RESPONSES TO SURVEY OF PRIMARY DEALERS

Markets Group, Federal Reserve Bank of New York

DECEMBER 2021

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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.

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 December FOMC statement. **Please write N/A if you do not expect any changes.**

Current economic conditions:

Many dealers indicated that they expected the word "transitory" to be dropped from the description of factors driving inflation. Several dealers indicated that they expected inflation to be characterized as elevated or above the Committee's goal. Several dealers indicated that they expected the statement to note risks or uncertainty around COVID-19 or the Omicron variant.

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

Many dealers indicated that they did not expect material changes to the Committee's characterization of the economic outlook or forward guidance for the target federal funds rate. Several dealers indicated that they expected a reference to risks or increased uncertainty around COVID-19 or the Omicron variant.

Communication on tools other than the target federal funds rate:

In response to this question, most dealers indicated that they expected an announcement of an acceleration in the pace of asset purchase tapering. Most dealers indicated that they expected the pace of asset purchase tapering to double. Many dealers expected an acceleration in the pace of asset purchase tapering would begin in January.

Other:
(10 responses)

Dealers did not provide significant commentary in this section.

1b) 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 2021	Year-End 2022	Year-End 2023	Year-End 2024	Longer Run
25th Pctl	**0.13%**	**0.63%**	**1.38%**	**2.00%**	**2.50%**
Median	**0.13%**	**0.63%**	**1.38%**	**2.13%**	**2.50%**
75th Pctl	**0.13%**	**0.63%**	**1.44%**	**2.38%**	**2.50%**

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

Many dealers indicated that they expected the Chair to discuss an acceleration in the pace of asset purchase tapering, and several indicated that they expected the Chair to link such an acceleration to upside risks to inflation. Several indicated that they expected the Chair to reiterate that the criteria for future rate increases are distinct from those for asset purchase tapering.

Several dealers indicated that they expected the Chair to note risks of higher or more persistent inflation, and several dealers indicated that they expected the Chair to discuss why factors driving inflation are no longer characterized as "transitory". Several dealers indicated that they expected the Chair to reiterate that the Fed is prepared to respond to higher inflation. Several dealers indicated that they expected the Chair would make comments similar to those in his late-November congressional testimony with respect to inflation.

Several dealers indicated that they expected the Chair would highlight risks or increased uncertainty around COVID-19 or the Omicron variant.

2a) 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.

	Dec. 14-15	Jan. 25-26	Mar. 15-16	May 3-4	Jun. 14-15	Jul. 26-27	Sep. 20-21
25th Pctl	0.13%	0.13%	0.13%	0.13%	0.13%	0.13%	0.38%
Median	0.13%	0.13%	0.13%	0.13%	0.38%	0.38%	0.63%
75th Pctl	0.13%	0.13%	0.13%	0.13%	0.38%	0.38%	0.63%
# of Responses	24	24	24	24	24	24	24

	2022 Q4	2023 Q1	2023 Q2	2023 Q3	2023 Q4
25th Pctl	0.63%	0.88%	1.00%	1.13%	1.38%
Median	0.75%	0.88%	1.13%	1.38%	1.63%
75th Pctl	0.88%	1.13%	1.38%	1.63%	1.88%
# of Responses	24	24	24	24	24

	2024 Q1	2024 Q2	2024 Q3	2024 Q4
25th Pctl	1.38%	1.63%	1.63%	1.88%
Median	1.88%	1.88%	2.13%	2.13%
75th Pctl	2.13%	2.13%	2.13%	2.38%
# of Responses	21	21	21	21

	2025	2026	2027	2028
25th Pctl	1.88%	2.13%	2.06%	2.06%
Median	2.13%	2.13%	2.13%	2.13%
75th Pctl	2.38%	2.63%	2.63%	2.50%
# 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.*

2b) 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	**3.5%**	**62.1%**	**4.9%**	**2.5%**
Median	**3.8%**	**62.3%**	**6.0%**	**3.7%**
75th Pctl	**3.9%**	**62.4%**	**6.4%**	**4.3%**

2c) 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%**	**1.59%**
Median	**2.25%**	**1.80%**
75th Pctl	**2.44%**	**2.08%**

2d) 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%**	**1%**	**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	**0%**	**11%**	**19%**	**27%**	**27%**	**12%**	**3%**	**1%**	**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	**0%**	**4%**	**3%**	**7%**	**14%**	**12%**	**17%**	**20%**	**14%**	**9%**

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%**	**4%**	**3%**	**4%**	**5%**	**11%**	**10%**	**14%**	**18%**	**30%**

2e) 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	**0.10%**
75th Pctl	**0.13%**

2f) For parts a-e, please explain the factors behind any change to your expectations, where applicable, since the last policy survey.

