RESPONSES TO SURVEY OF MARKET PARTICIPANTS

Markets Group, Federal Reserve Bank of New York

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

Responses were received from 28 market participants. Except where noted, all 28 participants responded to each question. In some cases, participants 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 Market Participants:
www.newyorkfed.org/markets/survey_market_participants.html

Table of Contents

1a) Provide below your expectations for **changes**, if any, from the March 15 and March 23 statements to the language referencing each of the following topics in the April FOMC statement. **Please write N/A if you do not expect any changes.**

Current economic conditions:
(27 responses)

Many respondents indicated that they expected the Committee to note a broad deterioration of economic activity in this section of the statement. Some respondents indicated that they expected the Committee to note a broad deterioration of the labor market. Several indicated that they expected the Committee to note that realized or expected inflation remains below target or has declined. Finally, several indicated that they expected no material changes to this section of the statement.

Economic outlook and communication on the expected path of the target federal funds rate:
(27 responses)

Some respondents indicated that they expected no material changes to communication on the expected path of the target range for the federal funds rate. Several respondents indicated that they expected the statement to repeat language from the Committee's statement on March 15 that the effects of the coronavirus will weigh on economic activity in the near-term and pose risks to the economic outlook. In addition, certain respondents indicated that they expected some changes as follows. Several indicated that they expected the Committee to note that the target range for the federal funds rate may remain at its current low level for an extended period of time. Several indicated that they expected the Committee to note that the current target range for the federal funds rate may remain at its current low level until certain metric-based conditions are met, such as specific targets for the unemployment rate or inflation. Several indicated that they expected no material changes to the Committee's characterization of the economic outlook. Finally, several indicated that they expected the Committee to note that the economic outlook is uncertain.

Communication on tools other than the target federal funds rate:
(25 responses)

Several respondents indicated that they expected no material changes to this section of the statement. Several indicated that they expected this section of the statement to repeat language that the Committee stands ready to use its full set of tools. Several indicated that they expected the Committee to provide additional clarification or new details on the implementation of existing tools. Finally, several indicated that they expected the Committee to provide additional guidance on the pace of asset purchases.

Other:
(13 responses)

Respondents did not provide significant commentary in this section.

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

Some respondents indicated that they expected the Chair's remarks to repeat elements from his April 9th webcast that the Fed stands ready to take whatever steps are necessary to support the economy and promote its dual mandate. Some indicated that they expected the Chair to take stock of the Fed's recent policy measures. Several indicated that they expected him to note that the Committee will continue to ensure the flow of credit to households and businesses, and several indicated that they expected him to note that the Committee will continue to ensure smooth market functioning. Finally, several indicated that they expected the Chair to stress the uncertainty surrounding the economic 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	1
3	5
4	8
5 - Effective	14
# of Responses	28

Please explain.

Some respondents indicated a positive view of the speed and communications surrounding the Fed's actions to support the economy, credit markets, and/or market functioning. Some indicated that they generally viewed the Fed's communication as clear or very clear. However, several indicated that they viewed certain aspects of policy measures with respect to announcements, strategy, or timelines as unclear.

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 year below. For the time periods at which you expect a target range, please indicate the midpoint of that range in providing your response.
(19 responses)

	Apr. 28-29	Jun. 9-10	Jul. 28-29	Sep. 15-16	Nov. 4-5	Dec. 15-16	Jan. 26-27
25th Pctl	**0.13%**	**0.13%**	**0.13%**	**0.13%**	**0.13%**	**0.13%**	**0.13%**
Median	**0.13%**	**0.13%**	**0.13%**	**0.13%**	**0.13%**	**0.13%**	**0.13%**
75th Pctl	**0.13%**	**0.13%**	**0.13%**	**0.13%**	**0.13%**	**0.13%**	**0.13%**
# of Responses	**28**	**28**	**28**	**28**	**28**	**28**	**28**
	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2022 Q1	2022 Q2	2022 H2
25th Pctl	**0.13%**	**0.13%**	**0.13%**	**0.13%**	**0.13%**	**0.13%**	**0.13%**
Median	**0.13%**	**0.13%**	**0.13%**	**0.13%**	**0.13%**	**0.13%**	**0.13%**
75th Pctl	**0.13%**	**0.13%**	**0.13%**	**0.13%**	**0.38%**	**0.50%**	**0.75%**
# of Responses	**28**	**28**	**28**	**28**	**28**	**28**	**28**

3b) Please describe what conditions or developments you expect will lead the FOMC to next change the target range.

