RESPONSES TO SURVEY OF MARKET PARTICIPANTS

Markets Group, Federal Reserve Bank of New York



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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.¹ 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 30 market participants. Except where noted, all 30 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.

¹ Answers may not sum to 100 percent due to rounding.

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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.

Current economic conditions: (29 responses)

Several respondents indicated that they expected no substantial changes to the statement language. Several respondents indicated that they expected the Committee to downgrade its characterization of economic activity from "strong" to another descriptor. Finally, several respondents indicated that they expected the committee to acknowledge the recent decline in measures of inflation compensation.

Economic outlook:

(27 responses)

Several respondents indicated that they expected no change to this section of the statement.

Communication on the expected path of the target federal funds rate: (27 responses)

Some respondents indicated that they expected the Committee to remove or alter language referencing "further gradual increases in the target range." Also, several respondents indicated that they expected the Committee to insert new language emphasizing the data dependence of future monetary policy decisions. Finally, several respondents indicated that they expected no change to this section of the statement.

Other:

(11 responses)

Respondents did not provide substantial commentary in this section.

What are your expectations for the medians of FOMC participants' <u>economic</u> projections in the Summary of Economic Projections (SEP)?
(29 responses)

Some respondents indicated that they expected the median of participants' projections for inflation to decline, and several respondents indicated that they saw a risk that the median of participants' projections for GDP growth in 2019 could decline. Finally, some respondents indicated that they expected no substantial changes to the median of participants' economic projections.

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

	Year-end 2018	Year-end 2019	Year-end 2020	Year-end 2021	Longer Run
25th Pctl	2.38%	2.88%	3.13%	3.13%	3.00%
Median	2.38%	2.88%	3.19%	3.38%	3.00%
75th Pctl	2.38%	3.13%	3.38%	3.38%	3.00%

Please comment on the balance of risks around your expectations. (28 responses)

Many respondents indicated that they viewed the balance of risks as skewed towards fewer projected rate increases.

1d) Additionally, please describe any expected changes to the distributions of FOMC participants' target rate projections, if applicable.

(27 responses)

Some respondents indicated that they saw a risk that the average of participants' target rate projections would decline. Several respondents noted that they expected no meaningful change to the distribution of participants' projections, and several noted that they expected the distribution of participants' projections to narrow.

What are your expectations for the Chairman's press conference? (29 responses)

> Some respondents indicated that they expected the Chairman to emphasize the data dependence of future monetary policy decisions, and several respondents indicated that they expected him to adopt an upbeat tone regarding economic fundamentals.

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 half 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 18-19 2018	Jan 29-30 2019	Mar 19-20 2019	Apr 30-May 1 2019	Jun 18 - 19 2019	Jul 30 - 31 2019	Sep 17-18 2019
25th Pctl	2.38%	2.38%	2.38%	2.38%	2.63%	2.63%	2.63%
Median	2.38%	2.38%	2.63%	2.63%	2.63%	2.63%	2.88%
75th Pctl	2.38%	2.38%	2.63%	2.63%	2.88%	2.88%	2.88%
# of Responses	30	30	30	30	30	30	30
	2019 Q4	2020 Q1	2020 Q2	2020 Q3	2020 Q4	2021 H1	2021 H2
25th Pctl	2.88%	2.88%	2.88%	2.88%	2.63%	2.38%	2.13%
Median	2.88%	2.88%	2.94%	3.06%	2.94%	2.88%	2.75%
75th Pctl	3.13%	3.13%	3.13%	3.13%	3.13%	3.38%	3.13%
# of Responses	30	30	30	30	30	30	30

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
	Longer Run	FF Rate
25th Pctl	2.63%	2.00%
Median	3.00%	2.50%
75th Pctl	3.00%	2.63%

2c) Please indicate the percent chance that you attach to the following possible outcomes for the Committee's next policy action <u>between now and the end of 2019</u>.

