### **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.<sup>1</sup> 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 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.

<sup>&</sup>lt;sup>1</sup> 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 January FOMC statement.

Current economic conditions:

Most dealers indicated that they expected no material changes to this section of the statement, while several indicated that they expected a downgrade to the Committee's characterization of household spending.

Economic outlook:

Most dealers indicated that they expected no material changes to this section of the statement.

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

Most dealers indicated that they expected no material changes to this section of the statement.

Other: (13 responses)

> Several dealers indicated that they expected an upward 5 basis point technical adjustment to the interest on excess reserves (IOER) rate.

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

Many dealers indicated that they expected the Chair to characterize the current stance of monetary policy as appropriate or suggest that the bar for changes to the target range is high, such as the need for a material reassessment of the outlook. Some dealers indicated that they expected him to discuss funding markets and conditions in the repo markets, including the Federal Reserve's repo operations and reserve management purchases of Treasury bills. Several dealers indicated that they expected the Chair to convey an upbeat economic outlook, including several that indicated that they expected him to describe the economy as "in a good place." Several dealers indicated that they expected the Chair to discuss the Federal Reserve's review of its monetary policy framework. Finally, several dealers indicated that they expected the Chair's remarks to be similar to those following the December FOMC meeting. 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	5
4	18
5 - Effective	1

Please explain.

Some dealers indicated that they viewed communication around the future path of policy as clear or more clear, with several dealers indicating that they viewed the Committee as clearly expressing that policy is on hold unless there are material changes to the outlook. In addition, several dealers indicated that they viewed the Committee as having delivered a consistent message and several indicated that they viewed the Committee as appearing unified or more unified on the policy outlook.

**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.

	Jan 28-29 2020	Mar 17-18 2020	Apr 28-29 2020	Jun 9-10 2020	Jul 28-29 2020	Sep 15-16 2020	Nov 4-5 2020
25th Pctl	1.63%	1.63%	1.63%	1.50%	1.50%	1.38%	1.38%
Median	1.63%	1.63%	1.63%	1.63%	1.63%	1.63%	1.63%
75th Pctl	1.63%	1.63%	1.63%	1.63%	1.63%	1.63%	1.63%
# of Responses	24	24	24	24	24	24	24
	2020 Q4	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2022 H1	2022 H2
25th Pctl	1.38%	1.25%	1.13%	1.13%	1.13%	1.13%	1.25%
Median	1.63%	1.63%	1.63%	1.63%	1.63%	1.63%	1.63%
75th Pctl	1.63%	1.63%	1.63%	1.75%	1.75%	2.00%	2.06%
# of Responses	24	24	24	24	24	20	20

**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.

	Longer Run	10-yr Average FF Rate
25th Pctl	2.25%	1.78%
Median	2.40%	2.00%
75th Pctl	2.56%	2.25%

**3c)** Please indicate the percent chance that you attach to the target federal funds rate or range falling in each of the following ranges <u>immediately following the January and March FOMC meetings and at the end of 2020</u>. If you expect a target range, please use the midpoint of that range in providing your response.

Federal	l Funds Ra			-				
	≤ 0.75%	0.76 - 1.00%	1.01 - 1.25%	1.26 - 1.50%	1.51 - 1.75%	1.76 - 2.00%	2.01 - 2.25%	≥ 2.26%
Average	0%	0%	0%	3%	95%	1%	0%	0%

Federal Funds Rate or Range Immediately Following the March 2020 FOMC Meeting									
	≤ 0.75%	0.76 - 1.00%	1.01 - 1.25%	1.26 - 1.50%	1.51 - 1.75%	1.76 - 2.00%	2.01 - 2.25%	≥ 2.26%	
Average	0%	0%	1%	14%	82%	1%	0%	0%	

Unconditional Year-End 2020 Target Federal Funds Rate										
	≤ 0.75%	0.76 - 1.00%	1.01 - 1.25%	1.26 - 1.50%	1.51 - 1.75%	1.76 - 2.00%	2.01 - 2.25%	≥ 2.26%		
Average	7%	7%	11%	18%	47%	7%	2%	1%		

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 and 2022</u>. If you expect a target range, please use the midpoint of that range in providing your response.
(23 responses)

Federal Funds Rate or Range at the End of 2021										
	< 0.00%	0.00 - 0.50%			1.51 - 2.00%			3.01 - 3.50%	≥ 3.51%	
Average	2%	13%	12%	23%	31%	14%	4%	1%	0%	

Federal Funds Rate or Range at the End of 2022										
	< 0.00%	0.00 - 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	2%	13%	13%	20%	26%	15%	6%	3%	1%	

**3e-i)** 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 2022</u>.

	Probability of Moving to ZLB at Some Point between Now and the End of 2022
25th Pctl	23%
Median	33%
75th Pctl	40%

3e-ii) 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
25th Pctl	-0.06%
Median	0.00%
75th Pctl	0.13%

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

#### (22 responses)

Several dealers noted positive trade developments, including the signing of the U.S.-China Phase 1 trade deal, as a factor behind changes to their expectations, and several dealers indicated improvements in their economic outlook as factors. Some dealers indicated that there were no material changes to their expectations.

