



September 2020 Senior Financial Officer Survey

Summary

In September 2020, the Federal Reserve conducted a Senior Financial Officer Survey to gather views systematically from a number of banks concerning how the increase in reserve balances in the banking system that occurred over March and April 2020 may have affected the reserve management behavior of individual banks. In response to the pandemic, starting in March 2020, the Federal Reserve began to take a number of actions, including purchasing Treasury securities and agency mortgage-backed securities (MBS) and establishing liquidity facilities, to support the flow of credit to households and businesses and the smooth functioning of critical financial markets. An increase in Federal Reserve assets leads to an increase in reserve balances in the banking system, all else being equal.¹ The amount of reserve balances increased roughly \$1.4 trillion over March and April 2020. The September survey focused on gaining information on the implications of this increase in reserve balances for individual banks and on obtaining banks' views on Federal Reserve liquidity provisions.²

In order to learn how this increase in reserve balances in the banking system may have affected the reserve management decisions of individual banks, the first part of the September survey asked respondents about increases in their reserve balances since the spring and about expected changes in their reserve balances over the remainder of the year. The survey also asked respondents about the actions they might take to manage their balances to these expected levels. Respondents who expect to take action to decrease the level or growth of their average end-of-day reserve balance in December relative to August were asked to rank, in order of importance, the factors that may prompt their firm to do so, as well as to rate the potential asset adjustment and liability adjustment actions that their firm would pursue.

The subsequent parts of the survey focused on banks' views on Federal Reserve liquidity provision. In light of temporary changes to the administration of the Policy on Payment System Risk and changes to the discount window, the survey asked respondents to characterize their views on the use of intraday credit and the discount window and to rate the factors driving their views. The survey also asked respondents about their use of the Paycheck Protection Program (PPP) and the Paycheck Protection Program Liquidity Facility (PPPLF).

The Federal Reserve distributed the survey to senior financial officers at 80 banks on September 18, 2020, with replies due by October 2, 2020.³ Responses were received from all 80 banks, which in aggregate held roughly three-fourths of total reserve balances in the banking system at the time of the survey. As in previous surveys, the banks sampled in the survey represented a wide range of asset sizes and business models. Responses were collected from senior financial officers at 46 domestic banks and 34 U.S. branches and agencies of foreign banking organizations (FBOs).⁴

¹ See Jerome H. Powell (2020), "Current Economic Issues," speech delivered at the Peterson Institute for International Economics, Washington, May 13, <https://www.federalreserve.gov/newsevents/speech/powell20200513a.htm>.

² The September 2020 survey was conducted by the Board of Governors of the Federal Reserve System in collaboration with the Federal Reserve Bank of New York.

³ Respondents were asked to specify the reserve holding entities that were covered in their survey responses.

⁴ As noted, the survey panel comprises 46 domestic banks and 34 foreign banks. The foreign banks consisted of U.S. branches and agencies of foreign banks as well as one U.S. commercial bank that exhibited reserve management behavior more akin to this group than similarly sized domestic banks.

Key takeaways from the survey included the following:

- The large majority of survey respondents' average end-of-day reserve balance positions over the period beginning March 1 and ending April 30 increased relative to February 2020.⁵ Most of these survey respondents indicated that the “most important” or “second most important” driver of their decision to hold higher reserve balances was a need to be prepared for potential drawdowns on committed credit lines or a desire to conduct asset/liability matching, given a large inflow of deposits with potentially high runoff rates or both.
- Reserves creation decelerated over the summer, and only about one-third of survey respondents' reserves increased in August relative to their average reserve position held over the spring (period beginning on March 1 and ending April 30). Most of these respondents cited that the most or second most important driver of reserve accumulation during this period was a lack of attractive alternative investment opportunities or a desire to conduct asset/liability matching, given a large inflow of deposits with potentially high runoff rates or both.
- Over the remainder of the year, almost half of domestic survey respondents expect a decrease in their reserve levels relative to August. FBOs, by comparison, generally do not expect their reserve levels to change.
 - Roughly half of survey respondents indicated that they will take action to decrease the level or growth of their reserve balances from August to December.
 - The factor most often cited as the most or second most important driver for potentially taking action to decrease the level or growth of reserve balances was concern over net interest margins. Another frequently cited driver that ranked highly was an increase in the expected return on alternative high-quality liquid assets (HQLA) Level 1 investments relative to the interest on excess reserves (IOER) rate.⁶
 - On the asset side, the actions to decrease the level or growth in reserves most commonly cited as “likely” or “very likely” were increasing holdings of non-Level 1 HQLA securities (for example, MBS or corporate bonds) or other Level 1 HQLA (for example, Treasury securities) or both. On the liability side, allowing outstanding term wholesale funding liabilities (for example, negotiable certificates of deposit or commercial paper) to mature without replacing them was the action most commonly cited as likely or very likely.
- Nearly one-third of survey respondents indicated they are more likely to consider the discount window as a source of liquidity than before the Federal Reserve's actions during the pandemic. Federal Reserve communications encouraging the use of the discount window to help meet the demand for credit from households and businesses were most often rated as “important” or “very important” in this consideration. Among those banks whose views on the discount window have not changed or that are less likely to consider it as a source of liquidity, concern about disclosures was most often rated as an important or very important factor.