	Next Change is Increase in Target Rate or Range	Next Change is Decrease in Target Rate or Range	No Change in Target Rate or Range Through the End of 2019
Average	89%	4%	7%

2d) Conditional on the Committee's next policy action <u>between now and the end of 2019</u> being an increase in the target federal funds rate or range, please indicate the percent chance that you attach to the following possible outcomes for the timing of such a change. Only fill out this conditional probability distribution if you assigned a non-zero probability to the Committee's next policy action between now and the end of 2019 being an increase.

	Increase Occurs at December 2018 FOMC Meeting	Increase Occurs at January 2019 FOMC Meeting	Increase Occurs at March 2019 FOMC Meeting or Later
Average	86%	4%	10%

2e) 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 2019</u>, conditional on the following possible scenarios for the direction and timing of the Committee's next policy action <u>between now and the end of 2019</u>. Only fill out the conditional probability distributions for which you assigned a non-zero probability to the conditioning event occurring. If you expect a target range, please use the midpoint of that range in providing your response.

Next Change is an Increase, Occurs at Jan. 2019 Meeting or Earlier												
		2.01 -	2.26 -	2.51 -	2.76 -	3.01 -	3.26 -					
	≤ 2.00%	2.25%	2.50%	2.75%	3.00%	3.25%	3.50%	≥ 3.51%				
Average	4%	4%	10%	21%	30%	20%	8%	2%				

	Next Change is an Increase, Occurs at Mar. 2019 Meeting or Later											
	≤ 2.00%	2.01 - 2.25%		2.51 - 2.75%	2.76 - 3.00%		3.26 - 3.50%	≥ 3.51%				
Average		10%		2 .73 %	20%	<u>9%</u>	<u>3%</u>	2%				

Next Change is a Decrease									
	< 0.25%	0.26 - 0.50%	0.51 - 0.75%	0.76 - 1.00%			1.51 - 1.75%	≥ 1.76%	
Average	16%	11%	11%	13%	14%	12%	11%	12%	

2f-i) 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 2020 and 2021, conditional on not moving to the zero lower bound (ZLB) at any point between now and the end of 2021. If you expect a target range, please use the midpoint of that range in providing your response.

Year-end 2020											
	≤ 1.00%	1.01- 1.50%	1.51- 2.00%		2.51- 3.00%	3.01- 3.50%	3.51- 4.00%	≥ 4.01%			
Average		4%	6%	14%	28%	27%	13%	3%			

Year-end 2021											
		1.01-	1.51-	2.01-	2.51-	3.01-	3.51-				
	≤ 1.00%	1.50%	2.00%	2.50%	3.00%	3.50%	4.00%	≥ 4.01%			
Average	7%	7%	11%	17%	22%	20%	11%	4%			

2f-ii) Please indicate the percent chance that you attach to moving to the ZLB at some point between <u>now and</u> <u>the end of 2021</u>.

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2f-iii) 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 2020 and 2021</u>, <u>conditional on moving to the ZLB at some point</u> <u>between now and the end of 2021</u>. Only fill out these conditional probability distributions if you assigned a

non-zero probability to moving to the ZLB at some point between now and the end of 2021. If you expect a target range, please use the midpoint of that range in providing your response. (29 responses)

	Year-end 2020								
		0.00-	0.26-	0.51-	1.01-	1.51-	2.01-		
	< 0.00%	0.25%	0.50%	1.00%	1.50%	2.00%	2.50%	≥ 2.51%	
Average	9%	34%	17%	15%	11%	6%	3%	5%	

Year-end 2021								
		0.00-	0.26-	0.51-	1.01-	1.51-	2.01-	
	< 0.00%	0.25%	0.50%	1.00%	1.50%	2.00%	2.50%	≥ 2.51%
Average	13%	47%	18%	10%	6%	3%	2%	1%

2f-iv) What is your estimate of the target federal funds rate or range at the effective lower bound? (28 responses)

	Level of Target Fed Funds Rate or Range at ELB
25th Pctl	-0.10%
Median	0.00%
75th Pctl	0.06%

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

(26 responses)

Several respondents indicated that they assigned increased probabilities to lower policy rate outcomes in response to recent communications from Fed officials. Furthermore, several respondents indicated that they assigned increased probabilities to lower policy rate outcomes in response to softening in U.S. and/or global economic data, with several specifically indicating that they assigned increased probabilities to lower policy rate outcomes in response to recent softness in inflation data. Finally, several indicated that they assigned increased probabilities to lower policy rate outcomes in response to recent tightening in financial conditions.

