

RESPONSES TO SURVEY OF PRIMARY DEALERS

Markets Group, Federal Reserve Bank of New York



JULY 2023

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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.

Table of Contents

Q-1)	FOMC Meeting Expectations
Q-2)	Federal Reserve System Communication Grade
Q-3)	Target Federal Funds Rate/Range
Q-4)	Federal Reserve Assets
Q-5)	Estimates of the Size of Reserves and ON RRP Take-up
Q-6)	Money Market Rate Spreads
Q-7)	U.S. Real GDP Growth Probability Distributions
Q-8)	Quarterly PCE Projections
Q-9)	Inflation Probability Distributions
Q-10)	U.S. and Global Recession Probabilities
Q-11)	Estimates of Economic Indicators

- 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:

Many dealers indicated they expected little or no change. Several dealers indicated they expected continued reference to elevated inflation, and several expected continued reference to modest economic growth. Several dealers indicated they expected softening of the language on robust job gains.

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

Most dealers indicated they expected an update to reflect an increase in the target range at the July meeting. Some dealers explicitly indicated that they expected the statement to retain language on taking into account monetary policy lags and economic and financial developments in determining the extent of additional policy firming. Several dealers indicated that they expected a reference to data dependence. Several dealers indicated they expected little or no change.

Communication on tools other than the target federal funds rate:

(23 responses)

Most dealers indicated they expected little or no change.

Other:

(20 responses)

Dealers did not provide significant commentary in this section.

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

Many dealers indicated they expected the Chair to note some potential for, or express a lean toward, further tightening without pre-committing to a specific rate path. Many dealers indicated they expected the Chair to note that additional policy firming will depend on incoming data. Some dealers indicated they expected the Chair to reiterate the FOMC's commitment to returning inflation to target. Some dealers indicated they expected the Chair to reference a moderation in inflation, and several expected the Chair to emphasize that recent favorable news on inflation would not be enough to provide confidence that inflation was on a sustained path to return to 2 percent.

- 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	1
3	7
4	15
5 - Effective	1
# of Respondents	24

Please explain:

Most dealers viewed components of Fed communications as being clear, consistent, or effective. In particular, several dealers referenced communications on expectations for an increase in the target range at the July meeting or regarding further tightening. Some dealers viewed components of Fed communications as being unclear or ineffective. In particular, several dealers noted that the rationale underlying the decision to not raise the target range at the June meeting was not clearly communicated. Some dealers indicated they perceived increasing divergence between views from FOMC participants.

- 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. 25-26	Sep. 19-20	Oct. 31-Nov. 1	Dec. 12-13	Jan. 30-31	Mar. 19-20	Apr. 30-May 1
25th Percentile	5.38%	5.38%	5.38%	5.38%	5.31%	4.88%	4.63%
Median	5.38%	5.38%	5.38%	5.38%	5.38%	5.38%	5.13%
75th Percentile	5.38%	5.38%	5.38%	5.38%	5.38%	5.38%	5.38%
# of Respondents	24	24	24	24	24	24	24

	2024 Q2	2024 Q3	2024 Q4	2025 Q1	2025 Q2	2025 Q3	2025 Q4	2026	2027
25th Percentile	4.31%	3.75%	3.25%	3.00%	2.63%	2.50%	2.38%	2.38%	2.38%
Median	4.88%	4.50%	4.00%	3.63%	3.13%	2.88%	2.63%	2.63%	2.63%
75th Percentile	5.13%	4.69%	4.38%	3.88%	3.63%	3.25%	3.13%	3.06%	3.00%
# of Respondents	24	24	24	19	19	19	19	19	19

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.

	10-yr Average FF Rate	Longer Run
25th Percentile	2.75%	2.50%
Median	2.95%	2.50%
75th Percentile	3.12%	2.66%
# of Respondents	24	24

3c) Please indicate the percent chance that you attach to the target federal funds rate or range falling in each of the following ranges immediately following the July and September FOMC meetings and at the end of 2023 and 2024. If you expect a target range, please use the midpoint of that range in providing your response.

