## RESPONSES TO SURVEY OF MARKET PARTICIPANTS

Markets Group, Federal Reserve Bank of New York



## DECEMBER 2022

Distributed: 11/30/2022 - Received by: 12/5/2022

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. 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.

List of Market Participants:

<sup>&</sup>lt;sup>1</sup> Answers may not sum to 100 percent due to rounding.

## **Table of Contents**

Q-1)	FOMC Meeting Expectations
Q-2)	Target Federal Funds Rate/Range
Q-3)	Federal Reserve Assets
Q-4)	U.S. Real GDP Growth Probability Distributions
Q-5)	Quarterly PCE Projections
Q-6)	Inflation Probability Distributions
Q-7)	U.S. and Global Recession Probabilities

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

Current economic conditions:

(25 responses)

Most respondents indicated they expected little or no change.

Economic outlook and communication on the expected path of the target federal funds rate: (26 responses)

Many respondents indicated they expected little or no change.

Communication on tools other than the target federal funds rate: (25 responses)

Most respondents indicated they expected little or no change.

Other:

(20 responses)

Respondents did not provide significant commentary in this section.

**1b)** What are your expectations for the most likely levels of the medians of FOMC participants' <u>target federal</u> funds rate projections in the SEP? Please provide your responses out to three decimal places.

	Year-end 2022	Year-end 2023	Year-end 2024	Year-end 2025	Longer Run
25th Percentile	4.38%	4.88%	3.88%	2.88%	2.50%
Median	4.38%	4.88%	4.13%	2.88%	2.50%
75th Percentile	4.38%	5.13%	4.13%	3.13%	2.50%
# of Respondents	28	28	28	28	28

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

Several respondents indicated they expected the Chair to reference a slowing in the pace of tightening. Several expected the Chair to focus on the peak level of the target range or the length of time at the peak.

Several respondents indicated they expected the Chair to reiterate the FOMC's commitment to returning inflation to target. Several expected continued reference to the tight labor market or strong wage growth.

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. 13-14	Jan. 31 - Feb. 1	Mar. 21-22	May 2-3	Jun. 13-14	Jul. 25-26	Sep. 19-20
25th Percentile	4.38%	4.63%	4.88%	4.88%	4.88%	4.88%	4.63%
Median	4.38%	4.63%	4.88%	4.88%	4.88%	4.88%	4.88%
75th Percentile	4.38%	4.88%	4.94%	5.13%	5.13%	5.13%	5.13%
# of Respondents	28	28	28	28	28	28	28

	2023 Q4	2024 Q1	2024 Q2	2024 Q3	2024 Q4
25th Percentile	4.38%	4.13%	3.50%	3.13%	2.75%
Median	4.88%	4.38%	4.13%	3.63%	3.13%
75th Percentile	5.13%	4.88%	4.50%	4.13%	3.88%
# of Respondents	28	27	27	27	27

	2025 Q1	2025 Q2	2025 Q3	2025 Q4	2026	2027	2028	2029
25th Percentile	2.50%	2.13%	2.13%	2.00%	2.13%	2.03%	2.13%	2.13%
Median	2.88%	2.63%	2.63%	2.63%	2.38%	2.38%	2.38%	2.38%
75th Percentile	3.50%	3.38%	3.13%	2.88%	2.63%	2.63%	2.63%	2.63%
# of Respondents	27	27	27	27	26	26	26	26

**2b)** 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	2.39%	2.13%
Median	2.65%	2.38%
75th Percentile	2.93%	2.56%
# of Respondents	27	27

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 2022, immediately following the January/February FOMC meeting and at the end of 2023, 2024, and 2025. If you expect a target range, please use the midpoint of that range in providing your response.

(27 responses)

		Fed	leral Fun	ds Rate d	or Range	at the Er	d of 2022	2		
	<= 3.25%	3.26 - 3.50%	3.51 - 3.75%	3.76 - 4.00%	4.01 - 4.25%	4.26 - 4.50%	4.51 - 4.75%	4.76 - 5.00%	5.01 - 5.25%	>= 5.26%
Average	0%	0%	0%	1%	7%	79%	13%	0%	0%	0%

	Federal F	unds Ra	te or Ran	ge after t	the Janua	ary/Febru	ary 2023	FOMC M	leeting	
	<= 3.50%	3.51 - 3.75%	3.76 - 4.00%	4.01 - 4.25%	4.26 - 4.50%	4.51 - 4.75%	4.76 - 5.00%	5.01 - 5.25%	5.26 - 5.50%	>= 5.51%
Average	0%	0%	1%	2%	13%	46%	33%	5%	1%	0%

	Federal Funds Rate or Range at the End of 2023												
	<= 3.50%	3.51 - 3.75%	3.76 - 4.00%	4.01 - 4.25%	4.26 - 4.50%	4.51 - 4.75%	4.76 - 5.00%	5.01 - 5.25%	5.26 - 5.50%	>= 5.51%			
Average	11%	4%	5%	11%	9%	12%	17%	15%	9%	7%			

		Fed	leral Fun	ds Rate d	or Range	at the En	nd of 2024	4		
	<= 1.00%	1.01 - 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%
Average	9%	5%	8%	9%	15%	16%	16%	11%	5%	5%

		Fed	leral Fun	ds Rate d	or Range	at the Er	nd of 202	5		
	<= 1.00%	1.01 - 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%
Average	13%	6%	15%	18%	17%	12%	8%	5%	3%	3%

**2d)** Please indicate the percent chance that you attach to the <u>highest level of the target range for the federal</u> funds rate before the target range is next decreased falling in each of the following ranges.