Some respondents indicated that they expected an improvement in the labor market would lead to the next change of the target range for the federal funds rate, and some respondents indicated that they expected an increase in inflation to various levels would lead to the next change of the target range. Several respondents noted they expected the development of a vaccine and/or better treatment for the coronavirus would lead to the next change of the target range.

3c) 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	**1.31%**	**0.75%**
Median	**2.00%**	**1.23%**
75th Pctl	**2.50%**	**1.61%**

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 2020, 2021, and 2022. 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 2020										
	< 0.00%	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 - 1.75%	1.76 - 2.00%	≥ 2.01%
Average	**3%**	**94%**	**3%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**

Federal Funds Rate or Range at the End of 2021										
	< 0.00%	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 - 1.75%	1.76 - 2.00%	≥ 2.01%
Average	**4%**	**63%**	**16%**	**9%**	**5%**	**2%**	**1%**	**0%**	**0%**	**0%**

	Federal Funds Rate or Range at the End of 2022									
	< 0.00%	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 - 1.75%	1.76 - 2.00%	≥ 2.01%
Average	**5%**	**37%**	**16%**	**12%**	**9%**	**8%**	**5%**	**3%**	**3%**	**2%**

3e) 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	**-0.24%**
Median	**0.00%**
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.

Most respondents noted the impact of the coronavirus outbreak as a factor behind changes to their expectations. Several respondents noted their belief that the U.S. and/or global economy are currently in a recession as a factor, and several respondents noted a deterioration in economic conditions. Several respondents indicated the decrease in the target range for the federal funds rate as a factor, and several respondents indicated that they expected the target range to remain low or at the zero lower bound for a long period of time.

4a) Please provide your expectation ($ billions) for the amount of purchases, net of reinvestment purchases, of U.S. Treasury securities, agency mortgage-backed securities (MBS), and agency commercial mortgage-backed securities (CMBS) the Desk will conduct for each month listed below through the end of the year. If you expect any of these amounts to be zero in a given period, please enter 0.
(21 responses)

Net purchases of U.S. Treasury securities ($ billions)								
	May 2020	Jun. 2020	Jul. 2020	Aug. 2020	Sep. 2020	Oct. 2020	Nov. 2020	Dec. 2020
25th Pctl	**125**	**120**	**100**	**100**	**90**	**80**	**70**	**70**
Median	**238**	**175**	**138**	**123**	**100**	**110**	**100**	**100**
75th Pctl	**300**	**250**	**225**	**200**	**175**	**150**	**150**	**150**

Net purchases of agency MBS ($ billions)								
	May 2020	Jun. 2020	Jul. 2020	Aug. 2020	Sep. 2020	Oct. 2020	Nov. 2020	Dec. 2020
25th Pctl	**80**	**70**	**40**	**40**	**38**	**25**	**25**	**25**
Median	**150**	**100**	**75**	**50**	**50**	**50**	**50**	**50**
75th Pctl	**160**	**125**	**100**	**80**	**75**	**75**	**70**	**70**

Net purchases of agency CMBS ($ billions)								
	May 2020	Jun. 2020	Jul. 2020	Aug. 2020	Sep. 2020	Oct. 2020	Nov. 2020	Dec. 2020
25th Pctl	**5**	**5**	**1**	**1**	**1**	**0**	**0**	**0**
Median	**10**	**10**	**5**	**5**	**5**	**2**	**2**	**2**
75th Pctl	**15**	**15**	**10**	**10**	**10**	**10**	**6**	**6**

4b) Please indicate your expectations for the most likely level ($ billions) of SOMA assets on September 30, 2020 as well as on December 31, 2021. For reference, the approximate* level of SOMA assets on April 8, 2020 was $5,903 billion.