Federal Funds Rate or Range after the July 2023 FOMC Meeting										
	<= 4.25%	4.26 - 4.50%	4.51 - 4.75%	4.76 - 5.00%	5.01 - 5.25%	5.26 - 5.50%	5.51 - 5.75%	5.76 - 6.00%	6.01 - 6.25%	>= 6.26%
Average	0%	0%	0%	0%	10%	89%	1%	0%	0%	0%

Federal Funds Rate or Range after the September 2023 FOMC Meeting										
	<= 4.25%	4.26 - 4.50%	4.51 - 4.75%	4.76 - 5.00%	5.01 - 5.25%	5.26 - 5.50%	5.51 - 5.75%	5.76 - 6.00%	6.01 - 6.25%	>= 6.26%
Average	0%	0%	0%	1%	6%	61%	31%	1%	0%	0%

Federal Funds Rate or Range at the End of 2023										
	<= 4.25%	4.26 - 4.50%	4.51 - 4.75%	4.76 - 5.00%	5.01 - 5.25%	5.26 - 5.50%	5.51 - 5.75%	5.76 - 6.00%	6.01 - 6.25%	>= 6.26%
Average	3%	1%	2%	5%	10%	42%	28%	7%	2%	1%

Federal Funds Rate or Range at the End of 2024										
	<= 1.50%	1.51 - 2.00%	2.01 - 2.50%	2.51 - 3.00%	3.01 - 3.50%	3.51 - 4.00%	4.01 - 4.50%	4.51 - 5.00%	5.01 - 5.50%	>= 5.51%
Average	7%	5%	8%	12%	13%	14%	16%	14%	6%	6%

3d) Please indicate the percent chance that you attach to the highest level of the target range for the federal funds rate before the target range is next decreased falling in each of the following ranges.

	<= 4.25%	4.26 - 4.50%	4.51 - 4.75%	4.76 - 5.00%	5.01 - 5.25%	5.26 - 5.50%	5.51 - 5.75%	5.76 - 6.00%	6.01 - 6.25%	>= 6.26%
Average	0%	0%	0%	0%	7%	46%	30%	9%	4%	3%

4a) Please provide your modal expectation for the total net change in SOMA holdings of U.S. Treasury securities and agency mortgage-backed securities (MBS) over each of the periods 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.

Net Change in U.S. Treasury Securities (\$ billions)							
	Jul. 2023	Aug. 2023	Sep. 2023	Oct. 2023	Nov. 2023	Dec. 2023	
25th Percentile	-60	-60	-60	-60	-60	-60	-60
Median	-60	-60	-60	-60	-60	-60	-60
75th Percentile	-60	-60	-60	-60	-60	-60	-60
# of Respondents	24	24	24	24	24	24	24

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 Percentile	-180	-180	-115	0	0	0	0	0
Median	-180	-72	0	0	0	0	0	0
75th Percentile	-114	0	54	51	53	58	58	58
# of Respondents	24	23	23	23	22	22	22	22

Net Change in Agency MBS (\$ billions)							
	Jul. 2023	Aug. 2023	Sep. 2023	Oct. 2023	Nov. 2023	Dec. 2023	
25th Percentile	-20	-20	-20	-20	-20	-20	-20
Median	-20	-19	-20	-19	-19	-19	-19
75th Percentile	-18	-17	-16	-16	-15	-15	-15
# of Respondents	23	23	23	23	23	23	23

Net Change in Agency MBS (\$ billions)								
	2024 Q1	2024 Q2	2024 Q3	2024 Q4	2025 Q1	2025 Q2	2025 Q3	2025 Q4
25th Percentile	-60	-60	-60	-59	-59	-59	-60	-58
Median	-54	-54	-54	-50	-44	-50	-44	-36
75th Percentile	-46	-48	-3	0	0	0	0	0
# of Respondents	23	23	23	23	22	22	22	22

- 4b)** Please indicate the period in which you expect the SOMA portfolio will cease to decline as well as the size of the SOMA portfolio when it ceases to decline. Please also indicate the size of specified liabilities, reserves and take-up at the overnight reverse repurchase facility, when the SOMA portfolio ceases to decline.

