

RESPONSES TO SURVEY OF PRIMARY DEALERS

Markets Group, Federal Reserve Bank of New York



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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.¹ For questions that ask respondents to give a probability distribution, the average response across dealers for each potential outcome is reported. Brief summaries of the comments received in free response form are also provided.

Responses were received from 23 primary dealers. Except where noted, all 23 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.

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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:

Several dealers indicated that they expected the Committee to downgrade its characterization of economic activity from “strong” to another descriptor. Also, several dealers indicated that they expected the Committee to acknowledge the recent decline in measures of inflation compensation or to adjust the characterization of the labor market to reflect recent data. Finally, several dealers indicated that they expected no substantial changes to the statement language.

Economic outlook:
(22 responses)

Some dealers indicated that they expected no change to this section of the statement.

Communication on the expected path of the target federal funds rate:

Many dealers indicated that they expected the Committee to remove or alter language referencing “further gradual increases in the target range.” Also, several dealers indicated that they expected the Committee to insert new language emphasizing the data dependence of future monetary policy decisions.

Other:
(12 responses)

Dealers did not provide substantial commentary in this section.

- 1b)** What are your expectations for the medians of FOMC participants' economic projections in the Summary of Economic Projections (SEP)?
(22 responses)

Many dealers indicated that they expected the median of participants' projections for inflation to decline, and some dealers indicated that they expected the median for participants' projections for GDP growth to decline. Several dealers indicated that they expected no change in the median of participants' projections for the unemployment rate, and several dealers indicated that they expected no substantial changes to median of participants' economic projections.

- 1c)** 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 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%	3.13%	3.13%	3.00%
75th Pctl	2.38%	3.13%	3.38%	3.38%	3.00%

Please comment on the balance of risks around your expectations.

(21 responses)

Most dealers 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.

(19 responses)

Some dealers indicated that they saw a risk that the average of participants' target rate projections would decline. Several dealers noted that they expected the distribution of participants' projections to narrow, and several dealers noted that they expected the projections of new Committee members would be close to the current median projections.

1e) What are your expectations for the Chairman's press conference?

Many dealers indicated that they expected the Chairman to emphasize the data dependence of future monetary policy decisions. Several dealers indicated that they expected the Chairman to adopt an upbeat tone regarding economic fundamentals, and several noted that they expected his commentary to be similar to his previous remarks.

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%	2.63%	2.63%	2.63%	2.88%
Median	2.38%	2.38%	2.63%	2.63%	2.88%	2.88%	2.88%
75th Pctl	2.38%	2.38%	2.63%	2.63%	2.88%	2.88%	3.13%
# of Responses	23	23	23	23	23	23	23
	2019 Q4	2020 Q1	2020 Q2	2020 Q3	2020 Q4	2021 H1	2021 H2
25th Pctl	2.88%	2.88%	2.88%	2.88%	2.88%	2.88%	2.88%
Median	2.88%	3.13%	3.13%	3.13%	3.13%	3.13%	3.13%
75th Pctl	3.13%	3.13%	3.38%	3.38%	3.38%	3.38%	3.38%
# of Responses	23	21	21	21	21	15	15

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.

	Longer Run	10-yr Average FF Rate
25th Pctl	2.50%	2.10%
Median	2.88%	2.50%
75th Pctl	3.00%	2.75%

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

	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	92%	2%	6%

2d) Conditional on the Committee's next policy action between now and the end of 2019 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	88%	5%	7%

2e) 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 2019, conditional on the following possible scenarios for the direction and timing of the Committee's next policy action between now and the end of 2019. 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. (22 responses)

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%	≥ 3.51%	
Average	3%	3%	9%	17%	33%	19%	13%	4%

Next Change is an Increase, Occurs at Mar. 2019 Meeting or Later								
	2.01 -	2.26 -	2.51 -	2.76 -	3.01 -	3.26 -		
	≤ 2.00%	2.25%	2.50%	2.75%	3.00%	3.25%	≥ 3.51%	
Average	4%	5%	23%	25%	23%	11%	7%	2%

Next Change is a Decrease								
	0.26 -	0.51 -	0.76 -	1.01 -	1.26 -	1.51 -		
	< 0.25%	0.50%	0.75%	1.00%	1.25%	1.50%	≥ 1.76%	
Average	6%	6%	7%	9%	17%	22%	23%	11%

- 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.
(22 responses)

Year-end 2020								
	1.01-	1.51-	2.01-	2.51-	3.01-	3.51-		
	≤ 1.00%	1.50%	2.00%	2.50%	3.00%	3.50%	≥ 4.01%	
Average	4%	7%	10%	14%	25%	26%	13%	2%

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%	≥ 4.01%	
Average	7%	11%	15%	15%	21%	18%	9%	5%

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

Probability of Moving to ZLB at Some Point between Now and the End of 2021	
25th Pctl	20%
Median	25%
75th Pctl	35%

- 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 at the end of 2020 and 2021, conditional on moving to the ZLB at some point between now and the end of 2021. 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.

