RESPONSES TO SURVEY OF PRIMARY DEALERS

Markets Group, Federal Reserve Bank of New York



APRIL 2021

Distributed: 4/14/2021 - Received by: 4/19/2021

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.

Table of Contents

Q-1)	FOMC Meeting Expectations
Q-2)	Federal Reserve System Communication Grade
Q-3)	Target Federal Funds Rate/Range and Lower Bound Expectations
Q-4)	Ten-Year Treasury Yield Probability Distributions
Q-5)	Federal Reserve Assets
Q-6)	Money Market Rate Spreads
Q-7)	Additional Federal Reserve Actions
Q-8)	Fiscal Policy Expectations
Q-9)	U.S. Real GDP Growth
Q-10)	Inflation Probability Distributions
Q-11)	U.S. and Global Recession Probabilities
Q-12)	Estimates of Economic Indicators

1a) Provide below your expectations for **changes**, if any, to the language referencing each of the following topics in the April 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 upgrade its assessment of current economic conditions, including several who expected it to upgrade its characterization of employment, several who expected it to upgrade its characterization of economic activity, and several who expected the statement to make reference to an increase in realized inflation. In addition, several dealers indicated that they did not expect material changes to the Committee's characterization of 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: (22 responses)

Most 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 Chair's press conference?

Many dealers indicated that they expected the Chair's remarks to be similar to recent communications by Federal Reserve officials, and many indicated that they expected him to express optimism regarding the economic outlook. Some dealers indicated that they expected the Chair to note that the economy has a long way to go to reach the Committee's goals or for him to emphasize patience in the Committee's policy stance, and several indicated that they expected him to reiterate guidance that asset purchases would continue at least at the current pace until "substantial further progress" has been made toward the Committee's goals. Several dealers indicated that they expected the Chair to reiterate that the economy is at an "inflection point", several indicated that they expected him to note that near-term increases in inflation are likely to be transitory, and several indicated that they expected him to reiterate that decisions regarding appropriate policy will be made based on outcomes rather than forecasts.

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	0
3	6
4	15
5 - Effective	3
# of Responses	24

Please explain.

Most dealers indicated that overall communications have generally been clear and/or consistent.

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.

	Apr.	Jun.	Jul.	Sep.	Nov.	Dec.	Jan.
	27-28	15-16	27-28	21-22	2-3	14-15	25-26
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 Q1	2022 Q2	2022 Q3	2022 Q4	2023 Q1	2023 Q2	2023 Q3	2023 Q4
25th Pctl	0.13%	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%	0.38%	0.38%
75th Pctl	0.13%	0.13%	0.13%	0.13%	0.13%	0.38%	0.38%	0.63%
# of Responses	24	24	24	24	21	21	21	21

	2024	2025	2026	2027
25th Pctl	0.63%	1.38%	1.88%	2.13%
Median	1.13%	1.75%	2.00%	2.38%
75th Pctl	1.63%	2.38%	2.50%	2.63%
# of Responses	19	19	19	19

If your responses **through year-end 2023** above do <u>not</u> 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.

	Earliest quarter*
25th Pctl	Q1 2024
Median	Q1 2024
75th Pctl	Q1 2024/Q2 2024**
# of Responses	8

* 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 or later.

** Statistic falls between two selections.

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.(22 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	3.4%	62.9%	7.7%	2.1%					
Median	3.7%	63.0%	8.2%	2.2%					
75th Pctl	4.0%	63.2%	10.8%	2.4%					

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	2.13%	1.25%
Median	2.31%	1.63%
75th Pctl	2.50%	1.80%

3d) Please indicate the percent chance that you attach to the target federal funds rate or range falling in each of the following ranges <u>at the end of 2021, 2022, and 2023</u>. If you expect a target range, please use the midpoint of that range in providing your response.
(22 responses)

						e at the En				
	< 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%	92%	6%	1%	0%	0%	0%	0%	0%	0%

				Funds Rat						
	< 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%	66%	19%	8%	3%	2%	1%	1%	0%	0%

				Funds Rat						
	< 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%	30%	25%	18%	11%	7%	4%	2%	1%	1%

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
0.00%
0.10%
0.13%

3f) For parts a-e, please explain the factors behind any change to your expectations, where applicable, since the last policy survey.

(23 responses)

Several dealers indicated that they did not make any material changes to their policy rate expectations. However, in explaining changes to their expectations, several others cited higher growth expectations, and several indicated that they now expected, or assigned a higher probability to, an earlier increase in the target range.