⁵ Response share statistics are calculated using a denominator of respondents who provided a non-“N/A” (“not applicable”) response to the question (80 respondents in this case). This convention is used throughout the summary.

⁶ For definitions of Level 1 HQLA and Level 2 HQLA, see Regulation WW—Liquidity Risk Measurement Standards, 12 C.F.R. § 249.20 (2016).

- Among the banks surveyed with PPP loans, the majority have not participated in the PPPLF and often pointed to the availability of alternative funding sources at a lower cost relative to the PPPLF (for example, funding with core deposits), along with concerns over required PPPLF borrower certifications, as important or very important factors behind their decisions.

The remainder of this summary is organized into two parts that mirror the structure of the survey, and the summary is followed by a detailed tabular presentation of responses.⁷

Part I: Current Reserve Balance Management Strategies and Practices

(Questions 1–3)

Questions on increases in demand for reserve balances. The first two questions in Part I asked respondents about increases in their average end-of-day reserve balances and the factors driving those increases.

The first question was designed to learn about how the increase in reserve balances in the banking system may have affected individual banks' reserve management decisions in the spring. The first part of the first question asked respondents whether their average end-of-day reserve balance for the period beginning on March 1 and ending April 30, 2020 ("spring"), increased relative to their institution's average in February 2020. The vast majority—70 of 80 respondents—answered "yes." Of those who responded "yes," more than two-thirds, or 49 of 70, indicated that a need to be prepared for potential drawdowns on committed credit lines was an important or very important driver that led to their higher reserve balances. More than half of those who said "yes" to the first part of the question, 38 of 70, indicated that a desire to conduct asset/liability matching, given a large inflow of deposits with potentially high runoff rates, was an important or very important driver.

The second survey question focused on reserve balances and reserve balance management in the summer. Approximately one-third—28 of 80 respondents—indicated that their average end-of-day reserve balance position for August 2020 ("summer") increased relative to the average end-of-day position beginning on March 1 and ending April 30. In the second part of the second survey question, those who responded "yes" were asked to rank, in order of importance, the drivers that led to their higher reserve balances. Seventy-five percent of those respondents, 21 of 28, indicated that the lack of alternative attractive investment opportunities was the most or second most important driver of the increase in reserve balances over the summer. More than half of those same respondents, 17 of 28, indicated that a desire to conduct asset/liability matching, given a large inflow of deposits with potentially high runoff rates, was the most or second most important driver.

Questions on prospective demand for reserve balances. The first part of the third survey question asked how much the respondent expects their institution's average end-of-day reserve level in December 2020 to change relative to the average end-of-day reserve balance their institution held in August 2020. The majority of respondents, 44 of 80, expect stable reserve

⁷ For the most part, the instructions and survey questions presented in each table mirror the ones distributed to the respondents, with minor adjustments to enhance clarity. As not all respondents answered every question, the number of respondents answering each question is reported in the accompanying data tables.

levels from September to December 2020. Most foreign respondents do not expect their reserve levels to change, while most domestic banks expect their reserve levels to remain stable or decrease somewhat.

The second part of the third survey question asked respondents whether they expect to take actions to adjust the level or growth of their reserve balances and, if so, whether it would be actions to reduce or increase reserve balances. Roughly similar numbers of respondents expect to take actions to reduce either the level or growth of reserve balances (37 respondents) as to not take specific actions (43 respondents). No respondents indicated that they intend to take actions to increase either the level or growth of their reserve balances.

The third part of the third survey question asked the 37 respondents who expect their institution to take actions to reduce either the level or growth of their reserve balances to rank, in order of importance, the factors they anticipate could prompt their bank to take that action. Almost two-thirds of these survey respondents—23 of 37—indicated that concern about net interest margins will be the most or second most important factor driving them to take action. An increase in the expected return on alternative HQLA Level 1 investments relative to the IOER rate was cited as the most or second most important driver by 17 of 37 respondents.

The fourth part of the third survey question asked those same 37 respondents to rate the likelihood that their firm would pursue certain asset adjustment and liability adjustment actions, assuming that the constellation of short-term interest rates relative to the IOER rate observed over the past month (August) persists for a significant period. In order to decrease the level or growth of reserves, nearly two-thirds of these respondents indicated that they are likely or very likely to increase their holdings of non-Level 1 HQLA securities (for example, MBS or corporate bonds) or other Level 1 HQLA (for example, Treasury securities) or both. On the liability side, these respondents most commonly indicated that they are likely or very likely to allow outstanding term wholesale funding liabilities (for example, negotiable certificates of deposit or commercial paper) to mature without replacing them.

Part II: Intraday Credit

(Questions 4–5)

Questions on views on the Policy on Payment System Risk. On April 23, 2020, the Federal Reserve announced temporary changes to the administration of the Policy on Payment System Risk and encouraged depository institutions to use intraday credit to meet unexpected funding needs and support the flow of credit to households and businesses.

The fourth question asked respondents to characterize their bank's view on the use of intraday credit in light of these actions. The vast majority of respondents reported that the likelihood of their using intraday credit is unchanged (70 of 80 respondents).

The fifth question asked the 7 respondents who are more likely to consider intraday credit as a source to meet liquidity needs to rate the level of importance of four factors. Among that small group of respondents, the factor that was most often rated as important or very important was Fed communications encouraging the use of intraday credit.