In addition, please indicate your expectations for the most likely level ($ billions) of other Federal Reserve assets associated with credit and liquidity programs on September 30, 2020 as well as on December 31, 2021. In providing your response, please include your expectations for previously-announced programs** as well as expectations for future programs, if any.
(18 responses)

SOMA Assets* ($ billions)		
	Sept. 30, 2020	Dec. 31, 2021
25th Pctl	**7000**	**7790**
Median	**7250**	**8500**
75th Pctl	**8200**	**9100**

Other assets associated with credit and liquidity programs** ($ billions)		
	Sept. 30, 2020	Dec. 31, 2021
25th Pctl	**1000**	**1000**
Median	**1600**	**1500**
75th Pctl	**2650**	**2500**

** According to the most recent H.4.1 release, the sum of the following SOMA assets totaled $5,903 billion: securities held outright (including inflation compensation), unamortized premiums and discounts on securities held outright, repurchase agreements (including those conducted through the FIMA Repo Facility and those conducted with primary dealers), central bank liquidity swaps, and foreign currency denominated assets. This approximation excludes accrued interest receivable. Please see H.4.1 releases at https://www.federalreserve.gov/releases/h41*

*** As of April 15, these include Discount Window, Primary Dealer Credit Facility (PDCF), Money Market Mutual Fund Liquidity Facility (MMLF), Commercial Paper Funding Facility (CPFF), Main Street New Loan Facility (MSNLF), Main Street Expanded Loan Facility (MSELF), Municipal Liquidity Facility (MLF), Primary Market Corporate Credit Facility (PMCCF), Secondary Market Corporate Credit Facility (SMCCF), Term Asset-Backed Securities Loan Facility (TALF), Paycheck Protection Program Liquidity Facility (PPPLF).*

4c) If you have formed expectations for the most likely level ($ billions) of Federal Reserve assets associated with any of the following, please provide your expectations for their levels on September 30, 2020 below. If you expect any of these amounts to be zero on this date, please enter 0.

Level on September 30, 2020 ($ billions)								
	Discount Window	PDCF	MMLF	CPFF	MSNLF	MSELF	MLF	TALF
25th Pctl	**0**	**0**	**0**	**10**	**153**	**150**	**250**	**40**
Median	**13**	**18**	**38**	**25**	**200**	**200**	**500**	**75**
75th Pctl	**50**	**30**	**50**	**50**	**300**	**300**	**500**	**100**
# of Responses	**10**	**10**	**10**	**10**	**11**	**11**	**11**	**11**

	PMCCF	SMCCF	PPPLF	Central bank liquidity swaps	FIMA repo	Repo agreements with primary dealers	Any additional programs
25th Pctl	**200**	**63**	**350**	**100**	**5**	**20**	**0**
Median	**300**	**200**	**450**	**200**	**13**	**93**	**50**
75th Pctl	**435**	**250**	**625**	**275**	**80**	**100**	**300**
# of Responses	**11**	**11**	**12**	**10**	**10**	**10**	**4**

4d) Please describe any views you have on the eventual effectiveness of specific programs listed in part c in achieving their stated goals.

(23 responses)

Some respondents indicated that they viewed various programs described in question 4c as effective in achieving their stated goals, while some noted aspects of various programs that they suggested may limit their effectiveness, with several highlighting their size, pricing, or eligibility requirements.

5) If applicable, please describe your expectations for the Federal Reserve to announce additional actions, or modifications to those previously announced, through year-end 2020.
(25 responses)

Some respondents indicated that they expected the Fed to expand certain existing credit or liquidity programs, and several respondents indicated that they expected an increase in the size of the Paycheck Protection Program Liquidity Facility, in particular.

6) 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 2020 and 2021.