4) The following matrix lays out hypothetical scenarios in which the realized levels of the 2020 unemployment rate (Q4 average level) and 2020 core PCE inflation (Q4/Q4 growth) are either 50 basis points above, below, or equal to the medians of FOMC participants' projections for these indicators in the December Summary of Economic Projections (SEP). For example, the upper left box represents a scenario in which the unemployment rate and core PCE inflation are both 50 basis points below the current SEP medians. The upper right box represents a scenario in which the unemployment rate is 50 basis points above the current SEP median, while core PCE inflation is 50 basis points below the current median.

For each of the following scenarios, please indicate the level of the target federal funds rate or range that you expect would prevail <u>at the end of Q1 2021</u>. If you expect a target range, please indicate the midpoint of that range in providing your response.

25th Doroonti		2020 Unemployment rate (Q4 average level)			
25th Percentile Responses		- 50 bps	Current SEP median 3.5%	+ 50 bps	
	- 50 bps	1.38%	1.13%	0.38%	
2020 Core PCE inflation	Current SEP median 1.9%	1.63%	1.63%	0.88%	
(Q4/Q4)	+ 50 bps	1.88%	1.63%	1.13%	

Median Responses			) Unemployment Q4 average leve	
		- 50 bps	Current SEP median 3.5%	+ 50 bps
	- 50 bps	1.61%	1.25%	0.75%
2020 Core PCE inflation (Q4/Q4)	Current SEP median 1.9%	1.63%	1.63%	1.13%
	+ 50 bps	2.13%	1.63%	1.63%

75th Percentile Responses			) Unemployment Q4 average leve	
		- 50 bps	Current SEP median 3.5%	+ 50 bps
	- 50 bps	<b>1.63%</b>	1.38%	1.13%
2020 Core PCE inflation (Q4/Q4)	Current SEP median 1.9%	1.88%	1.63%	1.38%
	+ 50 bps	2.13%	1.88%	1.63%

Please describe any other factors which in your view would be likely to impact the level of the target federal funds rate or range at the end of Q1 2021.

(20 responses)

Several dealers noted trade risk or uncertainty as another factor that would likely impact the level of the target federal funds range. Several dealers indicated financial conditions as factors. Several dealers only noted inflation and unemployment as factors.

5) The neutral real federal funds rate can be understood as the level of the real federal funds rate that would be neither expansionary nor contractionary if the economy were operating at or near its potential. Please provide your estimate for the level of the neutral real federal funds rate at each of the time periods below. (23 responses)

	Current Level	Year-end 2020	Year-end 2021	Year-end 2022
25th Pctl	0.01%	0.05%	0.25%	0.25%
Median	0.50%	0.50%	0.50%	0.50%
75th Pctl	0.88%	0.88%	1.00%	1.00%

Please explain the factors behind any changes to your estimates since the policy survey on July 22. (20 responses)

# Some dealers noted that they had made no material changes to their estimates.

6) Please describe your modal expectation and the balance of risks around your modal expectation for international trade developments over the next 6 months. In addition, please explain the factors behind any change to your views since the last policy survey.

Most dealers indicated that their modal expectation was for the U.S.-China Phase 1 trade deal to be maintained, with limited or no progress towards a Phase 2 trade deal, and existing tariffs to remain in place with no further tariff increases likely to take effect. Some dealers indicated that they perceived the risks around their modal expectations were tilted toward greater trade friction between the U.S. and China.

7) According to the Implementation Note issued December 11, 2019, "In light of recent and expected increases in the Federal Reserve's non-reserve liabilities, the Committee directs the [Open Market Desk at the Federal Reserve Bank of New York] to continue purchasing Treasury bills at least into the second quarter of 2020 to maintain over time ample reserve balances at or above the level that prevailed in early September 2019. The Committee also directs the Desk to continue conducting term and overnight repurchase agreement operations at least through January 2020 to ensure that the supply of reserves remains ample even during periods of sharp increases in non-reserve liabilities, and to mitigate the risk of money market pressures that could adversely affect policy implementation."

In light of these directives, and given details published by the Desk on the Repurchase Agreement Operational Details site,\* please provide your expectation (\$ billions) for the amount of reserve management purchases of Treasury bills as well as the maximum offered amounts for overnight and total term repurchase agreements (repo) during each of the following months.\*\* If you expect any of these amounts to be zero in a given period, please enter 0.

