# RESPONSES TO SURVEY OF PRIMARY DEALERS

Markets Group, Federal Reserve Bank of New York

## OCTOBER 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.[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 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.

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

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

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**1a)** Provide below your expectations for changes, if any, to the language referencing each of the following topics in the October 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, and several indicated that they expected or saw a possibility of a downgrade to its characterization of survey-based measures of inflation expectations. Several dealers indicated that they expected or saw a possibility of a downgrade in its characterization of job growth and/or the labor market. Finally, several dealers indicated that they expected the Committee to characterize the unemployment rate as low or as having declined.**

Economic outlook:

**Many dealers indicated that they expected no material changes to this section of the statement. In addition, several dealers indicated that they expected the Committee to continue to note that "uncertainties" remain, and several indicated that they expected the Committee to continue to indicate that "sustained expansion" was the most likely outcome.**

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

**Many dealers indicated that they expected no material changes to this section of the statement and/or noted specific language in the prior statement that they expected to be repeated. Several dealers indicated that they expected the Committee to announce a decision to lower the target range for the federal funds rate, and several indicated that they expected the Committee to signal that further decreases in the target range are less likely.**

Other:
(11 responses)

**Several dealers indicated that they expected at least one Committee member to dissent from a decision to lower the target federal funds range.**

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

**Some dealers indicated that they expected the Chair to emphasize that any future policy decisions would be data dependent; that the Committee will use a "meeting-by-meeting" approach; or that policy is not on a "preset course". Several dealers indicated that they expected the Chair to convey an upbeat economic outlook, several indicated that they expected him to emphasize risks to the outlook, and several suggested he would note that the Committee would provide additional stimulus if warranted. Finally, several dealers indicated that they expected the Chair to discuss the Fed's**

**response to developments in money markets, including several who expected him to stress the difference between reserve management purchases and post-crisis large-scale asset purchases.**

**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 | 1 |
| 2 | 3 |
| 3 | 11 |
| 4 | 9 |
| 5 - Effective | 0 |

Please explain.
(23 responses)

**Several dealers suggested Fed communication was clear or effective, several noted a perceived divergence in views among Fed officials, and several cited communications regarding the balance sheet or funding markets as informing their rating.**

**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.

| | Oct 29-30 2019 | Dec 10-11 2019 | Jan 28-29 2020 | Mar 17-18 2020 | Apr 28-29 2020 | Jun 9-10 2020 | Jul 28-29 2020 |
|---|---|---|---|---|---|---|---|
| 25th Pctl | 1.63% | 1.50% | 1.38% | 1.38% | 1.25% | 1.25% | 1.13% |
| Median | 1.63% | 1.63% | 1.63% | 1.38% | 1.38% | 1.38% | 1.38% |
| 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 Q3 | 2020 Q4 | 2021 Q1 | 2021 Q2 | 2021 Q3 | 2021 Q4 | 2022 H1 | 2022 H2 |
|---|---|---|---|---|---|---|---|---|
| 25th Pctl | 1.13% | 1.00% | 1.13% | 1.13% | 1.13% | 1.13% | 1.38% | 1.38% |
| Median | 1.38% | 1.38% | 1.38% | 1.38% | 1.38% | 1.38% | 1.63% | 1.63% |
| 75th Pctl | 1.63% | 1.63% | 1.63% | 1.63% | 1.88% | 2.00% | 2.13% | 2.13% |
| # of Responses | 24 | 24 | 21 | 21 | 21 | 21 | 17 | 17 |

**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%** | **1.83%** |
| Median | **2.50%** | **2.00%** |
| 75th Pctl | **2.56%** | **2.25%** |

**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 2020.

| | 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 2020 |
|---|---|---|---|
| Average | **3%** | **88%** | **9%** |

**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 October and December FOMC meetings. 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 October FOMC Meeting | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | ≤ 1.00% | 1.01 - 1.25% | 1.26 - 1.50% | 1.51 - 1.75% | 1.76 - 2.00% | 2.01 - 2.25% | 2.26 - 2.50% | ≥ 2.51% |
| Average | **0%** | **0%** | **2%** | **78%** | **19%** | **0%** | **0%** | **0%** |

| Federal Funds Rate or Range Immediately Following the December FOMC Meeting | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | ≤ 1.00% | 1.01 - 1.25% | 1.26 - 1.50% | 1.51 - 1.75% | 1.76 - 2.00% | 2.01 - 2.25% | 2.26 - 2.50% | ≥ 2.51% |
| Average | **1%** | **2%** | **28%** | **56%** | **13%** | **0%** | **0%** | **0%** |

**3e-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.
(20 responses)

| 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 | **23%** | **28%** | **36%** | **10%** | **2%** | **0%** | **0%** | **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 | **23%** | **26%** | **28%** | **14%** | **6%** | **2%** | **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 | **16%** | **24%** | **25%** | **19%** | **10%** | **4%** | **1%** | **1%** |

