RESPONSES TO SURVEY OF PRIMARY DEALERS

Markets Group, Federal Reserve Bank of New York

SEPTEMBER 2021

Distributed: 9/8/2021 – Received by: 9/13/2021

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

Table of Contents

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

Current economic conditions:

Some dealers indicated that they expected the Committee to characterize indicators of economic activity and/or employment as having moderated, with several of these dealers linking the moderation to COVID-19 concerns. Several dealers indicated that they did not expect material changes to statement language on current economic conditions.

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 federal funds rate.

Communication on tools other than the target federal funds rate:

Some dealers indicated that they expected an advance signal for upcoming decisions regarding the tapering of asset purchases. Among these respondents, several dealers specifically suggested that the Committee would include additional detail on the likely timing of a start to tapering. Several dealers indicated that they did not expect material changes to statement language on tools other than the target federal funds rate.

Other:
(14 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.

	Year-End 2021	Year-End 2022	Year-End 2023	Year-End 2024	Longer Run
25th Pctl	**0.13%**	**0.13%**	**0.63%**	**1.31%**	**2.50%**
Median	**0.13%**	**0.13%**	**0.75%**	**1.63%**	**2.50%**
75th Pctl	**0.13%**	**0.38%**	**0.88%**	**1.63%**	**2.50%**

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

Many dealers indicated that they expected the Chair to reiterate the distinction between future rate increases and asset purchase tapering, with several of these suggesting he would also note that lifting the target range for the federal funds rate required more stringent criteria to be met. Some dealers suggested that the Chair would indicate that labor markets have not yet achieved substantial further progress. Some dealers indicated that they expected the Chair

to discuss the economic impact of the Delta variant or acknowledge that COVID-related risks remain. Several dealers suggested that the Chair may provide an advance signal for upcoming decisions on asset purchase tapering.

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.

	Sep. 21-22	Nov. 2-3	Dec. 14-15	Jan. 25-26	Mar. 15-16	May 3-4	Jun. 14-15
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%**	**0.13%**	**0.38%**	**0.63%**
Median	**0.13%**	**0.13%**	**0.13%**	**0.38%**	**0.63%**	**0.63%**
75th Pctl	**0.13%**	**0.25%**	**0.38%**	**0.63%**	**0.88%**	**1.13%**
# of Responses	**24**	**24**	**23**	**23**	**23**	**23**

	2024 Q1	2024 Q2	2024 Q3	2024 Q4
25th Pctl	**0.63%**	**0.88%**	**1.13%**	**1.13%**
Median	**0.88%**	**1.13%**	**1.38%**	**1.63%**
75th Pctl	**1.38%**	**1.63%**	**1.88%**	**1.88%**
# of Responses	**21**	**21**	**21**	**21**

	2025	2026	2027	2028
25th Pctl	**1.63%**	**2.13%**	**2.00%**	**2.00%**
Median	**2.13%**	**2.13%**	**2.13%**	**2.13%**
75th Pctl	**2.38%**	**2.50%**	**2.38%**	**2.38%**
# of Responses	**21**	**21**	**20**	**19**

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%**	**62.4%**	**6.9%**	**2.1%**
Median	**3.7%**	**62.7%**	**8.0%**	**2.2%**
75th Pctl	**3.9%**	**63.0%**	**9.0%**	**2.4%**

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%**	**1.43%**
Median	**2.25%**	**1.70%**
75th Pctl	**2.50%**	**1.89%**

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	**1%**	**97%**	**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%**	**52%**	**31%**	**11%**	**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	**1%**	**15%**	**17%**	**24%**	**17%**	**13%**	**7%**	**3%**	**2%**	**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	**1%**	**6%**	**5%**	**8%**	**11%**	**18%**	**14%**	**13%**	**12%**	**11%**

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.
(22 responses)

Several dealers indicated that they did not make any material changes to their policy rate expectations. However, several other 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. In explaining changes to their expectations, several dealers noted increases in their inflation projections.