#### (22 responses)

Reserve Management Purchase of Treasury Bills (\$ billions)									
	January 2020	February 2020	March 2020	April 2020	May 2020	June 2020			
25th Pctl	60	60	60	30	10	10			
Median	60	60	60	48	30	18			
75th Pctl	60	60	60	60	40	40			

Maximum Daily Overnight Repo Offered (\$ billions)									
	January 2020	February 2020	March 2020	April 2020	May 2020	June 2020			
25th Pctl	120	100	75	50	30	25			
Median	120	110	100	90	75	60			
75th Pctl	120	120	120	100	80	100			

Maximum Daily Total Term Repo Offered (\$ billions)									
	January 2020	February 2020	March 2020	April 2020	May 2020	June 2020			
25th Pctl	140	120	90	70	20	0			
Median	140	120	100	100	60	50			
75th Pctl	230	140	120	120	100	90			

\* Please see the Repurchase Agreement Operational Details site at https://www.newyorkfed.org/markets/domesticmarket-operations/monetary-policy-implementation/repo-reverse-repo-agreements/repurchase-agreement-operationaldetails

\*\* For term repo, please provide your expectation for the maximum total offered amount at any point during the period. If you expect multiple operations with overlapping terms (excluding overnight repo), please sum across all operations to arrive at the total offered amount. For example, in September 2019, 14-day term repo operations settled on September 24, 26, and 27 with offered amounts of \$30 billion, \$60 billion, and \$60 billion, respectively, yielding a maximum total offered amount of \$150 billion for that month (as of September 27).

8) 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 +20 basis points; the spread between the effective federal funds rate (EFFR) and IOER has averaged 0 basis points; the spread between the Overnight Bank Funding Rate (OBFR) and IOER has averaged -1 basis points; the spread between the Tri-Party General Collateral Rate (TGCR) and IOER has averaged -3 basis point; and the spread between the bottom of the target range for the federal funds rate and the overnight reverse repurchase (ON RRP) rate has been +5 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)						
	Jan. 28-29	Mar. 17-18	Apr. 28-29	Jun. 9-10	Longer Run*		
25th Pctl	15.0	15.0	15.0	15.0	12.5		
Median	15.0	15.0	15.0	15.0	15.0		
75th Pctl	20.0	15.0	15.0	15.0	15.0		
# of Responses	22	22	22	22	21		

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

	EFFR minus IOER (in bps)						
	Jan. 28-29	Mar. 17-18	Apr. 28-29	Jun. 9-10	Longer Run*		
25th Pctl	0.0	0.0	0.0	0.0	0.0		
Median	0.0	0.0	0.0	0.0	0.0		
75th Pctl	0.0	0.0	0.0	0.0	1.0		
# of Responses	22	22	22	22	21		

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

	OBFR minus IOER (in bps)						
	Jan. 28-29	Mar. 17-18	Apr. 28-29	Jun. 9-10	Longer Run*		
25th Pctl	-1.0	-1.0	-1.0	-1.0	-1.0		
Median	-1.0	-1.0	-1.0	-1.0	0.0		
75th Pctl	-1.0	0.0	0.0	0.0	0.0		
# of Responses	22	22	22	22	21		

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

	TGCR minus IOER (in bps)						
	Jan. 28-29	Mar. 17-18	Apr. 28-29	Jun. 9-10	Longer Run*		
25th Pctl	-3.0	-3.0	-3.0	-3.0	-3.0		
Median	-3.0	-1.5	-1.0	-2.0	-1.0		
75th Pctl	-2.0	0.0	2.0	0.0	0.0		
# of Responses	22	22	22	22	21		

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

	Bottom of target range minus ON RRP (in bps)						
	Jan. 28-29	Mar. 17-18	Apr. 28-29	Jun. 9-10	Longer Run*		
25th Pctl	0.0	0.0	0.0	0.0	0.0		
Median	0.0	0.0	0.0	0.0	0.0		
75th Pctl	5.0	5.0	5.0	0.0	0.0		
# of Responses	22	22	22	22	21		

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

**9)** The July, September, October, and December FOMC meeting minutes all discussed the Federal Reserve's ongoing review of its monetary policy framework. Please provide your expectations for the outcome of the review related to: i) monetary policy strategy; ii) tools; and iii) communication practices.

For those indicating expectations for a change to the strategy, some dealers indicated that they expected the Federal Reserve to adopt some form of average inflation targeting as an outcome of its ongoing review of its monetary policy framework, and several others indicated that they expected the adoption of a makeup strategy. Several dealers indicated that they expected the Federal Reserve to commit to a range for an inflation target.

