### RESPONSES TO SURVEY OF PRIMARY DEALERS

Markets Group, Federal Reserve Bank of New York



### DECEMBER 2019

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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. 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.

List of Primary Dealers: www.newyorkfed.org/markets/primarydealers

<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 December FOMC statement.

Current economic conditions:

Some 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:

Many dealers indicated that they expected no material changes to this section of the statement, including several who indicated that they expected the Committee to continue to note they viewed a "sustained expansion" of economic activity as the most likely outcome, and several who indicated that they expected the Committee to continue to note that "uncertainties about the outlook remain."

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:

(11 responses)

Several dealers indicated that they did not expect any Committee members to dissent from a decision to maintain the current target range for the federal funds rate.

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

Some dealers indicated that they expected no material changes to participants' median economic projections. Several dealers indicated that they expected participants' median core PCE inflation projections for 2019 and/or 2020 to decline, and several indicated that they expected participants' median GDP growth projections for 2019 and/or 2020 to decline. In addition, several dealers indicated that they expected participants' median unemployment rate projection for 2019 to decline.

**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 2019	Year-End 2020	Year-End 2021	Year-End 2022	Longer Run
25th Pctl	1.63%	1.63%	1.88%	2.13%	2.50%
Median	1.63%	1.63%	1.88%	2.13%	2.50%
75th Pctl	1.63%	1.63%	2.13%	2.38%	2.50%

Please comment on the balance of risks around your own expectations for the median projections. (22 responses)

Several dealers indicated that they viewed the balance of risks to their expectations for the median of participants' target federal funds rate projections as tilted to the downside, and several indicated that they viewed the balance of risks as tilted to the downside for the longer-run median projection in particular. In addition, several other dealers indicated that they viewed the balance of risks as tilted to the upside, and several indicated that they viewed risks as balanced.

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

(22 responses)

Some dealers indicated that they expected the distribution of participants' target rate projections to narrow for one or more year-ends, including several who indicated that they expected the distribution to narrow for year-end 2020 in particular. Several dealers indicated that they expected the distribution for later years to be wide or to widen. In addition, several dealers indicated that they expected the distribution of participants' target rate projections to shift lower.

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

Some dealers indicated that they expected the Chair to convey an upbeat economic outlook, including some that indicated that they expected him to describe the economy as "in a good place." Some dealers indicated that they expected the Chair to suggest that near-term changes in the target range for the federal funds rate are unlikely, that the hurdle for such changes is high, and/or that the Committee would only respond in the event of a "material reassessment" of its outlook. Several dealers indicated that they expected the Chair's remarks to be similar to those following the October FOMC meeting, and several indicated that they expected him to mention downside risks to the economic outlook. Several dealers indicated that they expected the Chair to emphasize that future policy decisions would be data dependent, that the Committee would be flexible, and/or that monetary policy is not on a pre-set course. Several dealers indicated that they expected the Chair to make reference to previous decreases in the target range.

# Finally, several indicated that they expected him to discuss funding markets.

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	1
3	3
4	19
5 - Effective	1

Please explain.

Some dealers indicated that they viewed communication around the future path of policy as clear or more clear, and some dealers indicated that they viewed the Committee as having delivered a consistent message.

**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.

	Dec 10-11	Jan 28-29	Mar 17-18	Apr 28-29	Jun 9-10	Jul 28-29	Sep 15-16
	2019	2020	2020	2020	2020	2020	2020
25th Pctl	1.63%	1.63%	1.38%	1.38%	1.38%	1.38%	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%	1.63%	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	1.13%	1.13%	1.13%	1.13%	1.13%	1.25%	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%	1.88%	1.88%	2.00%	2.06%
# of Responses	24	23	23	23	23	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.

		10-yr Average
	Longer Run	FF Rate
25th Pctl	2.25%	1.75%
Median	2.50%	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 December and January FOMC meetings and at the end</u> of 2020. If you expect a target range, please use the midpoint of that range in providing your response.