**3e-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 | **32%** |
| Median | **38%** |
| 75th Pctl | **50%** |

**3e-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.
(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 | **10%** | **41%** | **15%** | **13%** | **10%** | **10%** | **1%** | **0%** |

| 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 | **9%** | **52%** | **19%** | **11%** | **5%** | **3%** | **1%** | **0%** |

| 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 | **4%** | **56%** | **17%** | **12%** | **6%** | **3%** | **1%** | **1%** |

**3e-iv)** 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.
(21 responses)

**Several dealers noted that there were no material changes to their expectations for the target range for the federal funds rate since the last policy survey, while several others cited weaker economic data and/or increasing economic risks in explaining changes to their expectations.**

**4)** Please indicate the percent chance that you attach to the 10-year Treasury yield falling in each of the following ranges at the end of 2019 and 2020.

| Year-end 2019 | | | | | | | |
|---|---|---|---|---|---|---|---|
| | ≤ 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 | **4%** | **24%** | **53%** | **16%** | **2%** | **1%** | **0%** |

| 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% |
| Average | **8%** | **23%** | **28%** | **28%** | **9%** | **4%** | **1%** |

**5a)** In its October 11 Statement Regarding Monetary Policy Implementation, the Committee indicated that "[i]n light of recent and expected increases in the Federal Reserve's non-reserve liabilities, the Federal Reserve will purchase Treasury bills at least into the second quarter of next year in order to maintain over time ample reserve balances at or above the level that prevailed in early September 2019. In addition, the Federal Reserve will 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 its October 11 Statement Regarding Treasury Bill Purchases and Repurchase Operations, the Federal Reserve Bank of New York indicated that "[i]n accordance with this directive, the Desk plans to purchase Treasury bills at an initial pace of approximately $60 billion per month, starting with the period from mid-October to mid-November. These reserve management purchases of Treasury bills will be in addition to the Desk's ongoing purchases of Treasury securities related to the reinvestment of principal payments from the Federal Reserve's holdings of agency debt and agency mortgage-backed securities." It also indicated that "[i]n addition, at least through January of next year, the Desk will conduct overnight and term repo operations to ensure that the supply of reserves remains ample and to mitigate the risk of money market pressures. Term repo operations will generally be conducted twice per week, initially in an offering amount of at least $35 billion per operation. Overnight repo operations will be conducted daily, initially in an offering amount of at least $75 billion per operation."

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.

| Reserve Management Purchase of Treasury Bills | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | November 2019 | December 2019 | January 2020 | February 2020 | March 2020 | April 2020 | May 2020 | June 2020 |
| 25th Pctl | **60** | **60** | **48** | **34** | **23** | **15** | **8** | **8** |
| Median | **60** | **60** | **60** | **60** | **45** | **30** | **18** | **15** |
| 75th Pctl | **60** | **60** | **60** | **60** | **60** | **55** | **48** | **33** |

| Maximum Daily Overnight Repo Offered | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | November 2019 | December 2019 | January 2020 | February 2020 | March 2020 | April 2020 | May 2020 | June 2020 |
| 25th Pctl | **75** | **75** | **75** | **50** | **45** | **8** | **0** | **0** |
| Median | **75** | **100** | **75** | **75** | **50** | **35** | **28** | **30** |
| 75th Pctl | **75** | **100** | **75** | **75** | **75** | **75** | **75** | **75** |

| Maximum Daily Total Term Repo Offered | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | November 2019 | December 2019 | January 2020 | February 2020 | March 2020 | April 2020 | May 2020 | June 2020 |
| 25th Pctl | **140** | **140** | **75** | **70** | **55** | **0** | **0** | **0** |
| Median | **140** | **155** | **123** | **95** | **90** | **45** | **38** | **45** |
| 75th Pctl | **150** | **205** | **145** | **135** | **145** | **118** | **100** | **103** |

** 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).*

**5b)** Please describe any assumptions that underlie your expectations in question 5a.

**Several dealers indicated that their responses assumed elevated funding pressures at year-end, and several indicated that they had assumed that reserve management purchases of Treasury bills and/or the level of participation in the Desk's repo operations would gradually decline at some point in the future. Finally, several dealers indicated that they had made an assumption regarding the evolution of the size of the Treasury General Account.**

**6)** 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 +4 basis points; the spread between the Overnight Bank Funding Rate (OBFR) and IOER has averaged +3 basis points; the spread between the Tri-Party General Collateral Rate (TGCR) and IOER has averaged +5 basis points; 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, at year-end, and over the longer run**. **Please ensure your signs are correct.**

| | Top of target range minus IOER (in bps) | | | |
|---|---|---|---|---|
| | Oct. 29-30* | Dec. 10-11 | Dec. 31 | Longer Run** |
| 25th Pctl | **20.0** | **20.0** | **20.0** | **15.0** |
| Median | **20.0** | **20.0** | **20.0** | **20.0** |
| 75th Pctl | **20.0** | **20.0** | **20.0** | **25.0** |
| # of Responses | **24** | **24** | **24** | **23** |