With respect to tools, several dealers indicated that they expected forward guidance to remain part of the toolkit and several indicated that they expected large-scale asset purchases or quantitative easing to remain part of the toolkit. Several dealers indicated that they expected the adoption of some version of yield curve control as part of the Federal Reserve's toolkit. Several dealers indicated that they expected a negative interest rate policy would not be adopted.

With respect to communications, several dealers indicated that they expected no significant changes to be made to practices while several others indicated that they expected the Federal Reserve to alter or eliminate the SEP "dot plot."

**10a)** For the outcomes below, provide the percent chance you attach to the annual average <u>CPI inflation</u> rate from January 1, 2020 – December 31, 2024 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	3%	12%	29%	36%	14%	5%
				Likely ome		
		25th Po	otl <b>2.0</b>	0%		
		Mediar	<b>2.1</b>	0%		
		75th Po	otl <b>2.2</b>	8%		

**10b)** For the outcomes below, provide the percent chance you attach to the annual average <u>CPI inflation</u> rate from January 1, 2025 – December 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%
Average	4%	11%	29%	38%	13%
				Likely ome	
		25th Po	5th Pctl <b>2.00%</b>		
		Mediar	edian <b>2.20%</b>		
		75th Po	ctl <b>2.3</b>	0%	

**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	10%	25th Pctl	15%
Median	5%	Median	15%	Median	20%
75th Pctl	5%	75th Pctl	20%	75th Pctl	25%

\*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.

**11b)** What percent chance do you attach to the U.S. economy first entering a recession\* in each of the following periods?

	2020 or				
	earlier	2021	2022	2023	later
Average	20%	23%	20%	16%	21%

\*NBER-defined recession

**11c)** Please explain the factors behind any change to your expectations in parts a-b since the last policy survey.

#### (22 responses)

In explaining decreases in one or more of their near-term recession probabilities, several dealers cited greater optimism on international trade developments and several cited improving domestic data. In addition, several noted that they had made no material changes to their recession probabilities.

**12)** Please describe what you view as the most significant upside and downside risks to the U.S. economic outlook in 2020 in order of most to least important.

Most significant upside risks:

Some dealers noted growth in business spending and investment as a significant upside risk to the U.S. economic outlook in 2020, while some dealers noted growth in consumer spending. Several dealers noted progress in trade talks or growth in global trade, and several dealers indicated stronger global economic growth. Several dealers noted a recovery in the U.S. and global manufacturing sector. In addition, several dealers noted growth in wages and an acceleration in inflation.

Most significant downside risks:

Many dealers indicated re-escalation or increased uncertainty in trade tensions as a significant downside risk to the U.S. economic outlook in 2020. Some dealers noted a reduction in business activity and corporate profits, and some dealers noted a softer labor market and reduction in consumer spending. Several dealers noted uncertainty around the U.S. election, several noted geopolitical uncertainty, and several dealers noted a slowing in global growth. In addition, several dealers indicated a tightening in financial conditions.

Please indicate your expectations for changes, on net, to the indicators listed below from January 1, 2020 - December 31, 2020. Please ensure your signs are correct.
(17 responses)

	Changes to Financial Indicators Over Calendar Year 2020							
	Trade-weighted dollar (percent)	10-year nominal Treasury yield (bps)		U.S. investment-grade corporate credit spread (bps)	S&P 500 Index (percent)			
25th Pctl	-2.1%	-24	-10	3	-2.0%			
Median	0.2%	7	1	23	3.0%			
75th Pctl	2.0%	28	18	30	6.0%			

**14a)** Provide your estimate of the most likely outcome for output, inflation, and unemployment. (17 responses)

		2020	2021	2022	Longer Run
	25th Pctl	1.60%	1.75%	1.70%	1.75%
Real GDP (Q4/Q4 Growth)	Median	1.80%	2.00%	2.00%	1.90%
	75th Pctl	2.05%	2.30%	2.20%	2.10%
	25th Pctl	1.80%	1.80%	1.90%	-
Core PCE Inflation (Q4/Q4)	Median	1.95%	1.95%	2.00%	-
	75th Pctl	2.00%	2.05%	2.00%	-
	25th Pctl	1.75%	1.70%	1.90%	2.00%
Headline PCE Inflation (Q4/Q4)	Median	1.90%	1.90%	1.95%	2.00%
	75th Pctl	2.00%	2.00%	2.00%	2.00%
	25th Pctl	3.50%	3.40%	3.40%	3.90%
Unemployment Rate (Q4 Average Level)	Median	3.60%	3.70%	3.80%	4.15%
(	75th Pctl	3.75%	4.00%	4.20%	4.50%

14b) Please explain changes, if any, to your estimates in part a since the last policy survey. (21 responses)

> Some dealers noted that they had made no material changes to their economic forecasts, while several other dealers indicated that they had updated their forecasts to reflect data since the December survey. Several dealers indicated that they had revised lower their unemployment estimates.