Federal I	Funds Rate	or Range	Immedia	tely Follov	ving the D	ecember 2	2019 FOM	Meeting
	≤ 0.75%	0.76 - 1.00%	1.01 - 1.25%	1.26 - 1.50%	1.51 - 1.75%	1.76 <b>-</b> 2.00%	2.01 - 2.25%	≥ 2.26%
Average	0%	0%	0%	10%	89%	1%	0%	0%

Federal	Funds Rat	_						
	≤ 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%	2%	23%	73%	2%	0%	0%

	Unconditional Year-End 2020 Target Federal Funds Rate								
	≤ 0.75%	0.76 - 1.00%	1.01 <b>-</b> 1.25%	1.26 - 1.50%	1.51 <b>-</b> 1.75%	1.76 - 2.00%	2.01 - 2.25%	≥ 2.26%	
Average	9%	9%	16%	18%	34%	10%	3%	1%	

**3d)** If you assign significant probability to outcomes for the target range for the federal funds rate at the end of 2020 that are above, equal to, and/or below your estimate for the target range immediately following the December 2019 FOMC meeting, please describe the scenarios that in your view would most likely lead to such outcomes.

above December 2019 estimate:

(16 responses)

Several dealers indicated scenarios based on a partial U.S.-China trade deal, and several dealers indicated an acceleration in inflation.

equal to December 2019 estimate:

(19 responses)

Several dealers indicated scenarios based on moderate or neartrend growth, and several indicated inflation close to 2 percent.

below December 2019 estimate:

(22 responses)

Several dealers indicated scenarios based on tepid or slowing growth, and several indicated low inflation. Several noted labor market stress, several noted greater trade friction, and several noted a slowing in consumer spending.

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 2021 and 2022. 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%				1.51 - 2.00%		2.51 - 3.00%		≥ 3.51%
Average	2%	14%	13%	24%	30%	11%	5%	1%	0%

Federal Funds Rate or Range at the End of 2022									
	< 0.00%	0.00 - 0.50%			1.51 - 2.00%		2.51 - 3.00%	3.01 - 3.50%	≥ 3.51%
Average	2%	13%	12%	20%	25%	16%	7%	3%	2%

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

	Probability of Moving to ZLB at Some Point between Now and the End of 2022
25th Pctl	29%
Median	35%
75th Pctl	43%

**3f-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%

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

(22 responses)

Several dealers noted international trade developments as a factor behind changes to their expectations, and several dealers indicated changes in their economic outlook. Several dealers indicated that there were no material changes to their expectations.

**4a)** 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. For reference, as of November 25 the yield was roughly 1.76 percent.

	2019 Q4	2020 Q1	2020 Q2	2020 Q3	2020 Q4
25th Pctl	1.70%	1.68%	1.70%	1.55%	1.60%
Median	1.75%	1.78%	1.83%	1.90%	1.93%
75th Pctl	1.83%	1.86%	1.98%	1.98%	2.08%
# of Responses	24	24	24	24	24
	2021 H1	2021 H2	2022 H1	2022 H2	Longer Run
25th Pctl	1.65%	1.73%	1.75%	1.75%	2.25%
Median	2.00%	2.08%	2.08%	2.08%	2.50%
75th Pctl	2.20%	2.30%	2.35%	2.50%	3.00%
# of Responses	21	20	18	18	21

**4b)** 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. For reference, as of November 25 the rate was roughly 3.70 percent.

	2019 Q4	2020 Q1	2020 Q2	2020 Q3	2020 Q4
25th Pctl	3.55%	3.55%	3.55%	3.60%	3.70%
Median	3.70%	3.72%	3.75%	3.80%	3.80%
75th Pctl	3.75%	3.80%	3.88%	3.90%	4.00%
# of Responses	19	19	19	19	19
	2021 H1	2021 H2	2022 H1	2022 H2	Longer Run
25th Pctl	3.60%	3.75%	3.75%	3.75%	4.00%
Median	3.88%	3.95%	4.00%	3.95%	4.25%
75th Pctl	4.06%	4.19%	4.25%	4.25%	5.00%
# of Responses	18	17	17	17	17

According to the Implementation Note issued October 30, 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 purchase Treasury bills at least into the second quarter of next year 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 conduct term and overnight repurchase agreement operations at least through January of next year 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.