Part III: Federal Reserve Facilities

(Questions 6–10)

Questions on the evolution of views on the discount window. On March 15, 2020, the Federal Reserve announced changes to the discount window and encouraged depository institutions to use the discount window to meet unexpected funding needs and support the flow of credit to households and businesses. The sixth question asked respondents to characterize their bank’s view on the discount window in light of these actions. Nearly one-third of respondents—26 of 80—indicated that they are more likely to consider the discount window as a source of liquidity.

The seventh question asked those respondents who are more likely to consider the discount window as a source to meet liquidity needs to rate the importance of five factors. Among the banks more likely to consider the discount window, the contributing factor most often rated as important or very important was Federal Reserve communications encouraging the use of the discount window to help meet the demand for credit from households and businesses.

Similarly, the eighth question asked respondents whose view was unchanged or who are less likely to consider the discount window as a source regardless of liquidity needs to rate the level of importance of three factors. Nearly two-thirds of those 54 respondents rated concern about disclosures as an important or very important factor.

Questions on participation in the Paycheck Protection Program Liquidity Facility. This section seeks to gather information about the Federal Reserve’s PPPLF, which provides term funding to institutions that are eligible to originate loans under the Small Business Administration’s PPP. The 9th question asked respondents whether their bank had originated or purchased loans authorized under the PPP. Thirty-eight of the 80 respondents have participated in the PPP.

The first part of the 10th question asked those 38 respondents who participated in the PPP (that is, answered “yes” to the 9th question) whether they had also participated in the PPPLF. The second part of the 10th question asked the 8 respondents who had also participated in the PPPLF to rate four factors that may have affected their decision to pledge PPP loans to the PPPLF. Over half of that small group of respondents pointed to the regulatory treatment of PPP loans pledged to the PPPLF for capital requirements (that is, exclusion of PPP loans pledged to the PPPLF from the leverage ratio) as an important or very important factor, and half pointed to the fact that the PPPLF offers funding that matches the maturity of underlying PPP loans.

The third part of the 10th question asked the 30 respondents who participated in the PPP (that is, answered “yes” to the 9th question) who had not participated in the PPPLF to rate three factors that may have affected their decision not to pledge PPP loans to the PPPLF. Almost half of those respondents—14 of 30—pointed to the availability of alternative funding sources at a lower cost relative to the PPPLF (for example, funding with core deposits) as an important or very important factor, and almost the same number of respondents—13 of 30—pointed to concerns over required borrower certifications. Many also noted in their written comments that they had sufficient liquidity to fund such loans.

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Results

The following results include the instructions provided to the survey respondents. Please note that percentages are based on the number of financial institutions that gave responses other than “not applicable.” Components may not sum to totals because of rounding. Themes or observations highlighted in written commentary may only be summarized when they are (1) not duplicative of answer options provided elsewhere in the question and (2) voiced by three or more respondents.

Part I: Current Reserve Balance Management Strategies and Practices

In response to the pandemic, starting in March 2020, the Federal Reserve began to take a number of actions to support the flow of credit to the real economy and the smooth functioning of critical financial markets. Increases in Federal Reserve assets lead to an increase in reserve balances in the banking system, all else being equal.⁸ The amount of reserve balances increased roughly \$1.4 trillion over March and April.

1. Question 1 is designed to learn about how this increase in reserve balances in the banking system may have affected individual banks’ reserve management decisionmaking and behavior.
 - A. Did your institution’s average end-of-day reserve balance for the period beginning on March 1 and ending April 30 increase relative to your institution’s average in February 2020? [Yes/No]

	All respondents	Domestic	Foreign
Yes	70	43	27
No	10	3	7
Total	80	46	34

If you answered “No” to question 1.A, please skip to question 2.

- B. If you answered “Yes” to question 1.A, please rank, in the order of their importance, the drivers that led to higher reserve balances at your institution during this time in the following table from 1 (least important) to 5 (most important). If an important driver for your institution is not listed, please provide it in the comment box.

⁸ See Jerome H. Powell (2020), “Current Economic Issues,” speech delivered at the Peterson Institute for International Economics, Washington, May 13, <https://www.federalreserve.gov/newsevents/speech/powell20200513a.htm>.

i. Lack of attractive alternative investment opportunities

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Least important)	11	16.4	5	11.6	6	25.0
2	18	26.9	8	18.6	10	41.7
3	19	28.4	13	30.2	6	25.0
4	11	16.4	9	20.9	2	8.3
5 (Most important)	8	11.9	8	18.6	0	.0
Total	67	100.0	43	100.0	24	100.0

Note: 3 respondents did not answer.

ii. Asset/liability matching given a large inflow of deposits with potentially high runoff rates

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Least important)	4	6.0	2	4.7	2	8.3
2	10	14.9	6	14.0	4	16.7
3	15	22.4	7	16.3	8	33.3
4	21	31.3	17	39.5	4	16.7
5 (Most important)	17	25.4	11	25.6	6	25.0
Total	67	100.0	43	100.0	24	100.0

Note: 3 respondents did not provide an answer.