Most dealers attributed pulling forward their modal expectation for the timing of liftoff to higher or more persistent realized or forecast inflation, and some dealers cited communications by FOMC participants.

3a) Please provide your modal expectation for the net change in SOMA holdings of U.S. Treasury securities and agency mortgage-backed securities (MBS) for each monthly purchase period beginning mid-month listed below and the total net change over each of the quarters below.

If you expect SOMA holdings to increase on net in a given period, for example through net asset purchases, please enter a positive number. If you expect SOMA holdings to be unchanged on net in a given period, for example through reinvestments that result in no net change in holdings, please enter 0. If you expect SOMA holdings to decline on net in a given period, for example through maturities or paydowns that exceed any reinvestments or through sales, please enter a negative number.
(20 responses)

Net Change in U.S. Treasury Securities ($ billions)						
	Mid-Jan. 2022	Mid-Feb. 2022	Mid-Mar. 2022	Mid-Apr. 2022	Mid-May 2022	Mid-Jun. 2022
25th Pctl	**40**	**20**	**0**	**0**	**0**	**0**
Median	**40**	**20**	**0**	**0**	**0**	**0**
75th Pctl	**40**	**20**	**0**	**0**	**0**	**0**

Net Change in U.S. Treasury Securities ($ billions)						
	Mid-Jul. 2022 to End 2022 Q3	2022 Q4	2023 Q1	2023 Q2	2023 Q3	2023 Q4
25th Pctl	**0**	**0**	**0**	**-40**	**-80**	**-90**
Median	**0**	**0**	**0**	**0**	**-50**	**-50**
75th Pctl	**0**	**0**	**0**	**0**	**0**	**0**

Net Change in U.S. Treasury Securities ($ billions)								
	2024 Q1	2024 Q2	2024 Q3	2024 Q4	2025 Q1	2025 Q2	2025 Q3	2025 Q4
25th Pctl	**-105**	**-114**	**-119**	**-106**	**-114**	**-110**	**-110**	**-110**
Median	**-60**	**-88**	**-100**	**-100**	**-100**	**-93**	**-85**	**-83**
75th Pctl	**-8**	**-15**	**-48**	**-55**	**-40**	**-55**	**-55**	**-50**

Net Change in Agency MBS ($ billions)						
	Mid-Jan. 2022	Mid-Feb. 2022	Mid-Mar. 2022	Mid-Apr. 2022	Mid-May 2022	Mid-Jun. 2022
25th Pctl	**20**	**10**	**0**	**0**	**0**	**0**
Median	**20**	**10**	**0**	**0**	**0**	**0**
75th Pctl	**20**	**10**	**0**	**0**	**0**	**0**

Net Change in Agency MBS ($ billions)						
	Mid-Jul. 2022 to End 2022 Q3	2022 Q4	2023 Q1	2023 Q2	2023 Q3	2023 Q4
25th Pctl	**0**	**0**	**0**	**-25**	**-50**	**-60**
Median	**0**	**0**	**0**	**0**	**-25**	**-25**
75th Pctl	**0**	**0**	**0**	**0**	**0**	**0**

Net Change in Agency MBS ($ billions)								
	2024 Q1	2024 Q2	2024 Q3	2024 Q4	2025 Q1	2025 Q2	2025 Q3	2025 Q4
25th Pctl	**-60**	**-68**	**-73**	**-73**	**-64**	**-63**	**-62**	**-61**
Median	**-28**	**-40**	**-50**	**-50**	**-50**	**-50**	**-45**	**-40**
75th Pctl	**-3**	**-3**	**-14**	**-15**	**-10**	**-15**	**-15**	**-15**

If your responses above do not reflect a period in which SOMA holdings decline, please provide your modal expectation for the earliest quarter in which SOMA holdings decline.