#### (23 responses)

	Reserve Management Purchase of Treasury Bills						
	December 2019	January 2020	February 2020	March 2020	April 2020	May 2020	June 2020
25th Pctl	60	56	48	39	18	4	1
Median	60	60	60	55	40	15	15
75th Pctl	60	60	60	60	60	40	40

	ı	Maximum	Daily Ove	rnight Rep	oo Offered		
	December 2019	January 2020	February 2020	March 2020	April 2020	May 2020	June 2020
25th Pctl	120	<b>75</b>	75	50	25	0	0
Median	120	100	100	80	50	50	75
75th Pctl	150	120	120	120	100	90	110

	N	Maximum	Daily Tota	l Term Re	po Offered	ı	
	December 2019	January 2020	February 2020	March 2020	April 2020	May 2020	June 2020
25th Pctl	150	100	70	70	30	0	0
Median	220	150	100	100	60	50	50
75th Pctl	260	195	150	150	140	100	140

<sup>\*</sup> Please see the Repurchase Agreement Operational Details site at https://www.newyorkfed.org/markets/domestic-market-operations/monetary-policy-implementation/repo-reverse-repo-agreements/repurchase-agreement-operational-

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 0 basis points; the spread between the Tri-Party General Collateral Rate (TGCR) and IOER has averaged -1 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

<sup>\*\*</sup> 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).

points. Please provide your expectation for each of these rate spreads immediately following each of the FOMC meetings below, at year-end, and over the longer run\*. **Please ensure your signs are correct.** 

	Тор	of target r	ange minus	s IOER (in	bps)
	Dec. 10-11	Dec. 31	Jan. 28-29	Mar. 17-18	Longer Run*
25th Pctl	20.0	20.0	20.0	20.0	15.0
Median	20.0	20.0	20.0	20.0	20.0
75th Pctl	20.0	20.0	20.0	20.0	20.0
# of Responses	23	23	23	23	23

<sup>\* &</sup>quot;Longer run" as discussed in the January 2019 Statement Regarding Monetary Policy Implementation and Balance Sheet Normalization.

		EFFR m	ninus IOER	(in bps)	
	Dec. 10-11	Dec. 31	Jan. 28-29	Mar. 17-18	Longer Run*
25th Pctl	0.0	0.0	0.0	0.0	0.0
Median	0.0	5.0	1.0	1.0	3.0
75th Pctl	2.0	10.0	2.0	3.0	10.0
# of Responses	23	23	23	23	23

<sup>\* &</sup>quot;Longer run" as discussed in the January 2019 Statement Regarding Monetary Policy Implementation and Balance Sheet Normalization.

		OBFR n	ninus IOER	(in bps)	
	Dec. 10-11	Dec. 31	Jan. 28-29	Mar. 17-18	Longer Run*
25th Pctl	0.0	1.0	0.0	0.0	0.0
Median	0.0	4.0	1.0	0.0	1.0
75th Pctl	1.0	8.0	2.0	2.0	4.0
# of Responses	23	23	23	23	23

<sup>\* &</sup>quot;Longer run" as discussed in the January 2019 Statement Regarding Monetary Policy Implementation and Balance Sheet Normalization.

	TGCR minus IOER (in bps)				
	Dec. 10-11	Dec. 31	Jan. 28-29	Mar. 17-18	Longer Run*
25th Pctl	0.0	5.0	-1.0	-1.0	-1.0
Median	0.0	50.0	0.0	0.0	0.0
75th Pctl	5.0	145.0	5.0	5.0	5.0
# of Responses	23	23	23	23	23

<sup>\* &</sup>quot;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)				
	Dec. 10-11	Dec. 31	Jan. 28-29	Mar. 17-18	Longer Run*
25th Pctl	5.0	5.0	5.0	5.0	0.0
Median	5.0	5.0	5.0	5.0	5.0
75th Pctl	5.0	5.0	5.0	5.0	5.0
# of Responses	23	23	23	23	23

<sup>\* &</sup>quot;Longer run" as discussed in the January 2019 Statement Regarding Monetary Policy Implementation and Balance Sheet Normalization.