	Period in which SOMA portfolio ceases to decline*	Size of SOMA portfolio when it ceases to decline**	Size of reserves***	Take-up at the overnight reverse repurchase facility****
25th Percentile	2024 Q2	6,250	2,375	875
Median	2024 Q2/Q3	6,750	2,625	1,250
75th Percentile	2024 Q4	7,250	2,938	1,375
# of Respondents	24	24	24	24

*Dropdown selections: 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, Q2 2028, Q3 2028, Q4 2028, Q1 2029 or later.

**Dropdown selections: \$0-500bn, \$501-1000bn, \$1001-1500bn, \$1501-2000bn, \$2001-2500bn, \$2501-3000bn, \$3001-3500bn, \$3501-4000bn, \$4001-4500bn, \$4501-5000bn, \$5001-5500bn, \$5501-6000bn, \$6001-6500bn, \$6501-7000bn, \$7001-7500bn, \$7501-8000bn.

***Dropdown selections: \$1000bn or smaller, \$1001-1250bn, \$1251-1500bn, \$1501-1750bn, \$1751-2000bn, \$2001-2250bn, \$2251-2500bn, \$2501-2750bn, \$2751-3000bn, \$3001-3250bn, \$3251-3500bn, \$3501-3750bn, \$3751-4000bn, \$4001bn or larger.

****Dropdown selections: \$0-250bn, \$251-500bn, \$501-750bn, \$751-1000bn, \$1001-1250bn, \$1251-1500bn, \$1501-1750bn, \$1751-2000bn, \$2001-2250bn, \$2251-2500bn, \$2501bn or larger.

- 4c)** Please indicate the percent chance that you attach to the size of the SOMA portfolio falling in each of the following ranges when it ceases to decline. For reference, Securities Held Outright in the SOMA portfolio on July 5, 2023 was \$7,647 billion according to the most recent H.4.1 release.

	\$4000bn or smaller	\$4001-4500bn	\$4501-5000bn	\$5001-5500bn	\$5501-6000bn	\$6001-6500bn	\$6501-7000bn	\$7001-7500bn	\$7501bn or larger
Average	1%	1%	3%	7%	11%	18%	28%	26%	6%

- 4d)** Please describe the factors that underpin your baseline expectations for when the decline in the SOMA portfolio will be slowed and then stopped.
(23 responses)

Some dealers indicated they expected balance sheet reduction to end at the time of a recession and/or when the Fed starts reducing the level of the target range. Some dealers indicated they expected or saw potential for the end of balance sheet reduction to be determined by reserve scarcity or assessments of reserves as a percentage of GDP. Several dealers cited a possibility that balance sheet reduction could continue even after the Fed starts reducing the level of the target range. Several dealers indicated they expected that maturing MBS would be reinvested in Treasury securities once the reduction in the size of the balance sheet had been completed.

Please describe the distribution of outcomes around your baseline for the end of SOMA decline and any factors associated with that distribution.

(22 responses)

Several dealers viewed the distribution of outcomes as skewed toward a later end to runoff and a smaller SOMA portfolio.

- 5) Please provide your modal expectation for the size of reserves and take-up at the overnight reverse repurchase facility, averaged for each of the periods below.

Estimate of the Size of Reserves (\$ billions)						
	2023 Q3	2023 Q4	2024 Q1	2024 Q2	2024 Q3	2024 Q4
25th Percentile	2,929	2,779	2,585	2,525	2,423	2,419
Median	3,000	2,864	2,757	2,700	2,642	2,625
75th Percentile	3,100	2,955	2,904	2,992	2,990	3,030
# of Respondents	24	24	24	24	24	24

Estimate of Overnight Reverse Repo Take-up (\$ billions)						
	2023 Q3	2023 Q4	2024 Q1	2024 Q2	2024 Q3	2024 Q4
25th Percentile	1,635	1,349	1,102	981	882	761
Median	1,750	1,594	1,350	1,240	1,200	1,100
75th Percentile	1,800	1,616	1,530	1,478	1,430	1,314
# of Respondents	24	24	24	24	24	24

Please provide any additional information or factors behind your baseline expectations and the distribution of outcomes around your baseline for the size of reserves and take-up at the overnight reverse repurchase facility over the next six months.

