RESPONSES TO SURVEY OF MARKET PARTICIPANTS

Markets Group, Federal Reserve Bank of New York

JULY 2021

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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:
https://www.newyorkfed.org/markets/survey_market_participants

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

Current economic conditions:
(27 responses)

Many respondents indicated that they did not expect material changes to the Committee's characterization of current economic conditions. Several respondents suggested that the Committee would acknowledge further increases in inflation, and several indicated that they expected or saw a possibility that the Committee would acknowledge a worsening of the pandemic or make reference to new COVID-19 variants.

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

Most respondents indicated that they did not expect material changes to statement language on the economic outlook or communication on the expected path of the target federal funds rate.

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

Most respondents indicated that they did not expect material changes to statement language on tools other than the target federal funds rate.

Other:
(16 responses)

Respondents did not provide significant commentary in this section.

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

Several respondents suggested that the Chair would note that discussions related to the tapering of asset purchases continued at this meeting. Several respondents indicated that they expected the Chair to provide more clarity on the Committee's discussions regarding the conditions constituting "substantial further progress". In addition, several respondents indicated that they expected the Chair to characterize recent increases in inflation as largely reflecting transitory factors. Several respondents indicated that they expected the Chair to note continued improvement in economic conditions or to express optimism about 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	6
3	10
4	10
5 - Effective	2
# of Responses	28

Please explain.

Some respondents described a perceived diversity of views expressed by FOMC participants. Some respondents also suggested a lack of clarity around the various elements of the June Summary of Economic Projections (SEP), the FOMC's monetary policy framework, or the Committee's views regarding recent increases in inflation. In addition, several respondents noted that remarks by FOMC participants were unclear or inconsistent, while several others described communications as clear or consistent.

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 years below. For the time periods at which you expect a target range, please indicate the midpoint of that range in providing your response.

	Jul. 27-28	Sep. 21-22	Nov. 2-3	Dec. 14-15	Jan. 25-26	Mar. 15-16	May 3-4
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

	2022 Q2	2022 Q3	2022 Q4	2023 Q1	2023 Q2	2023 Q3	2023 Q4
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%	0.38%	0.38%
75th Pctl	0.13%	0.13%	0.13%	0.38%	0.38%	0.63%	0.63%
# of Responses	28	28	28	28	28	28	28

	2024	2025	2026	2027
25th Pctl	0.75%	1.25%	1.63%	1.63%
Median	1.06%	1.63%	2.13%	2.13%
75th Pctl	1.63%	2.25%	2.50%	2.38%
# of Responses	28	28	28	28

If your responses **through year-end 2023** above do not reflect an increase from the current target range at any point, please provide the earliest quarter in which your modal expectation for the level of the target range is higher than the current level.

	Earliest quarter*
25th Pctl	**Q1 2024**
Median	**Q2 2024**
75th Pctl	**Q1 2025**
# of Responses	**8**

** Dropdown selections: Q1 2024, Q2 2024, Q3 2024, Q4 2024, Q1 2025, Q2 2025, Q3 2025, Q4 2025, Q1 2026, Q2 2026, Q3 2026, Q4 2026, Q1 2027 or later.*

3b) Provide your estimate for the most likely value for the following indicators at the time of the next increase in the target range for the federal funds rate.
(25 responses)

Most Likely Value of Economic Indicator at Time of First Increase in Target Range				
	Unemployment rate (%)	Labor force participation rate (%)	Total change in the level of real GDP since 2019 Q4 (%)	Headline 12-month PCE inflation (%)
25th Pctl	**3.4%**	**62.7%**	**8.5%**	**2.2%**
Median	**3.5%**	**63.0%**	**10.0%**	**2.3%**
75th Pctl	**4.0%**	**64.0%**	**12.5%**	**2.5%**

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	**1.75%**	**0.95%**
Median	**2.00%**	**1.30%**
75th Pctl	**2.50%**	**1.71%**

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, 2022, and 2023. 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 - 0.25%	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	**1%**	**92%**	**5%**	**2%**	**0%**	**0%**	**0%**	**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	**2%**	**60%**	**23%**	**9%**	**4%**	**1%**	**1%**	**0%**	**0%**	**0%**

Federal Funds Rate or Range at the End of 2023										
	< 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	**2%**	**30%**	**24%**	**22%**	**11%**	**7%**	**2%**	**1%**	**1%**	**1%**

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

	Level of Target Federal Funds Rate or Range at ELB
25th Pctl	**-0.50%**
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.
(24 responses)

Many respondents indicated that they did not make any material changes to their policy rate expectations. However, several other respondents indicated that they now assigned a higher probability to an earlier increase in the target range. In explaining changes to their expectations, several respondents cited Federal Reserve communications, including projections for the target range for the federal funds rate in the June Summary of Economic Projections.

