4.50%**

10b) Please explain changes, if any, to your estimates in part a since the last policy survey.
(22 responses)

Most dealers indicated downside risks to their economic forecasts due to the coronavirus outbreak. Many dealers noted that they had revised lower their growth estimates for the near term due to the impact of the outbreak. Several dealers indicated that they had revised higher their growth estimates for 2021 due to an anticipated improvement in economic conditions following the initial impact of the outbreak, and several noted that they had revised lower their inflation estimates.