

# RESPONSES TO SURVEY OF MARKET PARTICIPANTS

Markets Group, Federal Reserve Bank of New York



## SEPTEMBER 2019

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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.<sup>1</sup> 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.

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<sup>1</sup> 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) Money Market Rate Spreads and Reserve Balances
- 
- Q-5) Changes in U.S. Treasury Yields
- 
- Q-6) International Trade Developments
- 
- Q-7) Inflation Probability Distributions
- 
- Q-8) U.S. and Global Recession Probabilities

- 1a)** Provide below your expectations for changes, if any, to the language referencing each of the following topics in the September FOMC statement.

Current economic conditions:  
(29 responses)

**Some respondents indicated that they expected no material changes to this section of the statement. Several respondents indicated that they expected the Committee to downgrade its characterization of job gains. In addition, several respondents indicated that they expected the Committee to reiterate that economic activity has been rising at a moderate rate and/or that inflation is running below 2 percent.**

Economic outlook:  
(29 responses)

**Many respondents indicated that they expected no material changes to this section of the statement.**

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

**Some respondents indicated that they expected no material changes to this section of the statement, while several indicated that they expected the Committee to note a decrease in the target federal funds range. In addition, several respondents indicated that they expected the Committee to reiterate that it would “act as appropriate” to sustain the economic expansion.**

Other:  
(9 responses)

**Several respondents indicated that they expected some reference to international trade developments in the statement.**

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

**Some respondents indicated that they expected participants' median GDP growth projections to decline, including several that indicated that they expected the median projection for 2020 GDP growth in particular to decline. Several respondents indicated that they expected participants' median unemployment rate projections to increase, and several indicated that they expected participants' median core PCE inflation projections to decrease. Finally, some respondents indicated that they expected no material changes to participants' median 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.  
(29 responses)

	Year-End 2019	Year-End 2020	Year-End 2021	Year-End 2022	Longer Run
25th Pctl	<b>1.63%</b>	<b>1.63%</b>	<b>1.88%</b>	<b>1.88%</b>	<b>2.25%</b>
Median	<b>1.88%</b>	<b>1.88%</b>	<b>1.88%</b>	<b>2.13%</b>	<b>2.50%</b>
75th Pctl	<b>1.88%</b>	<b>1.88%</b>	<b>2.13%</b>	<b>2.38%</b>	<b>2.50%</b>

Please comment on the balance of risks around your own expectations for the median projections.  
(29 responses)

**Some respondents indicated that they viewed the balance of risks to their expectations for participants' median projections as tilted to the downside, while several indicated that they viewed the balance of risks as tilted to the upside.**

- 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 expected the distribution of participants' target rate projections to widen for one or more year-ends, while several indicated that they expected this distribution to narrow for one or more year-ends. In addition, several respondents indicated that they expected the distribution of participants' target rate projections to shift lower. Finally, several respondents indicated that they expected no material changes to the distribution of participants' target rate projections.**

- 1e)** What are your expectations for the Chair's press conference?  
(29 responses)

**Several respondents indicated that they expected the Chair to signal openness to decreases in the target range if warranted, and several indicated that they expected him to adopt a tone similar to his remarks at the July FOMC press conference. In addition, several respondents indicated that they expected the Chair to reiterate that the Committee would "act as appropriate".**

- 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	3
2	5
3	17
4	3
5 - Effective	2

Please explain.  
(29 responses)

**Some respondents suggested Fed communication was clear, effective, or consistent. Several respondents noted a perceived divergence in views among Fed officials. Several respondents characterized Fed communication as confusing, several noted drawbacks to the use of the phrase "mid-cycle adjustment", and several suggested that more clarity would be helpful regarding the Fed's reaction function.**

- 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 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.

	Sep 17-18 2019	Oct 29-30 2019	Dec 10-11 2019	Jan 28-29 2020	Mar 17-18 2020	Apr 28-29 2020	Jun 9-10 2020
25th Pctl	1.88%	1.63%	1.63%	1.63%	1.38%	1.38%	1.38%
Median	1.88%	1.88%	1.63%	1.63%	1.63%	1.63%	1.63%
75th Pctl	1.88%	1.88%	1.88%	1.88%	1.63%	1.63%	1.63%
# of Responses	30	30	30	30	30	30	30

  

	2020 Q3	2020 Q4	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2022 H1	2022 H2
25th Pctl	1.38%	1.38%	1.38%	1.13%	1.13%	0.88%	0.88%	0.88%
Median	1.63%	1.63%	1.63%	1.63%	1.63%	1.63%	1.75%	1.75%
75th Pctl	1.88%	1.88%	1.88%	1.88%	2.13%	2.13%	2.13%	2.13%
# of Responses	30	30	30	30	30	30	30	30

- 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.  
(29 responses)

	Longer Run	10-yr Average FF Rate
25th Pctl	2.25%	1.50%
Median	2.48%	1.95%
75th Pctl	2.50%	2.00%

3c) 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	1%	94%	6%

3d) 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 September FOMC meeting. If you expect a target range, please use the midpoint of that range in providing your response.