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%			1.51 - 2.00%	2.01 - 2.50%	≥ 2.51%
Average	0%	1%	4%	18%	39%	29%	8%

Year-end 2022							
					1.51 -		> 0 540/
	< 0.00%	0.50%	1.00%	1.50%	2.00%	2.50%	≥ 2.51%
Average	0%	1%	3%	12%	26%	35%	23%

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	purchase	s of U.S. T	reasury se	ecurities (\$ billions)	
	Apr. 2021				Aug 2021		
25th Pct	80	80	80	80	80	80	240
Median	80	80	80	80	80	80	240
75th Pct	80	80	80	80	80	80	240
:	2022 Q1	2022 Q2	2022 Q3	2022 Q4	2023 Q1	2023 Q2	2023 20 Q3 0
25th Pctl	180	98	15	0	0	0	0
Vedian	190	145	90	25	0	0	0
75th Pctl	220	180	120	73	0	0	0

	Net purchases of agency MBS (\$ billions)									
		Apr. 2021	May 2021				Aug. 2021	Sep. 2021	2021 Q4	
25th	Pctl	40	40	40	4	0	40	40	120	
Mec	lian	40	40	40	4)	40	40	120	
75th	n Pctl	40	40	40	4	0	40	40	120	
	2022 Q1	4	2022 Q2	2022 Q3	2022 Q4	2023 Q1	20 C	23 2	2023 Q3	202 Q4
25th Pctl	83		38	0	0	0	()	0	0
Median	95		65	40	8	0	()	0	0
5th Pctl	108		85	58	25	0	()	0	0

If your responses above do <u>not</u> 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.

Responses were limited to one respondent. *

* 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 or later.

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

	Earliest quarter*
25th Pctl	Q1 2025
Median	Q2 2025
75th Pctl	Q1 2026
# of Responses	21

* Dropdown selections: Q2 2021, 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 or later.

If applicable, please describe your expectations for any changes to key elements of and/or the communications regarding asset purchases going forward.

(22 responses)

Several dealers indicated that they expected a change in communications at some point between June and September of this year regarding the Committee's assessment of conditions for tapering asset purchases or plans for such a tapering. In addition, several dealers indicated that they expected an announcement regarding the tapering of asset purchases to be made sometime in the fourth quarter of 2021, and several indicated that they expected the tapering of asset purchases to begin in the first quarter of 2022.

5b) The March 2021 FOMC statement noted that "the Federal Reserve will continue to increase its holdings of Treasury securities by at least \$80 billion per month and of agency mortgage-backed securities by at least \$40 billion per month until substantial further progress has been made toward the Committee's maximum employment and price stability goals."

Please provide your views on the most likely economic and financial conditions prevailing at the time that the Committee judges "substantial further progress" has been made toward its goals. If your views have changed since the last policy survey, please describe the factors behind those changes.

At the time that the Committee judges "substantial further progress" has been made toward its goals, several dealers indicated that they expected that there will have been inclusive improvement in the labor market, several indicated an unemployment rate below 5 percent, and several indicated that they expected that there will have been a significant increase in the number of jobs. In addition, several dealers indicated a level of inflation greater than 2 percent, and several indicated rapid economic growth or for the level of real GDP to exceed its level prior to the onset of the COVID-19 pandemic. Finally, several dealers indicated that they expected that risks posed by the COVID-19 pandemic will have subsided and/or that they expected continued progress on vaccinations.

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.

	Top of target range** minus IOER (in bps)				
	Apr. 27-28	Jun. 15-16	Jul. 27-28		
25th Pctl	15.0	10.0	10.0		
Median	15.0	10.0	10.0		
75th Pctl	15.0	15.0	15.0		
# of Responses	24	24	24		

	EFFR minus IOER (in bps)				
	Apr. 27-28	Jun. 15-16	Jul. 27-28		
25th Pctl	-3.5	-5.0	-5.0		
Median	-3.0	-4.0	-4.0		
75th Pctl	-3.0	-3.0	-3.0		
# of Responses	24	24	24		

	SOFR minus IOER (in bps)				
	Apr. 27-28	Jun. 15-16	Jul. 27-28		
25th Pctl	-9.0	-10.0	-10.0		
Median	-9.0	-9.0	-9.0		
75th Pctl	-8.5	-8.0	-7.5		
# of Responses	24	24	24		

	Bottom of target range** minus ON RRP rate (in bps)			
	Apr. 27-28	Jun. 15-16	Jul. 27-28	
25th Pctl	0.0	-5.0	-5.0	
Median	0.0	-1.0	-2.5	
75th Pctl	0.0	0.0	0.0	
# of Responses	24	24	24	

	3-Month U.S. Treasury bill yield minus 3- Month OIS (in bps)			
	Apr. 27-28	Jun. 15-16	Jul. 27-28	
25th Pctl	-6.0	-8.0	-8.0	
Median	-6.0	-6.0	-6.0	
75th Pctl	-6.0	-5.0	-5.0	
# of Responses	23	23	23	

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

7) Beyond your responses provided in the questions above, please describe your expectations for any additional actions or monetary policy measures, or modifications to those previously announced, by the Federal Reserve through year-end 2021.