(19 responses)

Several dealers indicated they expected a decline in the level of overnight reverse repurchase (ON RRP) take-up due to Treasury bill issuance and the rebuild of the Treasury General Account (TGA). Several dealers indicated they saw potential for ON RRP take-up to remain elevated, citing policy uncertainty and the prospect of more rate hikes.

Please provide any additional information or factors behind your baseline expectations and the distribution of outcomes around your baseline for the size of reserves and take-up at the overnight reverse repurchase facility beyond the next six months.

(19 responses)

Several dealers indicated they expected that a continued decline in ON RRP could be driven by supply or attractiveness of alternative investments. Several dealers indicated they expected a greater decline in reserves than ON RRP or the potential for ON RRP to remain elevated beyond the next six months.

- 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 and please do not include decimal places.

Top of target range** minus IORB (in bps)				
	Jul. 25-26	Sep. 19-20	Oct. 31- Nov. 1	Dec. 12-13
25th Percentile	10.0	10.0	10.0	10.0
Median	10.0	10.0	10.0	10.0
75th Percentile	10.0	10.0	10.0	10.0
# of Respondents	24	24	24	24

EFFR minus IORB (in bps)				
	Jul. 25-26	Sep. 19-20	Oct. 31- Nov. 1	Dec. 12-13
25th Percentile	-7.0	-7.0	-7.0	-7.0
Median	-7.0	-7.0	-6.0	-6.0
75th Percentile	-7.0	-6.0	-5.0	-5.0
# of Respondents	24	24	24	24

SOFR minus IORB (in bps)				
	Jul. 25-26	Sep. 19-20	Oct. 31- Nov. 1	Dec. 12-13
25th Percentile	-9.0	-9.0	-9.0	-8.3
Median	-9.0	-9.0	-8.0	-7.5
75th Percentile	-9.0	-7.8	-6.8	-5.8
# of Respondents	24	24	24	24

Bottom of target range** minus ON RRP rate (in bps)				
	Jul. 25-26	Sep. 19-20	Oct. 31- Nov. 1	Dec. 12-13
25th Percentile	-5.0	-5.0	-5.0	-5.0
Median	-5.0	-5.0	-5.0	-5.0
75th Percentile	-5.0	-5.0	-5.0	-5.0
# of Respondents	24	24	24	24

3m U.S. Treasury bill yield minus 3m OIS (in bps):				
	Jul. 25-26	Sep. 19-20	Oct. 31- Nov. 1	Dec. 12-13
25th Percentile	4.0	4.0	3.5	1.5
Median	5.0	5.0	5.0	4.5
75th Percentile	5.0	6.3	6.3	8.0
# of Respondents	24	24	24	24

**Listed rates include the interest on reserve balances (IORB) 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*

- 7) Please provide the percent chance you attach to the following outcomes for U.S. real GDP growth in 2023 and 2024 (Q4/Q4).

Probability Distribution of U.S. Real GDP Growth in 2023 (Q4/Q4)										
	<= -1.01%	-1.00 - -0.51%	-0.50 - 0.00%	0.01 - 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%	5%	11%	16%	21%	24%	15%	4%	2%	1%

Probability Distribution of U.S. Real GDP Growth in 2024 (Q4/Q4)										
	<= -1.01%	-1.00 - -0.51%	-0.50 - 0.00%	0.01 - 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	4%	6%	15%	16%	20%	18%	11%	5%	2%	2%

Please also provide your point estimate for the most likely outcome.

U.S. Real GDP Modal Point Estimates (Q4/Q4)		
	2023	2024
25th Percentile	0.58%	0.40%
Median	0.90%	0.95%
75th Percentile	1.23%	1.30%
# of Respondents	24	24

- 8) Please indicate your modal projections for headline and core PCE inflation for each of the following quarters.*

Headline PCE Inflation Quarterly Modal Point Estimates					
	Q2 2023 (saar)	Q3 2023 (saar)	Q4 2023 (saar)	Q1 2024 (saar)	Q2 2024 (saar)
25th Percentile	2.7%	2.3%	2.3%	2.2%	1.6%
Median	2.8%	2.6%	2.7%	2.5%	2.1%
75th Percentile	2.8%	2.8%	3.2%	2.7%	2.3%
# of Respondents	24	24	24	24	24