	<= 3.75%	3.76 - 4.00%	4.01 - 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%
Average	1%	1%	2%	6%	15%	29%	20%	13%	7%	6%

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

(26 responses)

Some respondents cited communications and guidance from FOMC officials as motivating changes to their expectations for the path of the federal funds rate. Several respondents indicated they increased their modal expectations for the target range for the federal funds rate compared with their responses in the prior survey because the strength of the economy or the labor market warranted further tightening than previously thought. Some respondents explicitly mentioned they expected a higher peak level of the target range.

**3a)** Please provide your modal expectation for the <u>total net change in SOMA holdings</u> 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)									
	Dec. 2022	Jan. 2023	Feb. 2023	Mar. 2023	Apr. 2023	May 2023	Jun. 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	21	21	21	21	21	21	21		

	Net Change in U.S. Treasury Securities (\$ billions)									
	2023 Q3	2023 Q4	2024 Q1	2024 Q2	2024 Q3	2024 Q4	2025 Q1	2025 Q2	2025 Q3	2025 Q4
25th Percentile	-180	-180	-180	-180	-180	-180	-180	-180	-110	0
Median	-180	-180	-180	-180	-135	-60	0	0	0	0
75th Percentile	-180	-180	-180	0	0	0	0	0	0	35
# of Respondents	21	21	21	21	21	21	21	21	21	21

Net Change in Agency MBS (\$ billions)									
	Dec. 2022	Jan. 2023	Feb. 2023	Mar. 2023	Apr. 2023	May 2023	Jun. 2023		
25th Percentile	-25	-25	-25	-25	-25	-25	-25		
Median	-20	-20	-20	-20	-20	-20	-20		
75th Percentile	-19	-18	-18	-18	-18	-18	-19		
# of Respondents	21	21	21	21	21	21	21		

	Net Change in Agency MBS (\$ billions)										
	2023 Q3	2023 Q4	2024 Q1	2024 Q2	2024 Q3	2024 Q4	2025 Q1	2025 Q2	2025 Q3	2025 Q4	
25th Percentile	-80	-80	-100	-80	-60	-60	-60	-60	-60	-60	
Median	-60	-60	-60	-60	-45	-39	-38	-37	0	0	
75th Percentile	-55	-53	-45	0	0	0	0	0	0	0	
# of Respondents	21	21	21	21	21	21	21	21	21	21	

**3b)** 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	5,750	2,063	375
Median	2024 Q4	6,250	2,375	875
75th Percentile	2025 Q4	6,750	2,375	1,625
# of Respondents	22	22	20	20

\*Dropdown selections: 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, 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, \$8001bn or larger

\*\*\*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.

**3c)** 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 November 23, 2022 was \$8,210 billion according to the most recent H.4.1 release.

(22 responses)

	\$4000bn	\$4001-	\$4501-	\$5001-	\$5501-	\$6001-	\$6501-	\$7001-	\$7501bn
	or smaller	4500bn	5000bn	5500bn	6000bn	6500bn	7000bn	7500bn	or larger
Average	6%	4%	6%	9%	17%	22%	16%	12%	8%

**3d)** Please provide any additional information on your expectations for balance sheet reduction, including the period in which you expect the SOMA portfolio will cease to decline and the factors behind your expectations. Please include any factors that influenced the probability that you assigned to the distribution of outcomes in part c above.

(16 responses)

Several respondents indicated they expected balance sheet reduction to end at the time the Fed starts cutting policy rates.

4) Please provide the percent chance you attach to the following outcomes for U.S. real GDP growth in 2022, 2023, 2024, and 2025 (Q4/Q4).

(25 responses)

	Probability Distribution of U.S. Real GDP Growth in 2022 (Q4/Q4)									
	<= -1.01%		-0.50 - 0.00%		0.51 - 1.00%		1.51 - 2.00%		2.51 - 3.00%	>= 3.01%
Average	2%	3%	10%	31%	22%	14%	9%	5%	4%	1%

Probability Distribution of U.S. Real GDP Growth in 2023 (Q4/Q4)										
		-1.00 - -0.51%								>= 3.01%
Average	7%	8%	14%	24%	17%	12%	8%	5%	3%	2%

Probability Distribution of U.S. Real GDP Growth in 2024 (Q4/Q4)										
		-1.00 - -0.51%					1.51 - 2.00%			>= 3.01%
Average	5%	4%	6%	9%	13%	17%	22%	14%	6%	5%

