

RESPONSES TO SURVEY OF PRIMARY DEALERS

Markets Group, Federal Reserve Bank of New York



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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. For questions that ask respondents to give a probability distribution, the average response across dealers for each potential outcome is reported.¹ 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.

¹ Answers may not sum to 100 percent due to rounding.

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

Current economic conditions:

Many dealers indicated that they expected the Committee to note that economic activity had moderated, and several indicated that they expected the Committee to characterize inflation as elevated. Several dealers suggested that the Committee would comment on supply chain bottlenecks, in the context of higher inflation or moderating growth.

Economic outlook and communication on the expected path of the target federal funds rate:

Most dealers 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:

Most dealers indicated that they expected a tapering announcement in the November FOMC statement. Some dealers indicated that they expected tapering to start in November. Some dealers indicated that they expected a per-month tapering pace, and some cited a tapering increment of \$10 billion in Treasuries and \$5 billion in agency MBS. Some dealers indicated that they expected the Committee to state that substantial further progress toward its goals had been made. Several dealers indicated that they expected the statement to convey that the tapering of purchases could be adjusted according to changes in the outlook or to note that the tapering is not on a preset course.

Other:

(14 responses)

Dealers did not provide significant commentary in this section.

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

Some dealers indicated that they expected the Chair to discuss the tapering of asset purchases. Some dealers indicated that they expected the Chair to again emphasize the difference between future rate increases and the tapering of asset purchases. Several dealers indicated that they expected the Chair to note upside risks to inflation or to characterize inflationary pressures as more persistent than previously expected. Finally, several dealers indicated that they expected the Chair to note that supply chain bottlenecks have lasted longer than expected or that they could linger.

- 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	14
5 - Effective	3
# of Responses	24

Please explain.

Most dealers characterized FOMC participants' communications as clear and consistent regarding the Committee's intention to begin the tapering of asset purchases. However, several dealers suggested that there was less clarity regarding the Committee's inflation outlook and the extent to which inflationary pressures were expected to be transitory.

- 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.

	Nov. 2-3	Dec. 14-15	Jan. 25-26	Mar. 15-16	May 3-4	Jun. 14-15	Jul. 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	24	24	24	24	24	24	24

	2022 Q3	2022 Q4	2023 Q1	2023 Q2	2023 Q3	2023 Q4
25th Pctl	0.13%	0.13%	0.13%	0.38%	0.38%	0.63%
Median	0.13%	0.38%	0.38%	0.63%	0.88%	1.13%
75th Pctl	0.13%	0.38%	0.63%	0.88%	1.13%	1.38%
# of Responses	24	24	23	23	23	23

	2024 Q1	2024 Q2	2024 Q3	2024 Q4
25th Pctl	0.88%	1.13%	1.38%	1.63%
Median	1.38%	1.63%	1.88%	1.88%
75th Pctl	1.63%	1.88%	2.13%	2.13%
# of Responses	21	21	21	21

	2025	2026	2027	2028
25th Pctl	1.88%	2.00%	1.94%	1.94%
Median	2.13%	2.13%	2.13%	2.13%
75th Pctl	2.38%	2.63%	2.44%	2.44%
# of Responses	21	21	20	20

If your responses **through year-end 2024** 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.

There were no responses.*

**Dropdown selections: Q1 2025, Q2 2025, Q3 2025, Q4 2025, Q1 2026, Q2 2026, Q3 2026, Q4 2026, Q1 2027, Q2 2027, Q3 2027, Q4 2027, Q1 2028 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.
(23 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	3.6%	62.2%	6.1%	2.1%
Median	3.8%	62.5%	7.0%	2.2%
75th Pctl	4.0%	62.6%	8.4%	2.7%

- 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	2.00%	1.50%
Median	2.25%	1.70%
75th Pctl	2.44%	1.91%

- 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, 2023, and 2024. If you expect a target range, please use the midpoint of that range in providing your response.
(21 responses)

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	0%	98%	2%	0%	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	1%	39%	35%	17%	5%	2%	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	1%	10%	11%	18%	17%	17%	14%	7%	3%	2%

Federal Funds Rate or Range at the End of 2024										
	< 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	0%	6%	4%	6%	9%	15%	13%	13%	15%	19%

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	0.00%
Median	0.13%
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.
(22 responses)

Several dealers indicated that higher forecast or realized inflation informed changes to their policy rate expectations since the last survey. Several dealers indicated that they had either brought forward their expectations for the first increase in the target range for the federal funds rate or assigned a greater probability to an earlier rate increase.

4) The following matrix lays out hypothetical scenarios in which the realized levels of the 2023 unemployment rate (Q4 average level) and 2023 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 current (September 2021) 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.

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 2024. If you expect a target range, please indicate the midpoint of that range in providing your response.