Year-end 2020							
	< 0.00%	0.00 - 0.50%	0.51 - 1.00%	1.01 - 1.50%	1.51 - 2.00%	2.01 - 2.50%	≥ 2.51%
Average	**3%**	**23%**	**47%**	**19%**	**6%**	**1%**	**0%**

Year-end 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%
Average	**4%**	**16%**	**32%**	**32%**	**13%**	**4%**	**1%**

7) Relative to January 2020, please rate or provide your expectation for market functioning in each of the below markets at the following timeframes. (1 = significantly worse, 10 = significantly better)

Ratings of U.S. Treasuries Relative to January 2020			
	March 13	Today	1 Month From Today
1-Significantly Worse	18	0	0
2	4	0	0
3	5	5	2
4	0	7	5
5	0	6	5
6	0	2	4
7	0	4	2
8	0	2	4
9	0	1	3
10-Significantly Better	0	0	2
# of Responses	27	27	27

Ratings of Agency MBS Relative to January 2020			
	March 13	Today	1 Month From Today
1-Significantly Worse	21	0	0
2	6	1	1
3	0	6	1
4	0	10	7
5	0	3	7
6	0	5	3
7	0	0	3
8	0	2	2
9	0	0	1
10-Significantly Better	0	0	2
# of Responses	27	27	27

Ratings of Corporate Credit Relative to January 2020			
	March 13	Today	1 Month From Today
1-Significantly Worse	**20**	**0**	**0**
2	**5**	**2**	**1**
3	**1**	**8**	**4**
4	**0**	**8**	**6**
5	**0**	**6**	**6**
6	**0**	**0**	**5**
7	**0**	**2**	**1**
8	**0**	**1**	**1**
9	**1**	**0**	**1**
10-Significantly Better	**0**	**0**	**2**
# of Responses	**27**	**27**	**27**

8) 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. **Please ensure your signs are correct.**

	Top of target range*** minus IOER (in bps)		
	Apr. 28-29**	Jun. 9-10	Jul. 28-29
25th Pctl	**10.0**	**10.0**	**10.0**
Median	**15.0**	**15.0**	**15.0**
75th Pctl	**15.0**	**15.0**	**15.0**
# of Responses	**15**	**15**	**15**

Note: The average spread the week prior to the release of the survey was +15 basis points.

	EFFR minus IOER (in bps)		
	Apr. 28-29**	Jun. 9-10	Jul. 28-29
25th Pctl	**-6.0**	**-8.0**	**-9.0**
Median	**-5.0**	**-5.0**	**-5.0**
75th Pctl	**-5.0**	**-5.0**	**-3.0**
# of Responses	**15**	**15**	**15**

Note: The average spread the week prior to the release of the survey was -5 basis points.

	SOFR minus IOER (in bps)		
	Apr. 28-29**	Jun. 9-10	Jul. 28-29
25th Pctl	**-10.0**	**-10.0**	**-10.0**
Median	**-7.0**	**-6.0**	**-5.0**
75th Pctl	**-5.0**	**-4.0**	**0.0**
# of Responses	**15**	**15**	**15**

Note: The average spread the week prior to the release of the survey was -9 basis points.

	Bottom of target range*** minus ON RRP rate (in bps)		
	Apr. 28-29**	Jun. 9-10	Jul. 28-29
25th Pctl	**0.0**	**0.0**	**0.0**
Median	**0.0**	**0.0**	**0.0**
75th Pctl	**0.0**	**0.0**	**0.0**
# of Responses	**15**	**15**	**15**

Note: The average spread the week prior to the release of the survey was 0 basis points.

	3-Month U.S. Treasury bill yield minus 3-Month OIS (in bps)		
	Apr. 28-29**	Jun. 9-10	Jul. 28-29
25th Pctl	**3.0**	**1.0**	**0.0**
Median	**6.0**	**5.0**	**3.0**
75th Pctl	**10.0**	**7.0**	**5.0**
# of Responses	**15**	**15**	**15**

Note: The average spread the week prior to the release of the survey was +9 basis points.

