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.[1] For questions that ask respondents to give a probability distribution, the average response across participants for each potential outcome is reported. Brief summaries of the comments received in free response form are also provided.

Responses were received from 27 market participants. Except where noted, all 27 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, to the language referencing each of the following topics in the January FOMC statement.

Current economic conditions:

Most respondents indicated that they expected no material changes to this section of the statement.

Economic outlook:

Most respondents indicated that they expected no material changes to this section of the statement.

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

Most respondents indicated that they expected no material changes to this section of the statement.

Other:
(13 responses)

Respondents did not provide significant commentary in this section.

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

Several respondents indicated that they expected the Chair to characterize the current stance of monetary policy as appropriate. Several indicated that they expected him to discuss funding markets and conditions in the repo markets, including the Federal Reserve's repo operations and reserve management purchases of Treasury bills. Several respondents indicated that they expected the Chair to convey an upbeat economic outlook, including several that indicated that they expected him to describe the economy as "in a good place." Finally, several respondents indicated that they expected the Chair's remarks to be similar to those following the December FOMC meeting.

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	**2**
3	**5**
4	**16**
5 - Effective	**4**

Please explain.
(26 responses)

Some respondents indicated that they viewed communication around the future path of policy as clear or clearer, and several indicated that they viewed the Committee as having delivered a consistent message.

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.

	Jan 28-29 2020	Mar 17-18 2020	Apr 28-29 2020	Jun 9-10 2020	Jul 28-29 2020	Sep 15-16 2020	Nov 4-5 2020
25th Pctl	**1.63%**	**1.63%**	**1.63%**	**1.63%**	**1.63%**	**1.63%**	**1.63%**
Median	**1.63%**	**1.63%**	**1.63%**	**1.63%**	**1.63%**	**1.63%**	**1.63%**
75th Pctl	**1.63%**	**1.63%**	**1.63%**	**1.63%**	**1.63%**	**1.63%**	**1.63%**
# of Responses	**27**	**27**	**27**	**27**	**27**	**27**	**27**
	2020 Q4	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2022 H1	2022 H2
25th Pctl	**1.63%**	**1.38%**	**1.38%**	**1.38%**	**1.38%**	**1.38%**	**1.13%**
Median	**1.63%**	**1.63%**	**1.63%**	**1.63%**	**1.63%**	**1.63%**	**1.63%**
75th Pctl	**1.63%**	**1.63%**	**1.88%**	**1.88%**	**1.88%**	**2.13%**	**2.13%**
# of Responses	**27**	**26**	**26**	**26**	**26**	**26**	**26**

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	**2.13%**	**1.50%**
Median	**2.25%**	**1.88%**
75th Pctl	**2.50%**	**2.00%**

3c) Please indicate the percent chance that you attach to the target federal funds rate or range falling in each of the following ranges <u>immediately following the January and March FOMC meetings and at the end of 2020</u>. 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 January 2020 FOMC Meeting								
	≤ 0.75%	0.76 - 1.00%	1.01 - 1.25%	1.26 - 1.50%	1.51 - 1.75%	1.76 - 2.00%	2.01 - 2.25%	≥ 2.26%
Average	**0%**	**0%**	**1%**	**5%**	**93%**	**2%**	**0%**	**0%**

Federal Funds Rate or Range Immediately Following the March 2020 FOMC Meeting								
	≤ 0.75%	0.76 - 1.00%	1.01 - 1.25%	1.26 - 1.50%	1.51 - 1.75%	1.76 - 2.00%	2.01 - 2.25%	≥ 2.26%
Average	**0%**	**0%**	**2%**	**11%**	**85%**	**2%**	**0%**	**0%**

Unconditional Year-End 2020 Target Federal Funds Rate								
	≤ 0.75%	0.76 - 1.00%	1.01 - 1.25%	1.26 - 1.50%	1.51 - 1.75%	1.76 - 2.00%	2.01 - 2.25%	≥ 2.26%
Average	**4%**	**4%**	**10%**	**19%**	**52%**	**9%**	**3%**	**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.