Please describe the factors, if any, that are impacting each of your estimates of money market rates spreads for December 31, 2019 in part a above.

(23 responses)

Several dealers indicated that they viewed the Fed's operations as helping to reduce volatility in money market rates at year-end. Some dealers indicated that they anticipated volatility in money market rates at year-end due to balance sheet or regulatory constraints, including several who indicated that they expected or saw the possibility of volatility in repo rates.

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.
(23 responses)

Most dealers indicated that their modal expectation was for a partial trade deal between the U.S. and China to be concluded in

the near term, with no further tariff increases likely to take effect. Several dealers 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 they perceived these risks as tilted toward less friction.

**8a)** For the outcomes below, provide the percent chance you attach to the annual average <u>CPI inflation</u> rate from December 1, 2019 – November 30, 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	4%	12%	30%	35%	14%	<b>5</b> %

	Most Likely Outcome
25th Pctl	2.00%
Median	2.10%
75th Pctl	2.23%

**8b)** For the outcomes below, provide the percent chance you attach to the annual average <u>CPI inflation</u> rate from December 1, 2024 – November 30, 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	4%	11%	29%	38%	14%	5%

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

**9a)** 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	13%	25th Pctl	20%
Median	5%	Median	20%	Median	24%
75th Pctl	5%	75th Pctl	28%	75th Pctl	30%

**9b)** 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	7%	26%	27%	16%	24%

<sup>\*</sup>NBER-defined recession

**9c)** Please explain the factors behind any change to your expectations in parts a-b since the last policy survey.

(20 responses)

In explaining decreases in one or more of their near-term recession probabilities, several dealers cited improving domestic data and several cited greater optimism on international trade developments. In addition, several dealers cited closer proximity to the fixed time horizons of part b as contributing to their lower probabilities, and several noted that they had made no material changes to their recession probabilities.

**10a)** Provide your estimate of the most likely outcome for output, inflation, and unemployment. (17 responses)

		2019	2020	2021	2022	Longer Run
	25th Pctl	2.10%	1.60%	1.70%	1.70%	1.75%
Real GDP (Q4/Q4 Growth)	Median	2.20%	1.80%	1.95%	2.00%	1.90%
	75th Pctl	2.30%	2.00%	2.20%	2.20%	2.00%
	25th Pctl	1.60%	1.90%	1.80%	1.90%	-
Core PCE Inflation (Q4/Q4)	Median	1.70%	2.00%	2.00%	2.00%	-
	75th Pctl	1.70%	2.00%	2.10%	2.04%	-
	25th Pctl	1.50%	1.75%	1.80%	1.90%	2.00%
Headline PCE Inflation (Q4/Q4)	Median	1.50%	1.90%	1.90%	2.00%	2.00%
	75th Pctl	1.55%	2.00%	2.00%	2.02%	2.00%
	25th Pctl	3.60%	3.50%	3.40%	3.50%	4.00%
Unemployment Rate (Q4 Average Level)	Median	3.60%	3.70%	3.80%	3.93%	4.15%
	75th Pctl	3.70%	3.80%	4.00%	4.20%	4.50%

<sup>\*</sup>NBER-defined recession

<sup>\*\*</sup>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.

**10b)** Please explain changes, if any, to your estimates in part a since the last policy survey. (22 responses)

Several 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 October survey, and several noted that they made changes to their estimates due to altered expectations for international trade developments. Several dealers indicated that they had revised higher their growth estimates, several noted that they had revised lower their inflation estimates, and several noted that they had revised lower their unemployment estimates.