Federal Funds Rate or Range Immediately Following the September FOMC Meeting								
	≤ 1.25%	1.26-1.50%	1.51-1.75%	1.76-2.00%	2.01-2.25%	2.26-2.50%	2.51-2.75%	≥ 2.76%
Average	0%	0%	16%	76%	7%	0%	0%	0%

3e) 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. If you expect a target range, please use the midpoint of that range in providing your response.

Federal Funds Rate or Range at the End of 2019								
	≤ 1.25%	1.26-1.50%	1.51-1.75%	1.76-2.00%	2.01-2.25%	2.26-2.50%	2.51-2.75%	≥ 2.76%
Average	5%	20%	39%	29%	6%	1%	0%	0%

3f-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, 2021 and 2022, conditional on not moving to the zero lower bound (ZLB) at any point between now and the end of 2022. 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%	2.01-2.50%	2.51-3.00%	3.01-3.50%	3.51-4.00%	≥ 4.01%
Average	18%	27%	33%	14%	5%	2%	1%	0%

Year-End 2021								
	≤ 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%
Average	22%	21%	24%	19%	10%	3%	1%	0%

Year-End 2022								
	≤ 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%
Average	22%	17%	22%	17%	12%	6%	3%	2%

**3f-ii)** Please indicate the percent chance that you attach to moving to the ZLB at some point between now and the end of 2022.

Probability of Moving to ZLB at Some Point between Now and the End of 2022	
25th Pctl	<b>20%</b>
Median	<b>35%</b>
75th Pctl	<b>50%</b>

Please comment on the change, if any, to your response compared to question 3g, part ii in the survey on July 22, as well as the degree to which this arises from a change in your outlook, the change to the question's forecast horizon, or both.

(27 responses)

**Several respondents noted that they had not revised their expectations for moving to the ZLB, while several respondents noted that they had increased the probability they assigned to moving to the ZLB because of a change to their outlook. In addition, several respondents indicated that they had increased the probability they assigned due to a change in the question's forecast horizon.**

**3f-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, 2021 and 2022, conditional on moving to the ZLB at some point between now and the end of 2022. 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 2022. If you expect a target range, please use the midpoint of that range in providing your response.

(28 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	<b>6%</b>	<b>43%</b>	<b>18%</b>	<b>14%</b>	<b>10%</b>	<b>6%</b>	<b>2%</b>	<b>1%</b>

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	<b>10%</b>	<b>50%</b>	<b>17%</b>	<b>12%</b>	<b>6%</b>	<b>3%</b>	<b>2%</b>	<b>1%</b>

Year-End 2022								
	< 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	<b>14%</b>	<b>51%</b>	<b>17%</b>	<b>9%</b>	<b>6%</b>	<b>3%</b>	<b>1%</b>	<b>0%</b>

**3f-iv)** What is your estimate of the target federal funds rate or range at the effective lower bound?  
(29 responses)

Level of Target Federal Funds Rate or Range at ELB	
25th Pctl	<b>-0.25%</b>
Median	<b>0.00%</b>
75th Pctl	<b>0.13%</b>

**3g)** For parts a-g, please explain the factors behind any change to your expectations, where applicable, since the last policy survey.  
(28 responses)

**Several respondents noted that they had revised lower their expected path of the target range for the federal funds rate. In explaining the change to their expectations, several respondents cited international trade developments and/or uncertainty and several respondents cited weaker economic data and/or global growth.**

**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 +15 basis points; the spread between the effective federal funds rate (EFFR) and IOER has averaged +2 basis points; the spread between the Overnight Bank Funding Rate (OBFR) and IOER has averaged +1 basis point; and the spread between the Tri-Party General Collateral Rate (TGCR) and IOER has averaged +2 basis points. Please provide your expectation for each of these rate spreads immediately following each of the FOMC meetings below and over the longer run\*\*. **Please ensure your signs are correct.**

	Top of target range minus IOER (in bps)				
	Sep. 17-18	Oct. 29-30*	Dec. 10-11	Jan. 28-29	Longer Run**
25th Pctl	<b>15.0</b>	<b>15.0</b>	<b>15.0</b>	<b>15.0</b>	<b>15.0</b>
Median	<b>15.0</b>	<b>15.0</b>	<b>15.0</b>	<b>15.0</b>	<b>15.0</b>
75th Pctl	<b>15.0</b>	<b>15.0</b>	<b>20.0</b>	<b>20.0</b>	<b>20.0</b>
<b># of Responses</b>	<b>18</b>	<b>17</b>	<b>17</b>	<b>17</b>	<b>17</b>

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

\*\* "Longer run" as discussed in the January 2019 Statement Regarding Monetary Policy Implementation and Balance Sheet Normalization.