3a) 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)									
	Oct. 2021	Nov. 2021	Dec. 2021	Jan. 2022	Feb. 2022	Mar. 2022	Apr. 2022	May 2022	Jun. 2022
25th Pctl	**80**	**80**	**70**	**60**	**50**	**40**	**30**	**20**	**10**
Median	**80**	**80**	**70**	**60**	**50**	**50**	**40**	**25**	**15**
75th Pctl	**80**	**80**	**80**	**70**	**60**	**50**	**40**	**40**	**30**

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	**10**	**0**	**0**	**0**	**0**	**0**
75th Pctl	**40**	**0**	**0**	**0**	**0**	**0**

Net purchases of agency MBS ($ billions)									
	Oct. 2021	Nov. 2021	Dec. 2021	Jan. 2022	Feb. 2022	Mar. 2022	Apr. 2022	May 2022	Jun. 2022
25th Pctl	**40**	**40**	**35**	**30**	**25**	**20**	**15**	**10**	**5**
Median	**40**	**40**	**35**	**30**	**25**	**20**	**15**	**10**	**5**
75th Pctl	**40**	**40**	**40**	**35**	**30**	**25**	**20**	**20**	**15**

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	**3**	**0**	**0**	**0**	**0**	**0**
75th Pctl	**20**	**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	**Q1 2026**
# of Responses	**23**

**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, 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).

Many dealers indicated that they expected an advance signal for upcoming decisions regarding the tapering of asset purchases in September, with some of these indicating that they expected a signal related to the likely timing of the start of tapering. In addition, many dealers indicated that they expected a tapering announcement in November, while several other dealers indicated that they expected a

tapering announcement in either November or December. Several dealers indicated that they expected the tapering of asset purchases to begin in December. Finally, several dealers indicated that they expected the tapering of purchases to be proportional across Treasuries and agency MBS, and several indicated that they expected reductions in the pace of asset purchases to occur each month.

3c) 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.

	September 2021	October 2021	November 2021	December 2021	January 2022	February 2022
Average	**2%**	**5%**	**24%**	**33%**	**24%**	**6%**

	March 2022	April 2022	May 2022	June 2022	July 2022 or later
Average	**3%**	**2%**	**1%**	**1%**	**1%**

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%**	**19%**	**39%**	**27%**	**5%**	**2%**	**5%**

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

Many dealers indicated that they expected tapering to be proportional across Treasuries and agency MBS, of which some described taper increments of $10 billion per month in Treasuries and $5 billion per month in agency MBS. Several dealers indicated that they expected reductions in the pace of asset purchases to occur each month, while several others indicated that they expected reductions to occur at each FOMC meeting.

4) 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%**	**6%**	**34%**	**38%**	**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%**	**4%**	**19%**	**28%**	**29%**	**14%**	**5%**

5) 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)		
	Sep. 21-22	Nov. 2-3	Dec. 14-15
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	**24**	**24**	**24**

	EFFR minus IOER (in bps)		
	Sep. 21-22	Nov. 2-3	Dec. 14-15
25th Pctl	**-8.0**	**-8.0**	**-8.0**
Median	**-7.0**	**-7.0**	**-7.0**
75th Pctl	**-7.0**	**-7.0**	**-5.5**
# of Responses	**24**	**24**	**24**

	SOFR minus IOER (in bps)		
	Sep. 21-22	Nov. 2-3	Dec. 14-15
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	**24**	**24**	**24**

	Bottom of target range** minus ON RRP rate (in bps)		
	Sep. 21-22	Nov. 2-3	Dec. 14-15
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	**24**	**24**	**24**

	3-Month U.S. Treasury bill yield minus 3-Month OIS (in bps)		
	Sep. 21-22	Nov. 2-3	Dec. 14-15
25th Pctl	**-5.0**	**-4.0**	**-4.0**
Median	**-4.0**	**-4.0**	**-3.5**
75th Pctl	**-4.0**	**-3.0**	**-2.0**
# of Responses	**24**	**24**	**24**