4a) Please provide your modal expectation for the amount of purchases, net of reinvestments, of U.S. Treasury securities and agency mortgage-backed securities (MBS) the Desk will conduct for each month listed below and the total over each of the quarters below. If you expect any of these amounts to be zero in a given period, please enter 0.
(23 responses)

Net purchases of U.S. Treasury securities ($ billions)								
	Aug. 2021	Sep. 2021	Oct. 2021	Nov. 2021	Dec. 2021	Jan. 2022	Feb. 2022	Mar. 2022
25th Pctl	**80**	**80**	**80**	**80**	**70**	**60**	**50**	**50**
Median	**80**	**80**	**80**	**80**	**80**	**70**	**60**	**56**
75th Pctl	**80**	**80**	**80**	**80**	**80**	**72**	**70**	**60**

Net purchases of U.S. Treasury securities ($ billions)							
	2022 Q2	2022 Q3	2022 Q4	2023 Q1	2023 Q2	2023 Q3	2023 Q4
25th Pctl	**90**	**10**	**0**	**0**	**0**	**0**	**0**
Median	**120**	**60**	**0**	**0**	**0**	**0**	**0**
75th Pctl	**160**	**110**	**50**	**0**	**0**	**0**	**0**

Net purchases of agency MBS ($ billions)								
	Aug. 2021	Sep. 2021	Oct. 2021	Nov. 2021	Dec. 2021	Jan. 2022	Feb. 2022	Mar. 2022
25th Pctl	**40**	**40**	**40**	**40**	**30**	**25**	**20**	**20**
Median	**40**	**40**	**40**	**40**	**40**	**30**	**30**	**25**
75th Pctl	**40**	**40**	**40**	**40**	**40**	**36**	**33**	**30**

Net purchases of agency MBS ($ billions)							
	2022 Q2	2022 Q3	2022 Q4	2023 Q1	2023 Q2	2023 Q3	2023 Q4
25th Pctl	**30**	**5**	**0**	**0**	**0**	**0**	**0**
Median	**60**	**24**	**0**	**0**	**0**	**0**	**0**
75th Pctl	**75**	**40**	**20**	**0**	**0**	**0**	**0**

If your responses above do not reflect a period in which the combined pace of net purchases of Treasury securities and agency mortgage-backed securities (MBS) falls to zero, please provide the earliest quarter in which your modal expectation for the combined pace of net purchases of these securities falls to zero.

Responses were limited to one respondent.*

** Dropdown selections: Q1 2024, Q2 2024, Q3 2024, Q4 2024, Q1 2025, Q2 2025, Q3 2025, Q4 2025, Q1 2026, Q2 2026, Q3 2026, Q4 2026, Q1 2027 or later.*

In addition, please also provide your modal expectation for the earliest quarter in which the SOMA portfolio declines.

	Earliest quarter*
25th Pctl	**Q4 2024**
Median	**Q4 2025**
75th Pctl	**Q1 2027 or later**
# of Responses	**22**

** Dropdown selections: Q3 2021, Q4 2021, Q1 2022, Q2 2022, Q3 2022, Q4 2022, Q1 2023, Q2 2023, Q3 2023, Q4 2023, Q1 2024, Q2 2024, Q3 2024, Q4 2024, Q1 2025, Q2 2025, Q3 2025, Q4 2025, Q1 2026, Q2 2026, Q3 2026, Q4 2026, Q1 2027 or later.*

4b) If applicable, please describe your expectations for communications regarding asset purchases going forward, including the timing and form of such communications (if any).
(23 responses)

Some respondents indicated that they expected communications over coming months to provide an advance signal for upcoming decisions regarding the tapering of asset purchases, with several indicating that they expected signaling in July and several indicating that they expected signaling in September. Several respondents indicated that they expected a formal announcement on the tapering of asset purchases to occur in the fourth quarter, while several others indicated that they expected an announcement at the September FOMC meeting.

4c) Please indicate the percent chance that you attach to the first reduction in the pace of asset purchases occurring in each of the following periods.
(24 responses)

	August 2021	September 2021	October 2021	November 2021	December 2021	January 2022
Average	1%	4%	8%	9%	16%	27%

	February 2022	March 2022	April 2022	May 2022	June 2022	July 2022 or later
Average	10%	8%	5%	3%	3%	6%

Please indicate the percent chance that you attach to the length of time (in months) between the month with the first reduction in the pace of purchases and the earliest month in which the combined pace falls to zero.
(24 responses)

	3 or fewer	4 to 6	7 to 9	10 to 12	13 to 15	16 to 18	19 or more
Average	2%	11%	27%	36%	15%	7%	4%

Please describe any assumptions underlying your expectations, including regarding the composition of asset purchases.
(23 responses)

Many respondents indicated that they expected purchases of agency mortgage-backed securities and Treasury securities to be tapered roughly proportionally. Several respondents noted a possibility that the pace of asset purchase tapering could vary over time, and several indicated that they viewed the start or pace of asset purchase tapering as conditional on continued reopening or economic recovery.