	EFFR minus IOER (in bps)				
	Sep. 17-18	Oct. 29-30*	Dec. 10-11	Jan. 28-29	Longer Run**
25th Pctl	2.0	2.0	3.0	2.0	2.0
Median	2.0	3.0	4.0	3.0	2.0
75th Pctl	3.0	5.0	5.0	5.0	5.0
# of Responses	18	17	17	17	17

	OBFR minus IOER (in bps)				
	Sep. 17-18	Oct. 29-30*	Dec. 10-11	Jan. 28-29	Longer Run**
25th Pctl	1.0	1.0	0.5	0.0	0.0
Median	1.0	2.0	2.0	1.5	1.0
75th Pctl	2.0	3.0	3.0	2.5	3.0
# of Responses	17	16	16	16	16

	TGCR minus IOER (in bps)				
	Sep. 17-18	Oct. 29-30*	Dec. 10-11	Jan. 28-29	Longer Run**
25th Pctl	2.0	2.5	3.0	2.5	2.0
Median	3.0	4.0	4.5	3.0	3.0
75th Pctl	8.0	7.0	6.0	5.0	5.0
# of Responses	17	16	16	16	16

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

\*\* "Longer run" as discussed in the January 2019 Statement Regarding Monetary Policy Implementation and Balance Sheet Normalization.

- 4b)** 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 August 28, 2019 was \$1499 billion according to the most recent H.4.1 release.

(24 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	<b>1200</b>
Median	<b>1250</b>
75th Pctl	<b>1350</b>

- 4c)** According to the March 2019 Balance Sheet Normalization Principles and Plans, "[w]hen the Committee judges that reserve balances have declined to [a level consistent with efficient and effective implementation of monetary policy], the SOMA portfolio will hold no more securities than necessary for efficient and effective policy implementation. Once that point is reached, the Committee will begin increasing its securities holdings to keep pace with trend growth of the Federal Reserve's non-reserve liabilities and maintain an appropriate level of reserves in the system."

Please indicate the quarter in which you expect the Committee will begin increasing its securities holdings as described above, conditional on not moving to the ZLB at any point between now and the end of 2025.

(25 responses)

Most Likely Quarter in Which the Committee Will Begin Increasing Its Securities Holdings, Conditional on Not Moving to the ZLB at any Point Between Now and the End of 2025*	
25th Pctl	<b>2020 Q1</b>
Median	<b>2020 Q1</b>
75th Pctl	<b>2020 Q4</b>

\*Dropdown selections:

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

- 5a)** As of September 3, 2-year and 30-year nominal Treasury yields have declined by roughly 40 and 60 basis points on net since the July FOMC meeting, respectively. Please rate the importance of the following factors in explaining changes in these yields over this period. (5=very important, 1=not important)

## Factors Explaining the Change in the 2-Year Treasury Yield

	Changes in outlook and uncertainty around outlook for U.S. economic growth	Changes in outlook and uncertainty around outlook for foreign economic growth	Changes in expectations for U.S. inflation	Changes in perception of the FOMC's reaction function	Changes in expected duration or frequency of policy rates at the ZLB
1-Not Important	0	0	7	4	13
2	1	1	11	5	5
3	3	7	8	10	8
4	13	12	2	8	4
5-Very Important	13	10	2	3	0
# of Responses	30	30	30	30	30

	Changes in estimates of the U.S. neutral real rate of interest	Relative value of Treasury securities to foreign government securities	Investor positioning	Safe haven flows	Other (please explain)
1-Not Important	12	6	9	1	1
2	10	4	7	10	0
3	4	11	9	6	1
4	2	4	5	9	1
5-Very Important	2	5	0	4	2
# of Responses	30	30	30	30	5

## Factors Explaining the Change in the 30-Year Treasury Yield

	Changes in outlook and uncertainty around outlook for U.S. economic growth	Changes in outlook and uncertainty around outlook for foreign economic growth	Changes in expectations for U.S. inflation	Changes in perception of the FOMC's reaction function	Changes in expected duration or frequency of policy rates at the ZLB
1-Not Important	0	0	7	4	11
2	3	1	8	12	3
3	5	5	7	6	9
4	11	9	4	6	5
5-Very Important	11	15	4	2	2
# of Responses	30	30	30	30	30