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	**2%**	**12%**	**13%**	**17%**	**30%**	**16%**	**7%**	**2%**	**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	**3%**	**17%**	**13%**	**13%**	**21%**	**20%**	**9%**	**4%**	**2%**

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.
(26 responses)

	Probability of Moving to ZLB at Some Point between Now and the End of 2022
25th Pctl	**15%**
Median	**31%**
75th Pctl	**50%**

3e-ii) What is your estimate of the target federal funds rate or range at the effective lower bound?
(26 responses)

	Level of Target Federal Funds Rate or Range at ELB
25th Pctl	**-0.38%**
Median	**0.00%**
75th Pctl	**0.00%**

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

Several respondents noted positive trade developments as a factor behind changes to their expectations. Several respondents indicated improvements in their economic outlook as a factor, and several respondents indicated communication from Fed officials as a factor. Some respondents noted there were no material changes to their expectations.

4) The following matrix lays out hypothetical scenarios in which the realized levels of the 2020 unemployment rate (Q4 average level) and 2020 core PCE inflation (Q4/Q4 growth) are either 50 basis points above, below, or equal to the medians of FOMC participants' projections for these indicators in the December 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 2021. If you expect a target range, please indicate the midpoint of that range in providing your response.
(26 responses)

25th Percentile Responses		**2020 Unemployment rate (Q4 average level)**		
		- 50 bps	Current SEP median 3.5%	+ 50 bps
2020 Core PCE inflation (Q4/Q4)	- 50 bps	**1.38%**	**1.13%**	**0.63%**
	Current SEP median 1.9%	**1.63%**	**1.63%**	**0.88%**
	+ 50 bps	**1.63%**	**1.63%**	**1.13%**

Median Responses		2020 Unemployment rate (Q4 average level) - 50 bps	Current SEP median 3.5%	+ 50 bps
2020 Core PCE inflation (Q4/Q4)	- 50 bps	1.63%	1.38%	0.94%
	Current SEP median 1.9%	1.63%	1.63%	1.13%
	+ 50 bps	1.88%	1.65%	1.38%

75th Percentile Responses		2020 Unemployment rate (Q4 average level) - 50 bps	Current SEP median 3.5%	+ 50 bps
2020 Core PCE inflation (Q4/Q4)	- 50 bps	1.63%	1.38%	1.13%
	Current SEP median 1.9%	1.63%	1.63%	1.63%
	+ 50 bps	2.13%	1.88%	1.63%

Please describe any other factors which in your view would be likely to impact the level of the target federal funds rate or range at the end of Q1 2021.
(24 responses)

Some respondents indicated financial conditions as another factor that would likely impact the level of the target federal funds range. Several respondents noted the domestic economic outlook, and several respondents noted global economic conditions as factors. Several respondents only noted inflation and unemployment as factors.

5) The neutral real federal funds rate can be understood as the level of the real federal funds rate that would be neither expansionary nor contractionary if the economy were operating at or near its potential. Please provide your estimate for the level of the neutral real federal funds rate at each of the time periods below.

	Current Level	Year-end 2020	Year-end 2021	Year-end 2022
25th Pctl	**0.00%**	**0.00%**	**0.00%**	**0.00%**
Median	**0.50%**	**0.50%**	**0.50%**	**0.50%**
75th Pctl	**0.50%**	**0.70%**	**0.75%**	**0.75%**

Please explain the factors behind any changes to your estimates since the policy survey on July 22.
(26 responses)

Many respondents noted that they had made no material changes to their estimates.

6) Please describe your modal expectation and the balance of risks around your modal expectation for international trade developments over the next 6 months. In addition, please explain the factors behind any change to your views since the last policy survey.
(26 responses)

Most respondents indicated that their modal expectation was for the U.S.-China Phase 1 trade deal to be maintained, with limited or no progress towards a Phase 2 trade deal, and existing tariffs to remain in place with no further tariff increases likely to take effect. Many respondents indicated that they perceived the risks around their modal expectations were tilted toward greater trade friction between the U.S. and China, while some respondents indicated that they perceived these risks as tilted toward greater trade friction between the U.S. and Europe.