(23 responses)

Median Responses		2023 Unemployment Rate (Q4 average level)		
		- 50 bps	Current SEP median 3.5%	+ 50 bps
2023 Core PCE Inflation (Q4/Q4)	- 50 bps	0.88%	0.63%	0.38%
	Current SEP median 2.2%	1.38%	1.13%	0.88%
	+ 50 bps	2.00%	1.63%	1.38%

75th Percentile Responses		2023 Unemployment Rate (Q4 average level)		
		- 50 bps	Current SEP median 3.5%	+ 50 bps
2023 Core PCE Inflation (Q4/Q4)	- 50 bps	1.13%	1.13%	1.13%
	Current SEP median 2.2%	1.88%	1.75%	1.63%
	+ 50 bps	2.38%	2.25%	2.13%

25th Percentile Responses		2023 Unemployment Rate (Q4 average level)		
		- 50 bps	Current SEP median 3.5%	+ 50 bps
2023 Core PCE Inflation (Q4/Q4)	- 50 bps	0.38%	0.38%	0.13%
	Current SEP median 2.2%	1.13%	0.88%	0.38%
	+ 50 bps	1.63%	1.38%	1.13%

Please explain any assumptions underlying your responses.
(23 responses)

Many dealers specifically described inflation as more important than the unemployment rate for the level of the target range for the federal funds rate at the time horizon specified in the question.

- 5a)** 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.

Net purchases of U.S. Treasury securities (\$ billions)								
	Nov. 2021	Dec. 2021	Jan. 2022	Feb. 2022	Mar. 2022	Apr. 2022	May 2022	Jun. 2022
25th Pctl	70	60	50	40	30	20	10	0
Median	75	65	55	45	35	25	15	5
75th Pctl	75	68	58	48	38	28	18	8

Net purchases of U.S. Treasury securities (\$ billions)						
	2022 Q3	2022 Q4	2023 Q1	2023 Q2	2023 Q3	2023 Q4
25th Pctl	0	0	0	0	0	0
Median	0	0	0	0	0	0
75th Pctl	0	0	0	0	0	0

Net purchases of agency MBS (\$ billions)								
	Nov. 2021	Dec. 2021	Jan. 2022	Feb. 2022	Mar. 2022	Apr. 2022	May 2022	Jun. 2022
25th Pctl	35	30	25	20	15	10	5	0
Median	38	33	28	23	18	13	8	3
75th Pctl	38	34	29	24	19	14	9	4

Net purchases of agency MBS (\$ billions)						
	2022 Q3	2022 Q4	2023 Q1	2023 Q2	2023 Q3	2023 Q4
25th Pctl	0	0	0	0	0	0
Median	0	0	0	0	0	0
75th Pctl	0	0	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.

There were no responses.*

**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, Q2 2027, Q3 2027, Q4 2027, Q1 2028 or later.*

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

	Earliest quarter*
25th Pctl	Q2 2024
Median	Q1 2025
75th Pctl	Q3 2025
# of Responses	23

*Dropdown selections: 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, Q2 2027, Q3 2027, Q4 2027, Q1 2028 or later.

5b) If applicable, please describe your expectations for communications regarding asset purchases going forward, including the timing and form of such communications (if any).

Most dealers indicated that they expected a tapering announcement in November and for the tapering to start in November. Many dealers suggested that the pace of tapering could be adjusted based on incoming economic data or the economic outlook. Some dealers indicated that they expected a taper increment of \$10 billion in Treasuries and \$5 billion in agency MBS, with several indicating that they expected a monthly taper pace and several projecting that tapering would end in June 2022 or mid-2022.

5c) 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.

	October 2021	November 2021	December 2021	January 2022	February 2022
Average	0%	70%	26%	3%	0%

	March 2022	April 2022	May 2022	June 2022	July 2022 or later
Average	0%	0%	0%	0%	0%

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.

	3 or fewer	4 to 6	7 to 9	10 to 12	13 to 15	16 to 18	19 or more
Average	2%	21%	68%	9%	0%	0%	0%

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

(23 responses)

Many dealers indicated that they expected tapering to be proportional across Treasuries and agency MBS; many anticipated tapering increments of \$10 billion per month in Treasuries and \$5 billion per month in agency MBS. Some dealers indicated that they expected

tapering to start in November, and several suggested that tapering would end in mid-2022.

- 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 2021 and 2022.

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%	1%	3%	24%	53%	16%	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	0%	1%	3%	15%	30%	35%	12%	4%

- 7) As of October 19, the 5-year, 5-year forward nominal Treasury yield increased by approximately 30 basis points on net since the September FOMC meeting. Please rate the importance of the following factors in explaining the change in the 5-year, 5-year forward nominal Treasury yield since the September FOMC meeting. (5=very important, 1=not important)

Factors Explaining the Change in the 5-year, 5-year Forward Nominal Treasury Yield Since the September FOMC						
	Changes in Energy Prices	Changes in Expectations for Supply Chain Developments	Changes in Expectations for U.S. Monetary Policy	Changes in Expectations for Foreign Monetary Policy	Changes in Positioning	Other (Please Explain)
1-Not Important	2	2	0	5	1	0
2	3	3	1	7	10	0
3	6	10	6	4	8	4
4	5	5	9	7	2	1
5-Very Important	8	4	8	1	2	1
# of Responses	24	24	24	24	23	6

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

Dealers 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 each of the following periods?