** 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).*

*** Please provide your response as of May 1, the first post-FOMC day that is not a period-end reporting date.*

**** Target range for the federal funds rate.*

9a) Please indicate your modal projections for U.S. real GDP growth for each quarter (seasonally adjusted annual rate).
(27 responses)

Modal Projection for U.S. Real GDP Growth (percent)				
	Q1 2020 (saar)	Q2 2020 (saar)	Q3 2020 (saar)	Q4 2020 (saar)
25th Pctl	**-8.0%**	**-35.0%**	**2.0%**	**3.0%**
Median	**-5.0%**	**-30.0%**	**10.0%**	**9.0%**
75th Pctl	**-2.5%**	**-25.0%**	**19.0%**	**12.0%**

9b) Please provide the percent chance you attach to the following outcomes for U.S. real GDP growth in 2020 (Q4/Q4).
(27 responses)

Probability Distribution of U.S. Real GDP Growth in 2020 (Q4/Q4)						
	≤ -8.01%	-8.00 - -6.01%	-6.00 - -4.01%	-4.00 - -2.01%	-2.00 - -0.01%	≥ 0 %
Average	**17%**	**29%**	**32%**	**15%**	**5%**	**2%**

10) At what level do you expect the unemployment rate (U-3) to next peak and when?
(27 responses)

Peak Unemployment (U-3) Rate		
	Peak Unemployment (U-3) Rate	Peak Unemployment Rate Time Period
25th Pctl	**15.0%**	**May 2020**
Median	**18.0%**	**June 2020**
75th Pctl	**20.0%**	**June 2020**

** Dropdown selections:*
Apr 2020, May 2020, Jun 2020, Jul 2020, Aug 2020, Sep 2020, Oct 2020, Nov 2020, Dec 2020, Jan 2021, Feb 2021, Mar 2021, Apr 2021, May 2021, Jun 2021, Jul 2021, Aug 2021, Sep 2021, Oct 2021, Nov 2021, Dec 2021, Jan 2022 or later

11) Please describe your expectations for any additional U.S. federal fiscal policy measures through year-end 2020 to support the economy, if applicable.

Most respondents indicated that they expected additional fiscal stimulus, with many indicating they expected the Paycheck Protection Program, in particular, to be expanded. Some respondents indicated that they expected additional funding for state and local governments, and several indicated that they expected additional funding for healthcare facilities. In addition, several respondents indicated that they expected additional support targeted at households such as direct cash payments, and several indicated that they expected an expansion of unemployment insurance benefits.

12a) For the outcomes below, provide the percent chance you attach to the PCE inflation rate from April 1, 2022 – March 31, 2023 falling in each of the following ranges. Please also provide your point estimate for the most likely outcome.

	≤ 0.75%	0.76 - 1.25%	1.26 - 1.75%	1.76 - 2.25%	2.26 - 2.75%	2.76 - 3.25%	≥ 3.26%
Average	**8%**	**16%**	**31%**	**29%**	**11%**	**4%**	**1%**

	Most Likely Outcome
25th Pctl	**1.50%**
Median	**1.75%**
75th Pctl	**1.98%**

12b) For the outcomes below, provide the percent chance you attach to the annual average CPI inflation rate from April 1, 2025 – March 31, 2030 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	**7%**	**15%**	**28%**	**28%**	**15%**	**7%**

	Most Likely Outcome
25th Pctl	**1.80%**
Median	**2.00%**
75th Pctl	**2.25%**

13a) 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	**100%**	25th Pctl	**43%**	25th Pctl	**50%**
Median	**100%**	Median	**75%**	Median	**83%**
75th Pctl	**100%**	75th Pctl	**100%**	75th Pctl	**100%**

**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.*

13b) Please explain the factors behind any change to your expectations in part a since the last policy survey.
(26 responses)

In explaining increases in one or more of their recession probabilities, most respondents cited the impact of the coronavirus outbreak. Some respondents highlighted various shutdown or social distancing measures implemented to slow the spread of the coronavirus as leading to disruptions to the U.S. economy.