	Earliest Quarter*
25th Pctl	**Q3 2026**
Median	**Q1 2028**
75th Pctl	**Q1 2029**
# of Responses	**4**

**Dropdown selections: Q1 2026, Q2 2026, Q3 2026, Q4 2026, Q1 2027, Q2 2027, Q3 2027, Q4 2027, Q1 2028 or later.*

3b) If applicable, please describe your expectations for communications regarding asset purchases going forward, including the timing and form of such communications (if any).

In response to this question, most dealers indicated that they expected an announcement of an acceleration in the pace of asset purchase tapering. Some dealers indicated that they expected the pace of asset purchase tapering to double. Several dealers indicated that they expected balance sheet runoff to commence after the start of rate increases.

3c) Please indicate the percent chance that you attach to each of the following monthly purchase periods beginning mid-month being the last period in which there are positive net purchases of Treasury securities and agency mortgage-backed securities.

	Mid-Jan. 2022	Mid-Feb. 2022	Mid-Mar. 2022	Mid-Apr. 2022	Mid-May 2022	Mid-Jun. 2022
Average	**3%**	**52%**	**18%**	**8%**	**11%**	**4%**

	Mid-Jul. 2022	Mid-Aug. 2022	Mid-Sep. 2022	Mid-Oct. 2022	Mid-Nov. 2022	Mid-Dec. 2022 or later
Average	**1%**	**1%**	**0%**	**0%**	**0%**	**1%**

Please describe any assumptions underlying your expectations.
(21 responses)

In response to this question, most dealers indicated that they expected an announcement of an acceleration in the pace of asset purchase tapering. Some dealers indicated that they expected the pace of asset purchase tapering to double.

4) Provide your estimate of the most likely outcome for the 10-year Treasury yield at the end of each period below. In addition, provide your estimate of the longer-run level of the 10-year Treasury yield. For reference, as of November 30 the yield was roughly 1.44 percent.

	2021 Q4	2022 Q1	2022 Q2	2022 Q3	2022 Q4
25th Pctl	**1.50%**	**1.64%**	**1.73%**	**1.88%**	**1.98%**
Median	**1.60%**	**1.75%**	**1.90%**	**1.98%**	**2.10%**
75th Pctl	**1.68%**	**1.85%**	**2.00%**	**2.13%**	**2.25%**
# of Responses	**24**	**24**	**24**	**24**	**24**

	2023 H1	2023 H2	2024 H1	2024 H2	Longer Run
25th Pctl	**2.00%**	**2.25%**	**2.25%**	**2.25%**	**2.25%**
Median	**2.20%**	**2.25%**	**2.35%**	**2.40%**	**2.50%**
75th Pctl	**2.25%**	**2.40%**	**2.50%**	**2.50%**	**2.60%**
# of Responses	**23**	**23**	**21**	**21**	**21**

5) Provide your estimate of the most likely outcome for the 30-year fixed primary mortgage rate at the end of each period below. In addition, provide your estimate of the longer-run level of the 30-year fixed primary mortgage rate. For reference, as of November 30 the rate was roughly 3.10 percent.

	2021 Q4	2022 Q1	2022 Q2	2022 Q3	2022 Q4
25th Pctl	**3.11%**	**3.28%**	**3.44%**	**3.51%**	**3.55%**
Median	**3.20%**	**3.40%**	**3.58%**	**3.70%**	**3.80%**
75th Pctl	**3.33%**	**3.51%**	**3.65%**	**3.78%**	**3.98%**
# of Responses	**20**	**20**	**20**	**20**	**20**

	2023 H1	2023 H2	2024 H1	2024 H2	Longer Run
25th Pctl	**3.75%**	**3.75%**	**3.90%**	**4.00%**	**3.75%**
Median	**3.85%**	**3.98%**	**4.08%**	**4.11%**	**4.21%**
75th Pctl	**4.10%**	**4.19%**	**4.25%**	**4.30%**	**4.50%**
# of Responses	**19**	**19**	**18**	**18**	**19**

6) What percent chance do you attach to any additional U.S. federal fiscal policy measures being signed into law over the next 12 months (December 1, 2021 through November 30, 2022)?
(23 responses)

Probability of Additional U.S. Federal Fiscal Policy Measures	
	Next 12 Months
25th Pctl	**60%**
Median	**75%**
75th Pctl	**90%**

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 next 12 months (December 1, 2021 through November 30, 2022), conditional on there being such additional measures.