5) 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 2021 and 2022.
(27 responses)

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 - 3.00%	≥ 3.01%
Average	**0%**	**2%**	**8%**	**31%**	**39%**	**15%**	**3%**	**1%**

Year-end 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%
Average	**1%**	**2%**	**8%**	**17%**	**28%**	**28%**	**13%**	**4%**

6) The table below lists the average spreads of selected 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)		
	Jul. 27-28	Sep. 21-22	Nov. 2-3
25th Pctl	**10.0**	**10.0**	**10.0**
Median	**10.0**	**10.0**	**10.0**
75th Pctl	**10.0**	**10.0**	**10.0**
# of Responses	**16**	**16**	**16**

	EFFR minus IOER (in bps)		
	Jul. 27-28	Sep. 21-22	Nov. 2-3
25th Pctl	**-5.0**	**-5.0**	**-5.0**
Median	**-5.0**	**-5.0**	**-5.0**
75th Pctl	**-5.0**	**-5.0**	**-5.0**
# of Responses	**16**	**16**	**16**

	SOFR minus IOER (in bps)		
	Jul. 27-28	Sep. 21-22	Nov. 2-3
25th Pctl	**-10.0**	**-10.0**	**-10.0**
Median	**-10.0**	**-10.0**	**-10.0**
75th Pctl	**-10.0**	**-10.0**	**-10.0**
# of Responses	**16**	**16**	**16**

	Bottom of target range** minus ON RRP rate (in bps)		
	Jul. 27-28	Sep. 21-22	Nov. 2-3
25th Pctl	**-5.0**	**-5.0**	**-5.0**
Median	**-5.0**	**-5.0**	**-5.0**
75th Pctl	**-5.0**	**-5.0**	**-5.0**
# of Responses	**16**	**16**	**16**

	3-Month U.S. Treasury bill yield minus 3-Month OIS (in bps)		
	Jul. 27-28	Sep. 21-22	Nov. 2-3
25th Pctl	**-6.0**	**-6.0**	**-6.0**
Median	**-5.0**	**-5.0**	**-5.0**
75th Pctl	**-5.0**	**-5.0**	**-4.5**
# of Responses	**16**	**16**	**16**

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

7a) As of July 13, the 5-year, 5-year forward nominal Treasury yield decreased by approximately 30 basis points on net since the June FOMC meeting. Please decompose this change into the following components. Please ensure that your sum matches the approximate observed change over the time period. **Please ensure that your signs are correct.**
(22 responses)

	Change in market's expected average real policy rate	Change in market's expected average inflation rate	Change in real term premium	Change in inflation risk premium
Average (bps)	**-4.0**	**-7.4**	**-11.0**	**-7.7**

7b) Please rate the importance of the following factors in explaining the change in the 5-year, 5-year forward nominal Treasury yield since the June FOMC meeting. **(5=very important, 1=not important)**
(26 responses)

Factors Explaining the Change in the 5-Year, 5-Year Forward Nominal Treasury Yield Since the June FOMC Meeting

	Changes in expectations for fiscal policy	Changes in expectations for the course of the pandemic	Changes in perceptions of the FOMC's framework or reaction function	Changes in estimates of the long-run neutral rate	Changes in uncertainty around interest rates
1 - Not Important	**8**	**1**	**0**	**9**	**4**
2	**12**	**5**	**0**	**6**	**9**
3	**3**	**13**	**5**	**6**	**9**
4	**2**	**4**	**5**	**2**	**3**
5 - Very Important	**1**	**3**	**16**	**3**	**1**
# of Responses	**26**	**26**	**26**	**26**	**26**

	Changes in positioning	New investment by domestic or foreign accounts	Changes in the outlook and uncertainty around the outlook for foreign economic growth	Other (please explain)
1 - Not Important	**2**	**8**	**3**	**0**
2	**4**	**10**	**8**	**0**
3	**5**	**3**	**9**	**0**
4	**8**	**3**	**3**	**0**
5 - Very Important	**7**	**2**	**3**	**2**
# of Responses	**26**	**26**	**26**	**2**

If "Other", please explain:

Respondents did not provide significant commentary in this section.