7) According to the Implementation Note issued December 11, 2019, "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 January 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.
(22 responses)

Reserve Management Purchase of Treasury Bills ($ billions)						
	January 2020	February 2020	March 2020	April 2020	May 2020	June 2020
25th Pctl	60	60	60	40	20	10
Median	60	60	60	60	40	30
75th Pctl	60	60	60	60	60	60

Maximum Daily Overnight Repo Offered ($ billions)						
	January 2020	February 2020	March 2020	April 2020	May 2020	June 2020
25th Pctl	85	80	75	60	30	30
Median	120	100	83	73	55	60
75th Pctl	120	120	100	100	75	75

Maximum Daily Total Term Repo Offered ($ billions)						
	January 2020	February 2020	March 2020	April 2020	May 2020	June 2020
25th Pctl	100	50	60	20	20	0
Median	140	120	95	68	55	35
75th Pctl	175	140	120	100	80	80

** 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).*

8) Over the past week, the spread between the top of the target range for the federal funds rate and the interest on excess reserves (IOER) rate has been +20 basis points; the spread between the effective federal funds rate (EFFR) and IOER has averaged 0 basis points; the spread between the Overnight Bank Funding Rate (OBFR) and IOER has averaged -1 basis points; the spread between the Tri-Party General Collateral Rate (TGCR) and IOER has averaged -3 basis point; and the spread between the bottom of the target range for the federal funds rate and the overnight reverse repurchase (ON RRP) rate has been +5 basis points. Please provide your expectation for each of these rate spreads immediately following each of the FOMC meetings below and over the longer run*. **Please ensure your signs are correct.**

	Top of target range minus IOER (in bps)				
	Jan. 28-29	Mar. 17-18	Apr. 28-29	Jun. 9-10	Longer Run*
25th Pctl	**15.0**	**15.0**	**15.0**	**15.0**	**12.5**
Median	**15.0**	**15.0**	**15.0**	**15.0**	**15.0**
75th Pctl	**20.0**	**17.5**	**15.0**	**15.0**	**15.0**
# of Responses	**17**	**16**	**16**	**16**	**16**

** "Longer run" as discussed in the January 2019 Statement Regarding Monetary Policy Implementation and Balance Sheet Normalization.*

	EFFR minus IOER (in bps)				
	Jan. 28-29	Mar. 17-18	Apr. 28-29	Jun. 9-10	Longer Run*
25th Pctl	**-0.5**	**0.0**	**0.0**	**-1.0**	**-1.0**
Median	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
75th Pctl	**0.0**	**0.0**	**2.0**	**2.0**	**3.0**
# of Responses	**16**	**15**	**15**	**15**	**15**

** "Longer run" as discussed in the January 2019 Statement Regarding Monetary Policy Implementation and Balance Sheet Normalization.*

	OBFR minus IOER (in bps)				
	Jan. 28-29	Mar. 17-18	Apr. 28-29	Jun. 9-10	Longer Run*
25th Pctl	**-1.0**	**-1.0**	**-1.0**	**-2.0**	**-2.0**
Median	**-1.0**	**-1.0**	**0.0**	**0.0**	**0.0**
75th Pctl	**0.0**	**0.0**	**1.0**	**1.0**	**1.0**
# of Responses	**16**	**15**	**15**	**15**	**15**

** "Longer run" as discussed in the January 2019 Statement Regarding Monetary Policy Implementation and Balance Sheet Normalization.*

	TGCR minus IOER (in bps)				
	Jan. 28-29	Mar. 17-18	Apr. 28-29	Jun. 9-10	Longer Run*
25th Pctl	**-3.5**	**-4.0**	**-5.0**	**-4.0**	**-4.0**
Median	**-3.0**	**-3.0**	**-2.0**	**-2.0**	**-1.0**
75th Pctl	**-1.0**	**0.0**	**0.0**	**0.0**	**0.0**
# of Responses	**16**	**15**	**15**	**15**	**15**

** "Longer run" as discussed in the January 2019 Statement Regarding Monetary Policy Implementation and Balance Sheet Normalization.*

	Bottom of target range minus ON RRP (in bps)				
	Jan. 28-29	Mar. 17-18	Apr. 28-29	Jun. 9-10	Longer Run*
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	**5.0**	**5.0**	**5.0**	**5.0**	**5.0**
# of Responses	**17**	**16**	**16**	**16**	**16**

** "Longer run" as discussed in the January 2019 Statement Regarding Monetary Policy Implementation and Balance Sheet Normalization.*

9) The July, September, October, and December FOMC meeting minutes all discussed the Federal Reserve's ongoing review of its monetary policy framework. Please provide your expectations for the outcome of the review related to: i) monetary policy strategy; ii) tools; and iii) communication practices. (24 responses)

For those indicating expectations for a change to the strategy, some respondents indicated that they expected the Federal Reserve to adopt some form of average inflation targeting as an outcome of its ongoing review of its monetary policy framework.