3a) 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.

	2018 Q4	2019 Q1	2019 Q2	2019 Q3	2019 Q4
25th Pctl	2.90%	3.00%	3.00%	3.00%	3.00%
Median	2.90%	3.01%	3.14%	3.20%	3.20%
75th Pctl	3.00%	3.10%	3.25%	3.25%	3.30%
# of Responses	30	30	30	30	30
	2020 H1	2020 H2	2021 H1	2021 H2	Longer Run
25th Pctl	2.95%	2.75%	2.75%	2.50%	3.00%
Median	3.18%	3.13%	3.05%	3.00%	3.20%
75th Pctl	3.30%	3.40%	3.38%	3.38%	3.50%
# of Responses	30	30	30	30	29

3b) 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.

	2018 Q4	2019 Q1	2019 Q2	2019 Q3	2019 Q4
25th Pctl	4.50%	4.60%	4.70%	4.70%	4.65%
Median	4.63%	4.75%	4.85%	4.88%	4.85%
75th Pctl	4.75%	4.93%	5.00%	5.05%	5.13%
# of Responses	27	27	27	27	27
	2020 H1	2020 H2	2021 H1	2021 H2	Longer Run
25th Pctl	4.60%	4.45%	4.25%	4.20%	4.63%
Median	4.80%	4.75%	4.60%	4.63%	4.89%
75th Pctl	5.05%	5.05%	5.00%	5.00%	5.20%
# of Responses	27	27	27	27	26

4a) Over the past week, the spread between the top of the target range for the federal funds rate and the interest on excess reserves (IOER) rate has been +5 basis points; the spread between IOER and the effective federal funds rate (EFFR) has averaged 0 basis points; the spread between IOER and the Overnight Bank Funding Rate (OBFR) has averaged +1 basis points; and the spread between the Tri-Party General Collateral Rate (TGCR) and the overnight reverse repurchase (ON RRP) rate has averaged +22 basis points. Please provide your expectation for each of these rate spreads immediately following each of the FOMC meetings and on each of the dates below.

		Top of target range minus IOER (in bps)						
	Dec.18-19 FOMC	Jan. 29-30* FOMC	Mar. 19-20 FOMC	Apr. 30- May 1 FOMC	Jun. 27, 2019**	Dec. 30, 2019**		
25th Pctl	10.0	10.0	10.0	10.0	10.0	10.0		
Median	10.0	10.0	10.0	10.0	15.0	15.0		
75th Pctl	10.0	10.0	15.0	15.0	15.0	15.0		
# of Responses	19	19	19	18	18	17		

		IOER minus EFFR (in bps)						
	Dec.18-19 FOMC	Jan. 29-30* FOMC	Mar. 19-20 FOMC	Apr. 30- May 1 FOMC	Jun. 27, 2019**	Dec. 30, 2019**		
25th Pctl	-1.0	-2.0	-3.0	-3.0	-5.0	-5.0		
Median	0.0	0.0	0.0	-1.5	-2.0	-2.0		
75th Pctl	0.0	0.0	0.0	0.0	0.0	0.0		
# of Responses	19	19	19	18	18	17		

		IOER minus OBFR (in bps)						
	Dec.18-19 FOMC	Jan. 29-30* FOMC	Mar. 19-20 FOMC	Apr. 30- May 1 FOMC	Jun. 27, 2019**	Dec. 30, 2019**		
25th Pctl	0.0	-1.0	-2.0	-2.0	-3.0	-4.0		
Median	1.0	1.0	0.0	0.0	-1.0	-1.0		
75th Pctl	1.0	1.0	2.0	1.0	0.5	1.0		
# of Responses	17	17	17	16	16	15		