8) What percent chance do you attach to any additional U.S. federal fiscal policy measures being signed into law over the remainder of 2021?
(27 responses)

Probability of Additional U.S. Federal Fiscal Policy Measures	
	Probability
25th Pctl	**60%**
Median	**75%**
75th Pctl	**85%**

If you assigned a non-zero probability above, please provide your estimate of the most likely total amount of additional U.S. federal fiscal policy spending and revenue measures to be signed into law over the remainder of 2021, conditional on there being such additional measures.
(26 responses)

Additional U.S. Federal Fiscal Policy Measures Estimates		
	Estimate of Most Likely Total Amount of Additional U.S. Federal Fiscal Policy Spending Measures ($ billions)	Estimate of Most Likely Total Amount of Additional U.S. Federal Fiscal Policy Revenue Measures ($ billions)
25th Pctl	**1500**	**1000**
Median	**2225**	**1250**
75th Pctl	**2700**	**1700**

Please describe any assumptions underlying your estimates above, including regarding the profile over time of expenditures and/or revenues arising from any enacted legislation.
(25 responses)

In explaining any assumptions underlying their responses, some respondents suggested that passage of any tax increases would only partially finance any spending measures, and some suggested that any fiscal measures would be carried out over multiple years. Several respondents noted their spending estimates reflected some form of infrastructure package. Several respondents suggested total spending would likely be smaller than proposals that had been made by the administration, and several indicated that they expected passage of spending measures would occur through reconciliation.

9a) Please indicate your modal projections for U.S. real GDP growth for each of the following quarters (seasonally adjusted annual rate).

(26 responses)

Modal Projection for U.S. Real GDP Growth (percent)			
	Q2 2021 (saar)	Q3 2021 (saar)	Q4 2021 (saar)
25th Pctl	**8.5%**	**6.0%**	**4.5%**
Median	**9.0%**	**7.3%**	**5.0%**
75th Pctl	**9.2%**	**8.5%**	**6.0%**

9b) Please provide the percent chance you attach to the following outcomes for U.S. real GDP growth in 2021 and 2022 (Q4/Q4).
(26 responses)

Probability Distribution of U.S. Real GDP Growth in 2021 (Q4/Q4)							
	< 0%	0.00 - 2.00%	2.01 - 4.00%	4.01 - 6.00%	6.01 - 8.00%	8.01 - 10.00%	≥ 10.01%
Average	**1%**	**2%**	**11%**	**23%**	**43%**	**17%**	**3%**

Probability Distribution of U.S. Real GDP Growth in 2022 (Q4/Q4)							
	< 0%	0.00 - 1.00%	1.01 - 2.00%	2.01 - 3.00%	3.01 - 4.00%	4.01 - 5.00%	≥ 5.01%
Average	**3%**	**7%**	**15%**	**24%**	**26%**	**19%**	**6%**

10a) Please provide the percent chance you attach to the following outcomes for headline PCE inflation in 2022 and 2023 (Q4/Q4).
(26 responses)

Headline PCE Inflation 2022 (Q4/Q4)										
	≤ 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%	2.51-2.75%	2.76-3.00%	≥ 3.01%
Average	**2%**	**1%**	**4%**	**9%**	**18%**	**26%**	**18%**	**10%**	**8%**	**5%**

Headline PCE Inflation 2023 (Q4/Q4)										
	≤ 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%	2.51-2.75%	2.76-3.00%	≥ 3.01%
Average	**2%**	**2%**	**4%**	**8%**	**20%**	**28%**	**17%**	**9%**	**6%**	**4%**

10b) For the outcomes below, provide the percent chance you attach to the annual average CPI inflation rate from July 1, 2021 – June 30, 2026 falling in each of the following ranges. Please also provide your point estimate for the most likely outcome.
(27 responses)

	≤ 1.00%	1.01 - 1.50%	1.51 - 2.00%	2.01 - 2.50%	2.51 - 3.00%	≥ 3.01%
Average	**3%**	**9%**	**25%**	**37%**	**19%**	**7%**

	Most Likely Outcome
25th Pctl	**2.15%**
Median	**2.25%**
75th Pctl	**2.50%**

10c) For the outcomes below, provide the percent chance you attach to the annual average CPI inflation rate from July 1, 2026 – June 30, 2031 falling in each of the following ranges. Please also provide your point estimate for the most likely outcome.
(27 responses)

	≤ 1.00%	1.01 - 1.50%	1.51 - 2.00%	2.01 - 2.50%	2.51 - 3.00%	≥ 3.01%
Average	**4%**	**10%**	**24%**	**35%**	**18%**	**8%**

	Most Likely Outcome
25th Pctl	**2.10%**
Median	**2.25%**
75th Pctl	**2.40%**

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**?

(27 responses)

	Currently in U.S. Recession		U.S. Recession in 6 Months		Global Recession in 6 Months
25th Pctl	**0%**	25th Pctl	**1%**	25th Pctl	**3%**
Median	**0%**	Median	**5%**	Median	**8%**
75th Pctl	**3%**	75th Pctl	**10%**	75th Pctl	**15%**

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

In describing the factors behind any changes to their responses, several respondents cited increasing COVID-19 cases and/or developments surrounding the spread of the Delta variant of the virus.