iii. A need to be prepared for potential drawdowns on committed credit lines

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Least important)	6	9.0	5	11.6	1	4.2
2	2	3.0	1	2.3	1	4.2
3	10	14.9	10	23.3	0	.0
4	22	32.8	11	25.6	11	45.8
5 (Most important)	27	40.3	16	37.2	11	45.8
Total	67	100.0	43	100.0	24	100.0

Note: 3 respondents did not provide an answer.

iv. A need to provide a buffer against greater general operational uncertainty in a work-from-home environment

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Least important)	20	29.9	15	34.9	5	20.8
2	18	26.9	13	30.2	5	20.8
3	12	17.9	7	16.3	5	20.8
4	8	11.9	4	9.3	4	16.7
5 (Most important)	9	13.4	4	9.3	5	20.8
Total	67	100.0	43	100.0	24	100.0

Note: 3 respondents did not provide an answer.

v. Greater payment needs, such as those related to increased margin requirements

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Least important)	26	38.8	16	37.2	10	41.7
2	19	28.4	15	34.9	4	16.7
3	11	16.4	6	14.0	5	20.8
4	5	7.5	2	4.7	3	12.5
5 (Most important)	6	9.0	4	9.3	2	8.3
Total	67	100.0	43	100.0	24	100.0

Note: 3 respondents did not provide an answer.

Written responses did not generally coalesce around any particular theme.

2.

A. Did your firm's average end-of-day reserve balance position for August 2020 increase relative to the average end-of-day position beginning on March 1 and ending April 30? [Yes/No]

	All Respondents	Domestic	Foreign
Yes	28	26	2
No	52	20	32
Total	80	46	34

If you answered "No" to question 2.A, please skip to question 3.

B. If you answered "Yes" to question 2.A, please rank, in the order of their importance, the drivers that led to higher reserve balances at your institution during this time in the following table from 1 (least important) to 5 (most important). If an important driver for your institution is not listed, please provide it in the comment box.

i. Lack of attractive alternative investment opportunities

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Least important)	1	3.7	1	4.0	0	.0
2	2	7.4	1	4.0	1	50.0
3	3	11.1	2	8.0	1	50.0
4	5	18.5	5	20.0	0	.0
5 (Most important)	16	59.3	16	64.0	0	.0
Total	27	100.0	25	100.0	2	100.0

Note: 1 respondent did not provide an answer.

ii. Asset/liability matching given a large inflow of deposits with potentially high runoff rates

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Least important)	1	3.7	1	4.0	0	.0
2	4	14.8	3	12.0	1	50.0
3	5	18.5	5	20.0	0	.0
4	12	44.4	11	44.0	1	50.0
5 (Most important)	5	18.5	5	20.0	0	.0
Total	27	100.0	25	100.0	2	100.0

Note: 1 respondent did not provide an answer.

iii. A need to be prepared for an increase in consumer loan demand

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Least important)	1	3.7	1	4.0	0	.0
2	3	11.1	3	12.0	0	.0
3	14	51.9	13	52.0	1	50.0
4	8	29.6	7	28.0	1	50.0
5 (Most important)	1	3.7	1	4.0	0	.0
Total	27	100.0	25	100.0	2	100.0

Note: 1 respondent did not provide an answer.

- iv. A need to provide a buffer against greater general operational uncertainty in a work-from-home environment

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Least important)	4	14.8	4	16.0	0	.0
2	13	48.1	13	52.0	0	.0
3	5	18.5	5	20.0	0	.0
4	1	3.7	1	4.0	0	.0
5 (Most important)	4	14.8	2	8.0	2	100.0
Total	27	100.0	25	100.0	2	100.0

Note: 1 respondent did not provide an answer.

- v. Temporary changes to the supplementary leverage ratio calculation (that allows depository institutions to temporarily exclude reserves and Treasury securities) announced on May 15⁹

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Least important)	20	74.1	18	72.0	2	100.0
2	5	18.5	5	20.0	0	.0
3	0	.0	0	.0	0	.0
4	1	3.7	1	4.0	0	.0
5 (Most important)	1	3.7	1	4.0	0	.0
Total	27	100.0	25	100.0	2	100.0

Note: 1 respondent did not provide an answer.

Written responses did not generally coalesce around any particular theme.

3.

- A. By how much do you expect your institution's average end-of-day reserve level in December 2020 to change relative to the average end-of-day reserve balance your institution held in August 2020? For context, the results of the July Survey of Primary Dealers showed dealer expectations for substantial growth of the Federal Reserve's holdings of securities through the forecast horizon.¹⁰ All else being equal, these projections are consistent with continued growth of reserve balances in the banking system. (The sum of the medians of modal expectations for the monthly amount of net purchases of U.S. Treasury securities and agency MBS by dealers between the beginning of September and the end of December was \$480 billion.) (Select one.)

⁹ See Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, and Office of the Comptroller of the Currency (2020), "Regulatory Capital Rule: Temporary Exclusion of U.S. Treasury Securities and Deposits at Federal Reserve Banks from the Supplementary Leverage Ratio for Depository Institutions," interim final rule and request for comment (Docket No. R-1718), *Federal Register*, vol. 85 (June 1), pp. 32980–90, <https://www.federalregister.gov/d/2020-10962>. Under the interim final rule, a depository institution subsidiary of a U.S. global systemically important bank holding company or a depository institution subject to Category II or Category III capital standards (electing depository institutions) may elect to exclude deposits at Federal Reserve Banks and Treasury securities from the supplementary leverage ratio.