(23 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) 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	**1600**	**1050**
Median	**1750**	**1300**
75th Pctl	**2000**	**1500**

7a) 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					
	Q4 2021 (saar)	Q1 2022 (saar)	Q2 2022 (saar)	Q3 2022 (saar)	Q4 2022 (saar)
25th Pctl	**5.4%**	**3.4%**	**3.3%**	**2.6%**	**2.1%**
Median	**6.0%**	**4.0%**	**4.0%**	**3.0%**	**2.6%**
75th Pctl	**7.5%**	**4.6%**	**4.5%**	**3.6%**	**3.3%**

7b) 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%**	**7%**	**81%**	**11%**	**1%**	**0%**

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	**4%**	**4%**	**12%**	**27%**	**32%**	**18%**	**4%**

8a) 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%**	**3%**	**5%**	**11%**	**19%**	**18%**	**16%**	**14%**	**11%**

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%**	**3%**	**6%**	**16%**	**25%**	**19%**	**13%**	**10%**	**5%**

8b) For the outcomes below, provide the percent chance you attach to the annual average CPI inflation rate from December 1, 2021 – November 30, 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%**	**5%**	**17%**	**33%**	**29%**	**14%**

	Most Likely Outcome
25th Pctl	**2.30%**
Median	**2.58%**
75th Pctl	**2.88%**

8c) For the outcomes below, provide the percent chance you attach to the annual average CPI inflation rate from December 1, 2026 – November 30, 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%**	**24%**	**40%**	**18%**	**6%**

	Most Likely Outcome
25th Pctl	**2.20%**
Median	**2.30%**
75th Pctl	**2.33%**

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	**1%**	25th Pctl	**8%**	25th Pctl	**10%**
Median	**2%**	Median	**12%**	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.*

9b) Please explain the factors behind any change to your expectations in part a since the last policy survey.
(22 responses)

Some dealers indicated that there were no significant changes to their recession probabilities. In describing the factors behind any changes to their responses, some dealers cited risks or uncertainty regarding the Omicron variant, and several dealers noted stronger incoming labor market or economic activity data.

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

		2021	2022	2023	2024	Longer Run
Real GDP (Q4/Q4 Growth)	25th Pctl	**5.10%**	**3.00%**	**2.00%**	**1.80%**	**1.75%**
	Median	**5.30%**	**3.25%**	**2.30%**	**2.00%**	**1.90%**
	75th Pctl	**5.50%**	**3.90%**	**2.50%**	**2.30%**	**2.00%**
Core PCE Inflation (Q4/Q4)	25th Pctl	**4.30%**	**2.30%**	**2.05%**	**2.05%**	**-**
	Median	**4.40%**	**2.50%**	**2.20%**	**2.20%**	**-**
	75th Pctl	**4.50%**	**2.75%**	**2.40%**	**2.30%**	**-**
Headline PCE Inflation (Q4/Q4)	25th Pctl	**5.30%**	**2.15%**	**2.00%**	**2.00%**	**2.00%**
	Median	**5.40%**	**2.45%**	**2.20%**	**2.25%**	**2.00%**
	75th Pctl	**5.40%**	**2.70%**	**2.40%**	**2.35%**	**2.00%**
Unemployment Rate (Q4 Average Level)	25th Pctl	**4.30%**	**3.45%**	**3.20%**	**3.20%**	**3.50%**
	Median	**4.30%**	**3.55%**	**3.40%**	**3.50%**	**4.00%**
	75th Pctl	**4.40%**	**3.90%**	**3.70%**	**3.60%**	**4.20%**

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

In describing the factors underlying changes to their estimates, several dealers indicated that they revised their inflation estimates upward in response to supply chain disruptions and several dealers cited recent inflation data. Several dealers indicated that they revised their unemployment estimates downward in response to recent labor market data. Several dealers indicated that they revised their near-term GDP growth estimates upward in response to recent economic activity data. Several dealers indicated that they revised their near-term GDP growth estimates downward in response to supply chain disruptions or COVID-19 variants.