**Listed rates include the interest on excess reserves (IOER) rate, effective federal funds rate (EFFR), Secured Overnight Financing Rate (SOFR), overnight reverse repurchase agreement (ON RRP) rate, and 3-month overnight index swap rate (3m OIS).*
***Target range for the federal funds rate.*

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

Probability of Additional U.S. Federal Fiscal Policy Measures	
	Probability
25th Pctl	**60%**
Median	**75%**
75th Pctl	**80%**

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.
(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)	Estimate of Most Likely Total Amount of Additional U.S. Federal Fiscal Policy Revenue Measures ($ billions)
25th Pctl	**1900**	**1000**
Median	**2000**	**1050**
75th Pctl	**3000**	**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		
	Q3 2021 (saar)	Q4 2021 (saar)
25th Pctl	**4.2%**	**4.4%**
Median	**4.8%**	**5.6%**
75th Pctl	**5.8%**	**6.6%**

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%**	**1%**	**10%**	**48%**	**36%**	**4%**	**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	**2%**	**5%**	**12%**	**30%**	**32%**	**13%**	**6%**

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%**	**5%**	**8%**	**19%**	**23%**	**22%**	**12%**	**5%**	**2%**

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	**1%**	**2%**	**4%**	**7%**	**18%**	**27%**	**24%**	**10%**	**5%**	**2%**

8b) For the outcomes below, provide the percent chance you attach to the annual average CPI inflation rate from September 1, 2021 - August 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%**	**17%**	**37%**	**30%**	**8%**

	Most Likely Outcome
25th Pctl	**2.20%**
Median	**2.45%**
75th Pctl	**2.70%**

8c) For the outcomes below, provide the percent chance you attach to the annual average CPI inflation rate from September 1, 2026 – August 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%**	**27%**	**39%**	**17%**	**5%**

	Most Likely Outcome
25th Pctl	**2.20%**
Median	**2.25%**
75th Pctl	**2.30%**

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
25th Pctl	**0%**
Median	**2%**
75th Pctl	**5%**

	U.S. Recession in 6 Months
25th Pctl	**5%**
Median	**10%**
75th Pctl	**15%**

	Global Recession in 6 Months
25th Pctl	**10%**
Median	**13%**
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 there were no significant changes to their recession probabilities. In describing the factors behind any changes to their responses, some dealers cited COVID-19 developments and/or the spread of the Delta variant of the virus.

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

		2021	2022	2023	2024	Longer Run
Real GDP (Q4/Q4 Growth)	25th Pctl	**5.55%**	**2.65%**	**2.00%**	**1.80%**	**1.80%**
	Median	**5.80%**	**3.05%**	**2.30%**	**2.00%**	**2.00%**
	75th Pctl	**6.20%**	**3.75%**	**2.50%**	**2.20%**	**2.00%**
Core PCE Inflation (Q4/Q4)	25th Pctl	**3.55%**	**2.10%**	**2.10%**	**2.00%**	**-**
	Median	**3.90%**	**2.20%**	**2.20%**	**2.15%**	**-**
	75th Pctl	**4.00%**	**2.30%**	**2.40%**	**2.50%**	**-**
Headline PCE Inflation (Q4/Q4)	25th Pctl	**4.00%**	**1.90%**	**2.00%**	**2.00%**	**2.00%**
	Median	**4.40%**	**2.05%**	**2.20%**	**2.05%**	**2.00%**
	75th Pctl	**4.55%**	**2.45%**	**2.30%**	**2.50%**	**2.00%**
Unemployment Rate (Q4 Average Level)	25th Pctl	**4.50%**	**3.50%**	**3.30%**	**3.20%**	**3.80%**
	Median	**4.65%**	**3.90%**	**3.50%**	**3.50%**	**4.00%**
	75th Pctl	**4.90%**	**4.15%**	**3.90%**	**3.80%**	**4.40%**

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, many dealers cited the impact of the Delta variant of the virus on the economy. Several dealers cited continuing supply chain disruptions, several noted signs of slowing GDP growth in the second and third quarters, and several cited continuing inventory shortages. Finally, several dealers noted slowing momentum in the services sector, and several dealers cited recent economic data.