	Changes in estimates of the U.S. neutral real rate of interest	Relative value of Treasury securities to foreign government securities	Investor positioning	Safe haven flows	Other (please explain)
1-Not Important	9	3	5	2	0
2	9	3	6	4	0
3	6	8	9	7	2
4	2	6	7	8	1
5-Very Important	4	10	3	9	2
# of Responses	30	30	30	30	5

If "Other", please explain:  
(6 responses)

**Respondents did not provide substantial commentary in this section.**

- 5b)** As of September 3, the 2-year U.S. Treasury yield has declined by roughly 40 basis points since the July FOMC meeting. Please decompose this change into the following components. Please ensure that your sum matches -40 basis points. Please ensure that your signs are correct.

<b>2-Year U.S. Treasury Yield 40 bp decline (as of Sep. 3)</b>			
	Change in Market Expectations for Average Real Policy Rate Over the Following 2 Years (bps)	Change in Market Expectations for Average Inflation Rate Over the Following 2 Years (bps)	Change in Market-Implied Nominal Term Premium (bps)
Average (bps)	-27	-7	-6

- 5c)** As of September 3, the 30-year U.S. Treasury yield has declined by roughly 60 basis points since the July FOMC meeting. Please decompose this change into the following components. Please ensure that your sum matches -60 basis points. Please ensure that your signs are correct.

<b>30-Year U.S. Treasury Yield 60 bp decline (as of Sep. 3)</b>			
	Change in Market Expectations for Average Real Policy Rate Over the Following 30 Years (bps)	Change in Market Expectations for Average Inflation Rate Over the Following 30 Years (bps)	Change in Market-Implied Nominal Term Premium (bps)
Average (bps)	-26	-13	-21

**6a)** Please describe your modal expectation and the balance of risks around your modal expectation for international trade developments from now until the end of 2019. In addition, please explain the factors behind any change to your views since the last policy survey.

**Most respondents indicated that their modal expectation was for the bilateral tariffs announced by the U.S. and China to take effect, with no U.S.-China trade agreement concluded in the near term. Many respondents indicated that they perceived the risks around their modal expectations were tilted toward greater trade friction between the U.S. and China, while several others indicated that risks were tilted toward tariffs announced by China being delayed. Finally, several respondents indicated that they expected or saw risks of broader trade friction, including between the U.S. and Europe.**

**6b)** Please comment on your estimate of the magnitude of the impact, if any, of realized and expected international trade developments, including uncertainty, from now until the end of 2019 on the U.S. economy and financial conditions. In addition, please comment on how this estimate has changed since the last policy survey, if at all.

**Several respondents indicated that their estimate of the negative impact of international trade developments on real GDP growth had increased in magnitude, while several others indicated that they had not changed their estimate of the impact on real GDP growth since the last policy survey.**

**7a)** For the outcomes below, provide the percent chance you attach to the annual average CPI inflation rate from September 1, 2019 – August 31, 2024 falling in each of the following ranges. Please also provide your point estimate for the most likely outcome.  
(29 responses)

	≤ 1.00%	1.01-1.50%	1.51-2.00%	2.01-2.50%	2.51-3.00%	≥ 3.01%
Average	4%	14%	34%	30%	14%	4%

	Most Likely Outcome
25th Pctl	2.00%
Median	2.00%
75th Pctl	2.15%

**7b)** For the outcomes below, provide the percent chance you attach to the annual average CPI inflation rate from September 1, 2024 – August 31, 2029 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	<b>5%</b>	<b>13%</b>	<b>28%</b>	<b>31%</b>	<b>17%</b>	<b>6%</b>

	Most Likely Outcome
25th Pctl	<b>2.00%</b>
Median	<b>2.00%</b>
75th Pctl	<b>2.25%</b>

- 8a)** 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	<b>0%</b>	25th Pctl <b>11%</b>	25th Pctl <b>15%</b>
Median	<b>3%</b>	Median <b>20%</b>	Median <b>20%</b>
75th Pctl	<b>5%</b>	75th Pctl <b>25%</b>	75th Pctl <b>30%</b>

*\*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.*

- 8b)** 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	<b>12%</b>	<b>32%</b>	<b>27%</b>	<b>15%</b>	<b>15%</b>

*\*NBER-defined recession*

- 8c)** Please explain the factors behind any change to your expectations in parts a-b since the last policy survey.  
(28 responses)

**In explaining increases in one or more of their near-term recession probabilities, several respondents cited greater international trade uncertainty, and several respondents cited a softening trend in domestic and global data.**