¹⁰ See Federal Reserve Bank of New York (2020), "Responses to Survey of Primary Dealers," survey results, <https://www.newyorkfed.org/medialibrary/media/markets/survey/2020/jul-2020-spd-results.pdf>.

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
I. A decrease of greater than 50%	5	6.3	5	10.9	0	.0
II. A decrease of between 26% and 50%	6	7.5	5	10.9	1	2.9
III. A decrease of between 6% and 25%	15	18.8	12	26.1	3	8.8
IV. Stable reserves (plus or minus 5%)	44	55.0	17	37.0	27	79.4
V. An increase of between 6% and 25%	9	11.3	6	13.0	3	8.8
VI. An increase of between 26% and 50%	1	1.3	1	2.2	0	.0
VII. An increase of greater than 50%	0	.0	0	.0	0	.0
Total	80	100.0	46	100.0	34	100.0

B. In reaching the reserve levels that you expected in question 3.A, do you expect your institution will (Select one.):

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
I. Take actions to reduce either the level or growth in your reserve balances	37	46.3	35	76.1	2	5.9
II. Not take specific actions to adjust the level or growth in your reserve balances	43	53.8	11	23.9	32	94.1
III. Take actions to increase either the level or growth in your reserve balances	0	.0	0	.0	0	.0
Total	80	100.0	46	100.0	34	100.0

If you answered II or III to question 3.B, please skip to question 4.

C. If you selected I in question 3.B, what factors do you anticipate could prompt your bank to seek to reduce the level or growth of your reserve balance position to reach the levels expected in question 3.A? Please rank, in the order of their importance, the factors from 1 (least important) to 6 (most important). If an important factor for your institution is not listed, please provide it in the comment box.

i. An assessment that the existing deposit base will have lower runoff rates than is currently expected

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Least important)	2	5.4	2	5.7	0	.0
2	5	13.5	4	11.4	1	50.0
3	7	18.9	7	20.0	0	.0
4	10	27.0	10	28.6	0	.0
5	6	16.2	5	14.3	1	50.0
6 (Most important)	7	18.9	7	20.0	0	.0
Total	37	100.0	35	100.0	2	100.0

ii. An increase in the expected return on alternative HQLA Level 1 investments relative to IOER

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Least important)	9	24.3	9	25.7	0	.0
2	1	2.7	1	2.9	0	.0
3	4	10.8	4	11.4	0	.0
4	6	16.2	6	17.1	0	.0
5	7	18.9	7	20.0	0	.0
6 (Most important)	10	27.0	8	22.9	2	100.0
Total	37	100.0	35	100.0	2	100.0

iii. Expected resumption of loan demand from creditworthy borrowers

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Least important)	3	8.1	3	8.6	0	.0
2	10	27.0	10	28.6	0	.0
3	11	29.7	9	25.7	2	100.0
4	5	13.5	5	14.3	0	.0
5	2	5.4	2	5.7	0	.0
6 (Most important)	6	16.2	6	17.1	0	.0
Total	37	100.0	35	100.0	2	100.0

iv. An increase in the certainty of expected loan performance

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Least important)	10	27.0	8	22.9	2	100.0
2	14	37.8	14	40.0	0	.0
3	8	21.6	8	22.9	0	.0
4	2	5.4	2	5.7	0	.0
5	3	8.1	3	8.6	0	.0
6 (Most important)	0	.0	0	.0	0	.0
Total	37	100.0	35	100.0	2	100.0

v. A desire to preserve or decrease balance sheet size

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Least important)	11	29.7	11	31.4	0	.0
2	3	8.1	2	5.7	1	50.0
3	4	10.8	4	11.4	0	.0
4	9	24.3	9	25.7	0	.0
5	7	18.9	6	17.1	1	50.0
6 (Most important)	3	8.1	3	8.6	0	.0
Total	37	100.0	35	100.0	2	100.0

vi. Concern about net interest margins

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Least important)	2	5.4	2	5.7	0	.0
2	4	10.8	4	11.4	0	.0
3	3	8.1	3	8.6	0	.0
4	5	13.5	3	8.6	2	100.0
5	12	32.4	12	34.3	0	.0
6 (Most important)	11	29.7	11	31.4	0	.0
Total	37	100.0	35	100.0	2	100.0

Written responses did not generally coalesce around any particular theme.

- D. If you selected I in question 3.B, please rate the asset adjustment and liability adjustment actions in the following table by the likelihood that your firm would pursue the action on a scale of 1 (very unlikely) to 5 (very likely). If the action is not applicable to your firm (for example, your firm does not engage in the described activity), please select “N/A.”

For the purposes of this question, please assume that the constellation of short-term interest rates relative to the IOER rate observed over the past month (August) persists for a significant period.