(20 responses)

Year-end 2020								
	< 0.00%	0.00-0.25%	0.26-0.50%	0.51-1.00%	1.01-1.50%	1.51-2.00%	2.01-2.50%	≥ 2.51%
Average	11%	40%	16%	10%	6%	5%	4%	8%

Year-end 2021								
	< 0.00%	0.00-0.25%	0.26-0.50%	0.51-1.00%	1.01-1.50%	1.51-2.00%	2.01-2.50%	≥ 2.51%
Average	12%	47%	15%	9%	7%	5%	2%	4%

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

Level of Target Fed Funds Rate or Range at ELB	
25th Pctl	-0.25%
Median	0.00%
75th Pctl	0.13%

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

(18 responses)

Several dealers indicated that they assigned increased probabilities to lower policy rate outcomes in response to recent communications from Fed officials.

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%	3.05%	3.13%	3.00%
Median	3.00%	3.13%	3.25%	3.33%	3.30%
75th Pctl	3.12%	3.30%	3.40%	3.40%	3.50%
# of Responses	22	23	22	22	23
	2020 H1	2020 H2	2021 H1	2021 H2	Longer Run
25th Pctl	3.00%	2.88%	2.88%	2.90%	3.00%
Median	3.25%	3.15%	3.00%	3.00%	3.25%
75th Pctl	3.45%	3.40%	3.40%	3.45%	3.50%
# of Responses	17	18	17	17	19

- 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	4.60%	4.65%	4.75%	4.75%	4.75%
Median	4.64%	4.85%	5.03%	4.98%	5.00%
75th Pctl	4.75%	5.00%	5.20%	5.25%	5.30%
# of Responses	18	19	18	18	19
	2020 H1	2020 H2	2021 H1	2021 H2	Longer Run
25th Pctl	4.60%	4.52%	4.70%	4.65%	4.75%
Median	5.05%	5.00%	4.95%	4.90%	5.00%
75th Pctl	5.31%	5.23%	5.30%	5.35%	5.20%
# of Responses	15	16	15	15	15

- 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	20.0
# of Responses	23	23	23	23	23	23

	IOER minus EFR (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	-4.0	-5.0	-7.0	-10.0
Median	0.0	-1.0	-2.0	-3.0	-4.0	-5.0
75th Pctl	0.0	0.0	0.0	0.0	-2.0	-2.0
# of Responses	23	23	23	23	23	23

	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	-2.0	-3.0	-4.0	-5.0	-9.0
Median	1.0	0.0	-1.0	-2.0	-3.0	-5.0
75th Pctl	1.0	1.0	0.0	0.0	-1.0	-1.0
# of Responses	23	23	23	23	23	23

	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	17.0	18.0	17.0	17.0	17.0	15.0
Median	20.0	20.0	20.0	19.0	20.0	20.0
75th Pctl	22.0	22.0	22.0	21.0	23.0	25.0
# of Responses	23	23	23	23	23	23

*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.
(18 responses)

Several dealers indicated no change to their expectations relative to the prior survey. Also, several dealers 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*			Liabilities and Capital*		
	Level (\$Bn)	Share (%)		Level (\$Bn)	Share (%)
US Treasuries	2367	55%	Federal Reserve Notes	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 Capital	46	1%
			Total Liabilities and Capital	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.