		TGCR minus ON RRP rate (in bps)						
	Dec.18-19 FOMC	Jan. 29-30* FOMC	Mar. 19-20 FOMC	Apr. 30- May 1 FOMC	Jun. 27, 2019**	Dec. 30, 2019**		
25th Pctl	18.0	17.0	15.0	15.5	15.0	15.0		
Median	22.0	20.0	17.0	18.0	18.0	19.0		
75th Pctl	22.0	22.0	20.0	22.0	22.0	22.0		
# of Responses	17	17	17	16	16	15		

*Please provide your response as of Feb. 1, the first post-FOMC day that is not a period-end reporting date.

**These dates are not period-end reporting dates.

4b) Please explain changes to your expectations in part a since the policy survey on October 29, where applicable.

(20 responses)

Several respondents indicated no change to their expectations relative to the prior survey. Also, several respondents noted that they updated their responses to reflect realized moves in market rates since the prior survey.

5a) During 2018 to date, the average size of the Federal Reserve System's balance sheet was \$4301 billion, and was composed roughly as follows:

Assets*	Level (\$Bn)	Share (%)	Liabilities and Capital*	Level (\$Bn)	Share (%)
US Treasuries	2367	55%	Federal Reserve Notes	5 1611	37%
Agency MBS	1725	40%	Reserves	2006	47%
All Other Assets**	209	5%	Deposits in Treasury General Account (TGA)	.306	7%
Total Assets	4301	100%	Reverse Repos with Private Counterparties	15	0%
			Reverse Repos with Foreign Official Accounts	237	6%
			Other Deposits***	80	2%
			All Other Liabilities and Capita	46	1%
			Total Liabilities and Capita	4301	100%

*Individual categories rounded to the nearest \$ billion.

**Includes net unamortized premiums and discounts on securities held outright, repos, and other assets.

***Includes balances held by designated financial market utilities (DFMUs), government sponsored entities (GSEs) and international and multilateral organizations.

The figures above refer to averages of Wednesday levels from 2018 H.4.1 releases through 11/29.

Please indicate your expectations for the composition of the Federal Reserve System's balance sheet, on average, in 2025, conditional on not moving to the ZLB at any point between now and the end of 2025. Please provide your responses in levels (\$ billions); the total levels and shares will automatically populate so as to aid responding. Please ensure total assets are equal to total liabilities plus capital. (21 responses)

Assets				Liabilities			
		Level	Share	and Capital		Level	Share
	25th Pctl	2000	70%		25th Pctl	1920	51%
US Treasuries	Median	2900	75%	Federal Reserve Notes	Median	2100	56%
	75th Pctl	3300	79%		75th Pctl	2296	58%
	25th Pctl	500	14%		25th Pctl	814	23%
Agency MBS	Median	725	18%	Reserves	Median	1000	27%
	75th Pctl	870	25%		75th Pctl	1200	30%
	25th Pctl	175	5%		25th Pctl	235	7%
All Other Assets*	Median	250	6%	Deposits in Treasury General Account (TGA)	Median	300	8%
	75th Pctl	275	9%		75th Pctl	400	10%
					25th Pctl	0	0%
				Reverse Repos with Private Counterparties	Median	10	0%
					75th Pctl	15	1%
					25th Pctl	100	2%
				Reverse Repos with Foreign Official Accounts	Median	183	5%
				J	75th Pctl	220	6%
					25th Pctl	50	2%
				Other Deposits**	Median	80	2%
					75th Pctl	100	2%
					25th Pctl	40	1%
				All Other Liabilities and Capital	Median	50	1%
					75th Pctl	50	1%

*Includes net unamortized premiums and discounts on securities held outright, repos, and other assets.