Asset adjustment actions

- i. Increase lending in short-term unsecured money markets (for example, fed funds)

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Very unlikely)	19	67.9	18	66.7	1	100.0
2	5	17.9	5	18.5	0	.0
3	2	7.1	2	7.4	0	.0
4	0	.0	0	.0	0	.0
5 (Very likely)	2	7.1	2	7.4	0	.0
Total	28	100.0	27	100.0	1	100.0

Note: 9 respondents provided an answer of N/A.

ii. Increase lending in short-term secured money markets (for example, reverse repurchase agreements against Treasury securities)

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Very unlikely)	8	24.2	8	25.8	0	.0
2	8	24.2	8	25.8	0	.0
3	4	12.1	4	12.9	0	.0
4	5	15.2	4	12.9	1	50.0
5 (Very likely)	8	24.2	7	22.6	1	50.0
Total	33	100.0	31	100.0	2	100.0

Note: 4 respondents provided an answer of N/A.

iii. Increase holdings of other Level 1 HQLA (for example, Treasury securities)

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Very unlikely)	4	10.8	4	11.4	0	.0
2	6	16.2	6	17.1	0	.0
3	4	10.8	4	11.4	0	.0
4	11	29.7	9	25.7	2	100.0
5 (Very likely)	12	32.4	12	34.3	0	.0
Total	37	100.0	35	100.0	2	100.0

iv. Increase holdings of non-Level 1 HQLA securities (for example, mortgage-backed securities or corporate bonds)

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Very unlikely)	3	8.8	2	6.1	1	100.0
2	2	5.9	2	6.1	0	.0
3	5	14.7	5	15.2	0	.0
4	10	29.4	10	30.3	0	.0
5 (Very likely)	14	41.2	14	42.4	0	.0
Total	34	100.0	33	100.0	1	100.0

Note: 3 respondents provided an answer of N/A.

v. Increase holdings of other non-HQLA assets

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Very unlikely)	10	30.3	9	29.0	1	50.0
2	3	9.1	3	9.7	0	.0
3	8	24.2	7	22.6	1	50.0
4	6	18.2	6	19.4	0	.0
5 (Very likely)	6	18.2	6	19.4	0	.0
Total	33	100.0	31	100.0	2	100.0

Note: 4 respondents provided an answer of N/A.

vi. Other

Written responses did not generally coalesce around any particular theme.

Liability adjustment actions

vii. Decrease advances from FHLBs (“N/A” for banks that are not FHLB members)

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Very unlikely)	5	20.0	5	20.0	0	.0
2	3	12.0	3	12.0	0	.0
3	2	8.0	2	8.0	0	.0
4	0	.0	0	.0	0	.0
5 (Very likely)	15	60.0	15	60.0	0	.0
Total	25	100.0	25	100.0	0	.0

Note: 12 respondents provided an answer of N/A.

viii. Decrease retail deposit base by offering lower rates

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Very unlikely)	9	26.5	9	26.5	0	.0
2	3	8.8	3	8.8	0	.0
3	6	17.6	6	17.6	0	.0
4	9	26.5	9	26.5	0	.0
5 (Very likely)	7	20.6	7	20.6	0	.0
Total	34	100.0	34	100.0	0	.0

Note: 3 respondents provided an answer of N/A.

ix. Decrease overnight wholesale liabilities by offering lower rates

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Very unlikely)	5	20.0	5	21.7	0	.0
2	2	8.0	2	8.7	0	.0
3	4	16.0	4	17.4	0	.0
4	7	28.0	6	26.1	1	50.0
5 (Very likely)	7	28.0	6	26.1	1	50.0
Total	25	100.0	23	100.0	2	100.0

Note: 12 respondents provided an answer of N/A.

- x. Allow outstanding term wholesale funding liabilities (for example, negotiable certificates of deposit or commercial paper) to mature without replacing them

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Very unlikely)	3	9.4	3	10.0	0	.0
2	0	.0	0	.0	0	.0
3	1	3.1	1	3.3	0	.0
4	9	28.1	8	26.7	1	50.0
5 (Very likely)	19	59.4	18	60.0	1	50.0
Total	32	100.0	30	100.0	2	100.0

Note: 5 respondents provided an answer of N/A.

- xi. Decrease wholesale deposit base by imposing fees on balances

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Very unlikely)	15	62.5	15	62.5	0	.0
2	3	12.5	3	12.5	0	.0
3	3	12.5	3	12.5	0	.0
4	2	8.3	2	8.3	0	.0
5 (Very likely)	1	4.2	1	4.2	0	.0
Total	24	100.0	24	100.0	0	.0

Note: 13 respondents provided an answer of N/A.

- xii. Other

Written responses did not generally coalesce around any particular theme.

Part II: Intraday Credit

4. On April 23, 2020, the Federal Reserve announced temporary changes to the administration of the Policy on Payment System Risk and encouraged depository institutions to use intraday credit to meet unexpected funding needs and support the flow of credit to households and businesses. In light of these actions, how would you characterize your bank's view on use of intraday credit (Select one.):

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
I. More likely to consider intraday credit as a source to meet liquidity needs	7	8.8	5	10.9	2	5.9
II. Unchanged	70	87.5	40	87.0	30	88.2
III. Less likely to consider intraday credit as a source, regardless of liquidity needs	3	3.8	1	2.2	2	5.9
Total	80	100.0	46	100.0	34	100.0

If you answered II or III to question 4, please skip to question 6.