Core PCE Inflation Quarterly Modal Point Estimates					
	Q2 2023 (saar)	Q3 2023 (saar)	Q4 2023 (saar)	Q1 2024 (saar)	Q2 2024 (saar)
25th Percentile	3.9%	2.7%	2.7%	2.4%	2.3%
Median	4.0%	3.1%	2.9%	2.7%	2.4%
75th Percentile	4.0%	3.2%	3.1%	2.9%	2.6%
# of Respondents	24	24	24	24	24

**Percent change from the previous quarter at an annualized rate, based on the average of monthly levels (seasonally adjusted) in each quarter.*

9a) Please provide the percent chance you attach to the following outcomes for headline PCE inflation in 2023 and 2024 (Q4/Q4).

Probability Distribution of Headline PCE Inflation in 2023 (Q4/Q4)										
	<= 2.00%	2.01 - 2.25%	2.26 - 2.50%	2.51 - 2.75%	2.76 - 3.00%	3.01 - 3.25%	3.26 - 3.50%	3.51 - 3.75%	3.76 - 4.00%	>= 4.01%
Average	2%	2%	5%	14%	20%	22%	18%	10%	4%	3%

Probability Distribution of Headline PCE Inflation in 2024 (Q4/Q4)										
	<= 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 - 3.25%	3.26 - 3.50%	>= 3.51%
Average	6%	7%	12%	20%	21%	15%	9%	5%	2%	3%

Please also provide your point estimate for the most likely outcome.

Headline PCE Inflation Modal Point Estimates (Q4/Q4)		
	2023	2024
25th Percentile	2.90%	2.18%
Median	3.03%	2.25%
75th Percentile	3.23%	2.40%
# of Respondents	24	24

9b) For the outcomes below, provide the percent chance you attach to the annual average CPI inflation rate from July 1, 2023 – June 30, 2028 falling in each of the following ranges. Please also provide your point estimate for the most likely outcome.
(23 responses)

	<= 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	1%	1%	5%	13%	30%	27%	16%	7%

	Most Likely Outcome
25th Percentile	2.40%
Median	2.50%
75th Percentile	2.70%
# of Respondents	23

9c) For the outcomes below, provide the percent chance you attach to the annual average CPI inflation rate from July 1, 2028 – June 30, 2033 falling in each of the following ranges. Please also provide your point estimate for the most likely outcome.
(23 responses)

	<= 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	1%	1%	5%	19%	42%	22%	7%	3%

	Most Likely Outcome
25th Percentile	2.25%
Median	2.30%
75th Percentile	2.40%
# of Respondents	23

10a) 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 Percentile	4%	28%	33%
Median	5%	50%	50%
75th Percentile	10%	60%	60%
# of Respondents	24	24	23

*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.

10b) What percent chance do you attach to the U.S. economy first entering a recession* in each of the following periods?

	H1 2023**	H2 2023	H1 2024	H2 2024	H1 2025	No recession by end H1 2025
Average	2%	28%	29%	15%	9%	16%

*NBER-defined recession

**Percent chance that the economy first entered an NBER-defined recession in H1 2023.

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

		2023	2024	2025	Longer Run
Real GDP (Q4/Q4 Growth)*	25th Percentile	0.48%	0.40%	1.80%	1.80%
	Median	0.89%	0.95%	1.90%	1.80%
	75th Percentile	1.23%	1.30%	2.40%	2.00%
Core PCE Inflation (Q4/Q4)	25th Percentile	3.50%	2.20%	2.00%	-
	Median	3.65%	2.40%	2.05%	-
	75th Percentile	3.80%	2.53%	2.20%	-
Headline PCE Inflation (Q4/Q4)**	25th Percentile	2.90%	2.10%	2.00%	2.00%
	Median	3.03%	2.20%	2.05%	2.00%
	75th Percentile	3.23%	2.40%	2.23%	2.00%
Unemployment Rate (Q4 Average Level)	25th Percentile	3.78%	4.40%	4.28%	4.00%
	Median	4.00%	4.65%	4.55%	4.00%
	75th Percentile	4.13%	5.03%	4.80%	4.20%