(23 responses)

Several dealers indicated that they did not expect substantial further actions or measures to be implemented through year-end 2021 beyond what was reported in responses to previous questions. Several other dealers indicated that they saw a possibility of an upward adjustment to the interest on excess reserves (IOER) rate at some point this year, and several indicated they saw a possibility of an increase in the overnight reverse repo (ON RRP) rate at some point this year.

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

Probability of Additional U.S. Federal Fiscal Policy Measures		
	Probability	
25th Pctl	60%	
Median	73%	
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 <u>Spending</u> Measures (\$ billions)	Estimate of Most Likely Total Amount of Additional U.S. Federal Fiscal Policy <u>Revenue</u> Measures (\$ billions)		
25th Pctl	2000	1000		
Median	2675	1300		
75th Pctl	3100	2000		

Please describe any assumptions underlying your estimates above.

In explaining any assumptions underlying their estimates, some dealers indicated that they expected the total amount of additional fiscal spending measures over the remainder of 2021 to be in line with proposals that had been made by the administration, while several indicated that they expected the amount to be lower. Many dealers noted that passage of such measures would likely be financed at least in part through tax increases, with several specifically mentioning higher corporate tax rates. Several dealers also indicated uncertainty over the outcome of negotiations around potential spending and revenue measures.

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 (percent)							
	Q1 2021	Q2 2021	Q3 2021	Q4 2021			
	(saar)	(saar)	(saar)	(saar)			
25th Pctl	5.2%	8.0%	6.2%	4.0%			
Median	6.3%	9.0%	7.5%	5.2%			
75th Pctl	7.0%	10.2%	9.0%	6.5%			

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 D	istribution o	f U.S. Real (GDP Growth	in 2021 (Q4	/Q4)
	< 0%	0.00 -	2.01 -	4.01 -	6.01 -	≥ 8.01%
	< 0 70	2.00%	4.00%	6.00%	8.00%	≤ 0.0170
Average	1%	3%	7%	27%	45%	18%

Probability Distribution of U.S. Real GDP Growth in 2022 (Q4/Q4)							
	< 0%	0.00 -	1.01 -	2.01 -	3.01 -	4.01 -	≥ 5.01%
	< 0%	1.00%	2.00%	3.00%	4.00%	5.00%	2 5.0170
Average	3%	6%	13%	28%	29%	16%	6%

10a) For the outcomes below, provide the percent chance you attach to the annual average <u>CPI inflation</u> rate from April 1, 2021 – March 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		≥ 3.01%
Average	4%	9%	24%	39%	6 20%	4%
				Likely come		
		25th Po				
		2501 P0	30 2.0	0%		
		Median	2.2	0%		
		75th Po	otl 2.4	5%		

10b) For the outcomes below, provide the percent chance you attach to the annual average <u>CPI inflation</u> rate from April 1, 2026 – March 31, 2031 falling in each of the following ranges. Please also provide your point estimate for the most likely outcome.

	≤ 1.00%		1.51 - 2.00%		2.51 - 3.00%	≥ 3.01%
Average	3%	10%	26%	39%	18%	4%

	Most Likely Outcome
25th Pctl	2.05%
Median	2.20%
75th Pctl	2.40%

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**?

	Currently in U.S. Recession		U.S. Recession in 6 Months		Global Recession in 6 Months
25th Pctl	1%	25th Pctl	4%	25th Pctl	6%
Median	4%	Median	10%	Median	14%
75th Pctl	8%	75th Pctl	11%	75th Pctl	18%

*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. (22 responses)

In explaining changes to their recession probabilities, several dealers cited improving economic data and several cited an acceleration in the pace of vaccinations, while several cited the impact of fiscal stimulus measures. In addition, some dealers indicated that there were no significant changes to their recession probabilities.

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

		2021	2022	2023	Longer Run
	25th Pctl	6.25%	2.65%	2.00%	1.80%
Real GDP (Q4/Q4 Growth)	Median	7.15%	3.00%	2.25%	2.00%
	75th Pctl	7.65%	3.65%	2.50%	2.10%
Core PCE Inflation (Q4/Q4)	25th Pctl	1.95%	1.90%	2.00%	-
	Median	2.10%	2.01%	2.10%	-
	75th Pctl	2.30%	2.20%	2.35%	-
	25th Pctl	2.30%	1.85%	2.00%	2.00%
Headline PCE Inflation (Q4/Q4)	Median	2.40%	2.00%	2.00%	2.00%
	75th Pctl	2.70%	2.10%	2.25%	2.00%
	25th Pctl	4.30%	3.50%	3.20%	3.80%
Unemployment Rate (Q4 Average Level)	Median	4.47%	3.70%	3.50%	4.00%
(2	75th Pctl	4.75%	4.10%	3.85%	4.40%

12b) 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 recent positive economic data, while several cited expectations for or impacts of fiscal spending measures and several cited continued progress on vaccinations.