5. If you answered I to question 4, please rate the following factors on a scale of 1 (not important) to 5 (very important). If the factor is not applicable to your bank, please select “N/A.”

i. Federal Reserve communications encouraging the use of intraday credit

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Not important)	1	14.3	1	20.0	0	.0
2	0	.0	0	.0	0	.0
3	0	.0	0	.0	0	.0
4	1	14.3	1	20.0	0	.0
5 (Very important)	5	71.4	3	60.0	2	100.0
Total	7	100.0	5	100.0	2	100.0

ii. Suspension of uncollateralized intraday credit limits (net debit caps)

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Not important)	0	.0	0	.0	0	.0
2	2	28.6	2	40.0	0	.0
3	2	28.6	1	20.0	1	50.0
4	2	28.6	1	20.0	1	50.0
5 (Very important)	1	14.3	1	20.0	0	.0
Total	7	100.0	5	100.0	2	100.0

iii. Waiver of daylight overdraft fees for institutions that are eligible for the primary credit program

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Not important)	1	14.3	1	20.0	0	.0
2	1	14.3	1	20.0	0	.0
3	4	57.1	3	60.0	1	50.0
4	1	14.3	0	.0	1	50.0
5 (Very important)	0	.0	0	.0	0	.0
Total	7	100.0	5	100.0	2	100.0

- iv. Streamlined procedure for secondary credit institutions to request collateralized intraday credit (max caps)

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Not important)	1	25.0	1	33.3	0	.0
2	1	25.0	0	.0	1	100.0
3	1	25.0	1	33.3	0	.0
4	1	25.0	1	33.3	0	.0
5 (Very important)	0	.0	0	.0	0	.0
Total	4	100.0	3	100.0	1	100.0

Note: 3 respondents provided an answer of N/A.

Part III: Federal Reserve Facilities

Discount Window

6. On March 15, the Federal Reserve announced changes to the discount window and encouraged depository institutions to use the discount window to meet unexpected funding needs and support the flow of credit to households and businesses.¹¹ In light of these actions, how would you characterize your bank's view on the discount window (Select one.):

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
I. More likely to consider the discount window as a source to meet liquidity needs	26	32.5	15	32.6	11	32.4
II. Unchanged	52	65.0	30	65.2	22	64.7
III. Less likely to consider the discount window as a source, regardless of liquidity need	2	2.5	1	2.2	1	2.9
Total	80	100.0	46	100.0	34	100.0

7. If you answered I to question 6, please rate the following factors on a scale of 1 (not important) to 5 (very important) in explaining your answer. If the factor is not applicable to your bank, please select "N/A." If an important factor for your institution is not listed, please provide it in the comment box.

¹¹ Board of Governors of the Federal Reserve System (2020), "Federal Reserve Actions to Support the Flow of Credit to Households and Businesses," press release, March 15, <https://www.federalreserve.gov/newsevents/pressreleases/monetary20200315b.htm>.

i. Federal Reserve communications encouraging the use of the discount window to help meet the demand for credit from households and businesses

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Not important)	0	.0	0	.0	0	.0
2	1	3.8	1	6.7	0	.0
3	3	11.5	2	13.3	1	9.1
4	4	15.4	3	20.0	1	9.1
5 (Very important)	18	69.2	9	60.0	9	81.8
Total	26	100.0	15	100.0	11	100.0

ii. Increase in the term of primary credit to allow depository institutions to borrow for up to 90 days

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Not important)	2	7.7	2	13.3	0	.0
2	1	3.8	1	6.7	0	.0
3	8	30.8	5	33.3	3	27.3
4	11	42.3	5	33.3	6	54.5
5 (Very important)	4	15.4	2	13.3	2	18.2
Total	26	100.0	15	100.0	11	100.0

iii. Regulatory treatment of primary credit with long tenors in liquidity ratios

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Not important)	3	12.5	2	13.3	1	11.1
2	5	20.8	3	20.0	2	22.2
3	6	25.0	3	20.0	3	33.3
4	7	29.2	5	33.3	2	22.2
5 (Very important)	3	12.5	2	13.3	1	11.1
Total	24	100.0	15	100.0	9	100.0

Note: 2 respondents did not provide an answer.

iv. Decrease in the primary credit rate in March and the setting of the rate at the top of the target range for the federal funds rate

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Not important)	5	19.2	2	13.3	3	27.3
2	6	23.1	5	33.3	1	9.1
3	8	30.8	4	26.7	4	36.4
4	6	23.1	3	20.0	3	27.3
5 (Very important)	1	3.8	1	6.7	0	.0
Total	26	100.0	15	100.0	11	100.0

- v. Change in the way discount window loans are presented on the H.4.1 report to provide greater anonymity

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Not important)	5	20.0	3	20.0	2	20.0
2	6	24.0	1	6.7	5	50.0
3	3	12.0	3	20.0	0	.0
4	7	28.0	4	26.7	3	30.0
5 (Very important)	4	16.0	4	26.7	0	.0
Total	25	100.0	15	100.0	10	100.0

Note: 1 respondent did not provide an answer.

Written responses did not generally coalesce around any particular theme.

8. If you answered II or III to question 6, please rate factors on a scale of 1 (not important) to 5 (very important). If the factor is not applicable to your bank, please select “N/A.” If an important factor for your institution is not listed, please provide it in the comment box.