**Includes balances held by designated financial market utilities (DFMUs), government sponsored entities (GSEs) and international and multilateral organizations

	Total Assets	Total Liabilities and Capital
25th Pctl	3500	3500
Median	3910	3870
75th Pctl	4190	4150

Note: Due to partial responses, total assets may not equal total liabilities/capital at all percentiles.

5b) Please describe any assumptions regarding the Committee's long-run operating framework that underlie your expectations in part a.
(22 responses)

(23 responses)

Under the conditions described in question 5a, several respondents indicated that they assumed abundant reserves and/or a "floor system," while several indicated that they assumed that the long-run balance sheet would be smaller than its current level.

5c) Please describe any other assumptions that underlie your expectations in part a, including any assumptions of particular rates of growth for different categories of liabilities and capital on the Federal Reserve System's balance sheet.

(22 responses)

Under the conditions described in question 5a, several respondents indicated that their responses reflected assumptions about the rate of growth in Federal Reserve notes, and several indicated that they made various assumptions related to mortgagebacked securities holdings.

5d) Please explain changes to your responses in parts a-c since the policy survey on June 4, where applicable.

(22 responses)

Several respondents indicated that they had made no material changes to their expectations. In addition, several respondents indicated that they had revised upward their expectations for the level of reserves from the levels they reported in the June 2018 survey.

5e) Please indicate the percent chance that you attach to the following possible outcomes for the year in which the par value of the domestic SOMA portfolio will first exhibit quarter-over-quarter growth, conditional on not moving to the ZLB at any point between now and the end of 2025. (23 responses)

Year in Which the Par Value of the Domestic SOMA Portfolio Will First Exhibit Quarter-over-Quarter Growth Conditional on Not Moving to the ZLB at Any Point Between Now and the End of 2025								
	2019	2020	2021	2022	2023	2024	2025 or later	
Average	12%	29%	23%	17%	8%	4%	7%	

Point estimate for most likely quarter to first exhibit this growth**:

Point Estimate for Most Likely Quarter to First Exhibit This Growth					
25th Pctl Q2 2020					
Median Q1 2021					
75th Pctl	Q2 2022				

**Dropdown selections: Q1 2019, Q2 2019, Q3 2019, Q4 2019, Q1 2020, Q2 2020, Q3 2020, Q4 2020, Q1 2021, Q2 2021, Q3 2021, Q4 2021, Q4 2021, Q1 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 or later

5f) Please indicate the lowest average weekly level (\$ billions) you expect reserve balances to reach between now and the end of 2025, <u>conditional on not moving to the ZLB at any point between now and the end of 2025</u>, as reported in the weekly H.4.1 release. For reference, the average level of reserve balances for the week ended November 28, 2018 was \$1739 billion according to the most recent H.4.1 release.

(21 responses)

Lowest Average Weekly Level of Reserve Balances Between Now and the End of 2025 Conditional on Not Moving to the Zero Lower Bound						
25th Pctl	814					
Median	1000					
75th Pctl	1100					

6a) For the outcomes below, provide the percent chance you attach to the annual average <u>CPI inflation</u> rate from December 1, 2018 - November 30, 2023 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	4%	11%	28%	34%	16%	7%

	Most Likely Outcome
25th Pctl	2.00%
Median	2.18%
75th Pctl	2.25%

6b) For the outcomes below, provide the percent chance you attach to the annual average <u>CPI inflation</u> rate from December 1, 2023 - November 30, 2028 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	5%	13%	27%	32%	16%	8%
			Most Outo	Likely ome		
		25th Pc	tl 2.0	0%		
		Median	2.1	5%		
		75th Pc	tl 2.2	5%		

7a) 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	0%	25th Pctl	5%	25th Pctl	6%
Median	0%	Median	10%	Median	10%
75th Pctl	2%	75th Pctl	15%	75th Pctl	15%

*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.

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

	2019 or				2023 or
	earlier	2020	2021	2022	later
Average	15%	26%	26%	17%	17%