Probability of Additional U.S. Federal Fiscal Policy Measures		
	Remainder of 2021	Next 12 Months*
25th Pctl	58%	68%
Median	70%	80%
75th Pctl	80%	85%

*Through October 2022

For each of the periods indicated above, if you assigned a non-zero probability, 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 that period, conditional on there being such additional measures in that period.

Additional U.S. Federal Fiscal Policy Measures Estimates				
	Estimate of Most Likely Total Amount of Additional U.S. Federal Fiscal Policy Spending Measures (\$ billions) over Remainder of 2021	Estimate of Most Likely Total Amount of Additional U.S. Federal Fiscal Policy Revenue Measures (\$ billions) over Remainder of 2021	Estimate of Most Likely Total Amount of Additional U.S. Federal Fiscal Policy Spending Measures (\$ billions) over Next 12 Months*	Estimate of Most Likely Total Amount of Additional U.S. Federal Fiscal Policy Revenue Measures (\$ billions) over Next 12 Months*
25th Pctl	2000	1000	2000	1000
Median	2000	1225	2050	1225
75th Pctl	2500	1500	2625	1570

*Through October 2022

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

Modal Projection for U.S. Real GDP Growth						
	Q3 2021 (saar)	Q4 2021 (saar)	Q1 2022 (saar)	Q2 2022 (saar)	Q3 2022 (saar)	Q4 2022 (saar)
25th Pctl	2.4%	4.5%	3.4%	3.0%	2.5%	2.0%
Median	2.9%	5.2%	3.9%	3.4%	2.9%	2.3%
75th Pctl	3.2%	6.0%	5.2%	4.3%	3.4%	3.1%

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

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	0%	0%	13%	65%	20%	1%	0%

Probability Distribution of U.S. Real GDP Growth in 2022 (Q4/Q4)							
	0.00 - < 0%	1.01 - 1.00%	2.01 - 2.00%	3.01 - 3.00%	4.01 - 4.00%	5.01 - 5.00%	≥ 5.01%
Average	4%	5%	12%	31%	28%	15%	6%

10a) Please provide the percent chance you attach to the following outcomes for headline PCE inflation in 2022 and 2023 (Q4/Q4).
(23 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%	2%	4%	6%	14%	20%	22%	14%	10%	6%

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%	17%	23%	20%	13%	8%	3%

10b) For the outcomes below, provide the percent chance you attach to the annual average CPI inflation rate from November 1, 2021 – October 31, 2026 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%	6%	16%	35%	31%	9%

	Most Likely Outcome
25th Pctl	2.30%
Median	2.58%
75th Pctl	2.78%

10c) For the outcomes below, provide the percent chance you attach to the annual average CPI inflation rate from November 1, 2026 – October 31, 2031 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%	9%	23%	41%	18%	5%

	Most Likely Outcome
25th Pctl	2.20%
Median	2.30%
75th Pctl	2.38%

- 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**?
(23 responses)

	Currently in U.S. Recession		U.S. Recession in 6 Months		Global Recession in 6 Months
25th Pctl	1%	25th Pctl	7%	25th Pctl	10%
Median	4%	Median	10%	Median	15%
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)** Please explain the factors behind any change to your expectations in part a since the last policy survey
(21 responses)

Many dealers indicated that there were no significant changes to their recession probabilities. In describing the factors behind any changes to their responses, several dealers cited supply chain bottlenecks, perceived constraints on growth, or upside risk to the inflation outlook.

- 12a)** Provide your estimate of the most likely outcome for output, inflation, and unemployment.
(15 responses)

		2021	2022	2023	2024	Longer Run
Real GDP (Q4/Q4 Growth)	25th Pctl	5.00%	2.75%	2.00%	1.80%	1.80%
	Median	5.28%	3.25%	2.30%	2.00%	1.95%
	75th Pctl	5.50%	3.75%	2.40%	2.20%	2.00%
Core PCE Inflation (Q4/Q4)	25th Pctl	3.90%	2.15%	2.10%	2.00%	-
	Median	4.00%	2.40%	2.20%	2.20%	-
	75th Pctl	4.15%	2.50%	2.40%	2.40%	-
Headline PCE Inflation (Q4/Q4)	25th Pctl	4.60%	1.95%	2.00%	2.00%	2.00%
	Median	4.80%	2.20%	2.20%	2.20%	2.00%
	75th Pctl	5.00%	2.45%	2.40%	2.40%	2.00%
Unemployment Rate (Q4 Average Level)	25th Pctl	4.50%	3.50%	3.30%	3.20%	3.80%
	Median	4.65%	3.85%	3.50%	3.50%	4.00%
	75th Pctl	4.70%	4.10%	3.90%	3.80%	4.40%

12b) Please explain changes, if any, to your estimates in part a since the last policy survey.
(21 responses)

In describing the factors underlying downward revisions to their near-term GDP growth estimates, several dealers cited supply chain bottlenecks, and several cited recent economic data. In describing the factors underlying upward revisions to their near-term inflation estimates, several dealers cited supply chain bottlenecks, and several cited higher energy prices.