(22 responses)

Assets				Liabilities and Capital			
		Level	Share			Level	Share
US Treasuries	25th Pctl	2600	74%	Federal Reserve Notes	25th Pctl	2000	51%
	Median	3008	76%		Median	2284	55%
	75th Pctl	3526	78%		75th Pctl	2500	60%
Agency MBS	25th Pctl	682	16%	Reserves	25th Pctl	967	24%
	Median	700	19%		Median	1200	26%
	75th Pctl	825	21%		75th Pctl	1300	32%
All Other Assets*	25th Pctl	170	4%	Deposits in Treasury General Account (TGA)	25th Pctl	300	8%
	Median	205	5%		Median	327	8%
	75th Pctl	300	7%		75th Pctl	400	9%
				Reverse Repos with Private Counterparties	25th Pctl	1	0%
					Median	18	0%
					75th Pctl	40	1%
				Reverse Repos with Foreign Official Accounts	25th Pctl	175	4%
					Median	234	6%
					75th Pctl	250	6%
				Other Deposits**	25th Pctl	60	2%
					Median	80	2%
					75th Pctl	100	2%
				All Other Liabilities and Capital	25th Pctl	45	1%
					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	3660	3660
Median	4100	4100
75th Pctl	4500	4500

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

Under the conditions described in question 5a, some dealers indicated that they assumed abundant reserves and/or a "floor system," while several indicated that they assumed that proceeds

from maturing mortgage-backed securities would be reinvested in Treasury securities.

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, some dealers indicated that their responses reflected assumptions about the rate of growth in Federal Reserve notes, including several who indicated that they assumed that Federal Reserve notes would grow at the same rate as or faster than nominal GDP growth.

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

Compared to their response in the June 2018 survey, several dealers indicated that they had raised their expectations for the level of reserves. In addition, several dealers indicated that they had made no material changes to their expectations.

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.

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	17%	34%	24%	15%	5%	3%	2%

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

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

**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, 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 or later

5f) Please indicate the lowest average weekly level (\$ billions) you expect reserve balances to reach between now and the end of 2025, conditional on not moving to the ZLB at any point between now and the end of 2025, 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.

(22 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	850
Median	1000
75th Pctl	1200

6a) For the outcomes below, provide the percent chance you attach to the annual average CPI inflation 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.

(22 responses)

	≤ 1.00%	1.01-1.50%	1.51-2.00%	2.01-2.50%	2.51-3.00%	≥ 3.01%
Average	4%	11%	29%	38%	14%	5%

Most Likely Outcome	
25th Pctl	2.00%
Median	2.20%
75th Pctl	2.30%

6b) For the outcomes below, provide the percent chance you attach to the annual average CPI inflation 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	4%	10%	28%	40%	13%	5%

Most Likely Outcome	
25th Pctl	2.00%
Median	2.20%
75th Pctl	2.30%

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	10%	25th Pctl	10%
Median	2%	Median	10%	Median	15%
75th Pctl	5%	75th Pctl	15%	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.*

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

	2019 or earlier	2020	2021	2022	2023 or later
Average	15%	25%	27%	17%	17%

**NBER-defined recession*

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

Several dealers indicated that they had increased their recession probabilities in response to realized or expected international trade policy developments, and several dealers indicated that they had increased their recession probabilities in response to negative domestic and/or foreign economic data.

8a) Provide your estimate of the most likely outcome for output, inflation, and unemployment.
(16 responses)

		2018	2019	2020	2021	Longer Run
Real GDP (Q4/Q4 Growth)	25th Pctl	3.00%	2.00%	1.50%	1.50%	1.70%
	Median	3.10%	2.20%	1.70%	1.60%	1.90%
	75th Pctl	3.20%	2.40%	1.90%	2.00%	2.10%
Core PCE Inflation (Q4/Q4)	25th Pctl	1.80%	2.00%	2.00%	1.90%	-
	Median	1.80%	2.10%	2.10%	2.00%	-
	75th Pctl	1.90%	2.20%	2.20%	2.10%	-
Headline PCE Inflation (Q4/Q4)	25th Pctl	1.80%	1.80%	2.00%	1.90%	2.00%
	Median	1.84%	2.00%	2.00%	2.00%	2.00%
	75th Pctl	1.90%	2.10%	2.20%	2.10%	2.00%
Unemployment Rate (Q4 Average Level)	25th Pctl	3.60%	3.30%	3.30%	3.40%	4.10%
	Median	3.70%	3.40%	3.60%	4.00%	4.40%
	75th Pctl	3.70%	3.60%	3.80%	4.20%	4.60%

8b) Please explain changes, if any, to your estimates in part a since the last time this question was asked.
(20 responses)

Many dealers indicated that they updated their forecasts to reflect data since the November survey. Some dealers noted that they updated their inflation projections to reflect a recent decline in energy prices. Finally, several dealers noted that they updated their forecasts to reflect incremental information about trade concerns.