** 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) | | | |
|---|---|---|---|---|
| | Oct. 29-30* | Dec. 10-11 | Dec. 31 | Longer Run** |
| 25th Pctl | **3.5** | **3.0** | **4.0** | **2.0** |
| Median | **4.0** | **5.0** | **9.0** | **5.0** |
| 75th Pctl | **5.0** | **6.0** | **10.0** | **5.0** |
| # of Responses | **24** | **24** | **24** | **23** |

** 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.*

| | OBFR minus IOER (in bps) | | | |
|---|---|---|---|---|
| | Oct. 29-30* | Dec. 10-11 | Dec. 31 | Longer Run** |
| 25th Pctl | **3.0** | **2.0** | **3.0** | **1.0** |
| Median | **3.0** | **3.0** | **5.0** | **3.0** |
| 75th Pctl | **4.0** | **5.0** | **10.0** | **4.0** |
| # of Responses | **23** | **23** | **23** | **22** |

** 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.*

| | TGCR minus IOER (in bps) | | | |
|---|---|---|---|---|
| | Oct. 29-30* | Dec. 10-11 | Dec. 31 | Longer Run** |
| 25th Pctl | **5.0** | **4.0** | **7.5** | **2.0** |
| Median | **5.0** | **5.0** | **20.5** | **5.0** |
| 75th Pctl | **7.5** | **10.0** | **40.0** | **7.0** |
| # of Responses | **24** | **24** | **24** | **23** |

** 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.*

| | Bottom of target range minus ON RRP (in bps) | | | |
|---|---|---|---|---|
| | Oct. 29-30* | Dec. 10-11 | Dec. 31 | Longer Run** |
| 25th Pctl | **5.0** | **5.0** | **5.0** | **0.0** |
| Median | **5.0** | **5.0** | **5.0** | **5.0** |
| 75th Pctl | **5.0** | **5.0** | **5.0** | **5.0** |
| # of Responses | **23** | **23** | **23** | **22** |

** 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.*

**7)** 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.

**Many 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 other dealers indicated that their modal expectation was that previously-announced tariffs were likely to take effect in December. Finally, 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 perceived these risks as tilted toward less friction.**

**8a)** For the outcomes below, provide the percent chance you attach to the annual average CPI inflation rate from October 1, 2019 – September 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%** | **13%** | **30%** | **35%** | **14%** | **5%** |

| | 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 CPI inflation rate from October 1, 2024 – September 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%** | **30%** | **38%** | **13%** | **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 | **2%** | 25th Pctl | **14%** | 25th Pctl | **20%** |
| Median | **5%** | Median | **25%** | Median | **25%** |
| 75th Pctl | **10%** | 75th Pctl | **30%** | 75th Pctl | **35%** |

**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.*

**9b)** 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 | **12%** | **27%** | **25%** | **14%** | **21%** |

**NBER-defined recession*

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

**In explaining increases in one or more of their near-term recession probabilities, several dealers cited weakening domestic data. In addition, several dealers cited closer proximity to the fixed time horizons of part b as contributing to changes to their responses,**

**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.
(16 responses)

| | | 2019 | 2020 | 2021 | 2022 | Longer Run |
|---|---|---|---|---|---|---|
| Real GDP (Q4/Q4 Growth) | 25th Pctl | **2.05%** | **1.50%** | **1.70%** | **1.60%** | **1.70%** |
| | Median | **2.10%** | **1.70%** | **1.90%** | **1.80%** | **1.90%** |
| | 75th Pctl | **2.20%** | **1.90%** | **2.20%** | **2.05%** | **2.10%** |
| Core PCE Inflation (Q4/Q4) | 25th Pctl | **1.70%** | **1.90%** | **1.80%** | **1.95%** | **-** |
| | Median | **1.80%** | **2.00%** | **2.00%** | **2.00%** | **-** |
| | 75th Pctl | **1.80%** | **2.10%** | **2.10%** | **2.00%** | **-** |
| Headline PCE Inflation (Q4/Q4) | 25th Pctl | **1.50%** | **1.70%** | **1.80%** | **1.95%** | **2.00%** |
| | Median | **1.55%** | **1.90%** | **2.00%** | **2.00%** | **2.00%** |
| | 75th Pctl | **1.60%** | **2.10%** | **2.10%** | **2.05%** | **2.00%** |
| Unemployment Rate (Q4 Average Level) | 25th Pctl | **3.60%** | **3.50%** | **3.50%** | **3.65%** | **4.00%** |
| | Median | **3.60%** | **3.70%** | **3.80%** | **4.00%** | **4.15%** |
| | 75th Pctl | **3.70%** | **3.95%** | **4.00%** | **4.20%** | **4.50%** |

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

**Some dealers noted that they had made no material changes to their economic forecasts, while several indicated that they had updated their forecasts to reflect data since the September survey, and several noted that they had revised lower their growth estimates.**