With respect to tools, several respondents indicated that they expected forward guidance to remain part of the toolkit and several indicated that they expected large-scale asset purchases or quantitative easing to remain part of the toolkit. Several respondents indicated that they expected no significant changes to be made to the Federal Reserve's toolkit.

With respect to communications, several respondents indicated that they expected no significant changes to be made to current practices.

10a) For the outcomes below, provide the percent chance you attach to the annual average CPI inflation rate from January 1, 2020 – December 31, 2024 falling in each of the following ranges. Please also provide your point estimate for the most likely outcome.
(26 responses)

	≤ 1.00%	1.01 - 1.50%	1.51 - 2.00%	2.01 - 2.50%	2.51 - 3.00%	≥ 3.01%
Average	**3%**	**13%**	**37%**	**31%**	**13%**	**3%**

	Most Likely Outcome
25th Pctl	**1.90%**
Median	**2.00%**
75th Pctl	**2.10%**

10b) For the outcomes below, provide the percent chance you attach to the annual average CPI inflation rate from January 1, 2025 – December 31, 2029 falling in each of the following ranges. Please also provide your point estimate for the most likely outcome.
(26 responses)

	≤ 1.00%	1.01 - 1.50%	1.51 - 2.00%	2.01 - 2.50%	2.51 - 3.00%	≥ 3.01%
Average	**4%**	**14%**	**29%**	**31%**	**16%**	**5%**

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

11a) 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	**0%**	25th Pctl	**10%**	25th Pctl	**9%**
Median	**1%**	Median	**11%**	Median	**13%**
75th Pctl	**5%**	75th Pctl	**15%**	75th Pctl	**20%**

**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.*

11b) 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	**19%**	**26%**	**23%**	**14%**	**18%**

**NBER-defined recession*

11c) Please explain the factors behind any change to your expectations in parts a-b since the last policy survey.
(26 responses)

In explaining decreases in one or more of their near-term recession probabilities, several respondents cited greater optimism on international trade developments and several cited improving domestic data. In addition, several noted that they had made no material changes to their recession probabilities.

12) Please describe what you view as the most significant upside and downside risks to the U.S. economic outlook in 2020 in order of most to least important.

Most significant upside risks:
(26 responses)

Some respondents noted progress in trade talks or growth in global trade as a significant upside risk to the U.S. economic outlook in 2020, and some indicated stronger global economic growth. Several respondents noted growth in business spending and investment, several noted growth in consumer spending, and several respondents noted growth in wages and an acceleration in inflation. In addition, several respondents indicated benefits from U.S. fiscal stimulus.

Most significant downside risks:
(26 responses)

Many respondents indicated re-escalation or increased uncertainty in trade tensions as a significant downside risk to the U.S. economic outlook in 2020. Many respondents also noted uncertainty around the U.S. election. Some respondents indicated geopolitical uncertainty or war, while several respondents noted a slowing in global growth. Several respondents noted a reduction in business activity and corporate profits, and several respondents noted a softer labor market and reduction in consumer spending.

13) Please indicate your expectations for changes, on net, to the indicators listed below from January 1, 2020 - December 31, 2020. Please ensure your signs are correct.
(21 responses)

Changes to Financial Indicators Over Calendar Year 2020					
	Trade-weighted dollar (percent)	10-year nominal Treasury yield (bps)	10-year TIPS-implied breakeven inflation rate (bps)	U.S. investment-grade corporate credit spread (bps)	S&P 500 Index (percent)
25th Pctl	**-5.0%**	**-14**	**0**	**0**	**5.5%**
Median	**-3.0%**	**15**	**10**	**0**	**7.0%**
75th Pctl	**1.0%**	**28**	**18**	**15**	**10.0%**