	Probability Distribution of U.S. Real GDP Growth in 2025 (Q4/Q4)									
		-1.00 - -0.51%			0.51 - 1.00%			2.01 - 2.50%	2.51 - 3.00%	>= 3.01%
Average	3%	4%	4%	6%	10%	17%	24%	17%	9%	6%

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

U.S. F	Real GDP Mo	dal Point Esti	mates (Q4/Q4	·)
	2022	2023	2024	2025
25th Percentile	0.30%	0.26%	1.25%	1.70%
Median	0.58%	0.50%	1.60%	1.80%
75th Percentile	0.94%	0.95%	1.80%	2.00%
# of Respondents	26	26	25	25

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

Headline P	Headline PCE Inflation Quarterly Modal Point Estimates									
	Q4 2022 (saar)	Q1 2023 (saar)	Q2 2023 (saar)	Q3 2023 (saar)	Q4 2023 (saar)					
25th Percentile	3.7%	3.0%	2.6%	2.4%	2.1%					
Median	4.0%	3.5%	3.0%	2.8%	2.5%					
75th Percentile	4.2%	3.8%	3.5%	3.0%	3.0%					
# of Respondents	21	21	21	21	21					

Core PCE	<b>Inflation</b>	Quarterly	Modal Poi	int Estima	tes
	Q4 2022 (saar)	Q1 2023 (saar)	Q2 2023 (saar)	Q3 2023 (saar)	Q4 2023 (saar)
25th Percentile	3.7%	3.2%	2.8%	2.6%	2.5%
Median	4.1%	3.5%	3.0%	2.8%	2.7%
75th Percentile	4.4%	3.8%	3.3%	3.0%	3.0%
# of Respondents	23	23	23	23	23

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

Please provide the percent chance you attach to the following outcomes for <a href="headline PCE inflation">headline PCE inflation</a> in 2022, 2023, 2024, and 2025 (Q4/Q4). (25 responses)

Probability Distribution of Headline PCE Inflation in 2022 (Q4/Q4)										
	<= 3.00%	3.01 - 3.50%	3.51 - 4.00%	4.01 - 4.50%	4.51 - 5.00%	5.01 - 5.50%	5.51 - 6.00%		6.51 - 7.00%	>= 7.01%
Average	1%	1%	2%	4%	10%	24%	40%	14%	4%	2%

	Probability Distribution of Headline PCE Inflation in 2023 (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	3%	3%	6%	8%	9%	13%	17%	15%	15%	12%	

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	7%	6%	10%	17%	20%	13%	9%	7%	5%	6%

	Probability Distribution of Headline PCE Inflation in 2025 (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	7%	9%	19%	19%	15%	11%	8%	5%	3%	4%

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

Headline PCE Inflation Modal Point Estimates (Q4/Q4)									
	2022	2023	2024	2025					
25th Percentile	5.56%	2.80%	2.10%	2.00%					
Median	5.70%	2.90%	2.35%	2.10%					
75th Percentile	5.80%	3.18%	2.50%	2.40%					
# of Respondents	26	26	25	25					

**6b)** For the outcomes below, provide the percent chance you attach to the annual average <u>CPI inflation</u> rate from December 1, 2022 - November 30, 2027 falling in each of the following ranges. Please also provide your point estimate for the most likely outcome.

(26 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	0%	1%	6%	16%	25%	28%	16%	7%

	Most Likely Outcome
25th Percentile	2.46%
Median	2.50%
75th Percentile	3.00%
# of Respondents	26

For the outcomes below, provide the percent chance you attach to the annual average <u>CPI inflation</u> rate from December 1, 2027 - November 30, 2032 falling in each of the following ranges. Please also provide your point estimate for the most likely outcome.

(26 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%	3%	10%	26%	32%	19%	7%	3%

	Most Likely Outcome
25th Percentile	2.20%
Median	2.30%
75th Percentile	2.40%
# of Respondents	26

**7a)** What percent chance do you attach to:

the U.S. economy currently being in a recession  $\ensuremath{^{*}}\xspace$ 

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	5%	29%	33%
Median	5%	35%	40%
75th Percentile	15%	50%	50%
# of Respondents	27	27	27

<sup>\*</sup>NBER-defined recession

**7b)** What percent chance do you attach to the U.S. economy first entering a recession\* in each of the following periods?

(27 responses)

	2022***	H1 2023	H2 2023	H1 2024	H2 2024	No recession by end 2024
Average	10%	32%	25%	13%	8%	12%

<sup>\*</sup>NRFR-defined recession

**7c)** Please explain the factors behind any change to your expectations in parts a and b since the last policy survey.

(22 responses)

In explaining changes to their recession probabilities, some respondents noted they reduced their probability of recession or pushed out their expected timing of recession due to strong economic data. Among respondents citing reasons for a higher probability of recession, several cited tightening of monetary policy or financial conditions. Some respondents indicated they expected little or no change.

<sup>\*\*</sup>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.

<sup>\*\*</sup>Includes the possibility that the economy may currently be in an NBER-defined recession.