- i. Concerns about disclosures

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Not important)	3	6.3	3	10.7	0	.0
2	5	10.4	4	14.3	1	5.0
3	7	14.6	4	14.3	3	15.0
4	12	25.0	4	14.3	8	40.0
5 (Very important)	21	43.8	13	46.4	8	40.0
Total	48	100.0	28	100.0	20	100.0

Note: 6 respondents did not provide an answer.

- ii. 90-day tenor not sufficient to meet liquidity needs

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Not important)	27	61.4	16	64.0	11	57.9
2	11	25.0	6	24.0	5	26.3
3	4	9.1	2	8.0	2	10.5
4	1	2.3	0	.0	1	5.3
5 (Very important)	1	2.3	1	4.0	0	.0
Total	44	100.0	25	100.0	19	100.0

Note: 10 respondents did not provide an answer.

iii. Rate not sufficiently attractive relative to other funding sources

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Not important)	17	37.0	11	42.3	6	30.0
2	7	15.2	3	11.5	4	20.0
3	13	28.3	5	19.2	8	40.0
4	5	10.9	4	15.4	1	5.0
5 (Very important)	4	8.7	3	11.5	1	5.0
Total	46	100.0	26	100.0	20	100.0

Note: 8 respondents did not provide an answer.

About 25 percent of the respondents who provided written feedback on this question (6 of 20) indicated that perceived stigma associated with borrowing from the discount window and/or the view of the Federal Reserve as a lender of last resort was an important factor. Four respondents indicated that they simply had sufficient existing liquidity and therefore have no need to borrow from the discount window. Three respondents indicated that they would use the discount window if necessary.

Paycheck Protection Program Liquidity Facility

This section seeks to gather information about the Federal Reserve's Paycheck Protection Program Liquidity Facility (PPPLF), which provides term funding to institutions that are eligible to originate loans under the Small Business Administration's Paycheck Protection Program (PPP).¹² While the PPPLF has been established to bolster the effectiveness of the PPP by supplying liquidity to participating financial institutions through term financing backed by PPP loans, the PPPLF and PPP are distinct programs.

The Federal Reserve is *not* involved in the administration of the PPP, and questions 9 and 10 of this survey are not intended to solicit views about the PPP.

9. Has your bank originated loans or purchased loans authorized under the PPP? [Yes/No]

	All Respondents	Domestic	Foreign
Yes	38	37	1
No	42	9	33
Total	80	46	34

¹² See Board of Governors of the Federal Reserve System (2020), "Paycheck Protection Program Liquidity Facility (PPPLF)," webpage, <https://www.federalreserve.gov/monetarypolicy/ppplf.htm>.

10.

A. If you answered “Yes” to question 9, have you participated in the PPPLF? [Yes/No]

	All Respondents	Domestic	Foreign
Yes	8	8	0
No	30	29	1
Total	38	37	1

If you answered “Yes” to question 10.A, please answer question 10.B only. If you answered “No” to question 10.A, please answer question 10.C only.

B. If you answered “Yes” to question 9 and you have participated in the PPPLF, please rate factors affecting your decision to pledge PPP loans to the PPPLF on a scale of 1 (not important) to 5 (very important). If the factor is not applicable to your bank, please select “N/A.” If an important factor for your institution is not listed, please provide it in the comment box.

i. PPPLF offers attractive rate relative to alternative funding sources

	All respondents		Domestic	
	Banks	Percent	Banks	Percent
1 (Not important)	3	37.5	3	37.5
2	3	37.5	3	37.5
3	1	12.5	1	12.5
4	0	.0	0	.0
5 (Very important)	1	12.5	1	12.5
Total	8	100.0	8	100.0

ii. PPPLF offers funding that matches the maturity of underlying PPP loans

	All respondents		Domestic	
	Banks	Percent	Banks	Percent
1 (Not important)	1	12.5	1	12.5
2	0	.0	0	.0
3	3	37.5	3	37.5
4	2	25.0	2	25.0
5 (Very important)	2	25.0	2	25.0
Total	8	100.0	8	100.0

- iii. Regulatory treatment of PPP loans pledged to the PPPLF for capital requirements¹³ (that is, exclusion of PPP loans pledged to the PPPLF from the leverage ratio)

	All respondents		Domestic	
	Banks	Percent	Banks	Percent
1 (Not important)	2	25.0	2	25.0
2	0	.0	0	.0
3	1	12.5	1	12.5
4	1	12.5	1	12.5
5 (Very important)	4	50.0	4	50.0
Total	8	100.0	8	100.0

- iv. Regulatory treatment of PPP loans pledged to the PPPLF for liquidity requirements¹⁴ (that is, favorable treatment in the liquidity coverage ratio)

	All respondents		Domestic	
	Banks	Percent	Banks	Percent
1 (Not important)	4	50.0	4	50.0
2	1	12.5	1	12.5
3	1	12.5	1	12.5
4	1	12.5	1	12.5
5 (Very important)	1	12.5	1	12.5
Total	8	100.0	8	100.0

Written responses did not generally coalesce around any particular theme.

- C. If you answered “Yes” to question 9 but have not participated in the PPPLF, please rate factors affecting your decision not to pledge PPP loans to the PPPLF on a scale of 1 (not important) to 5 (very important). If the factor is not applicable to your bank, please select “N/A.” If an important factor for your institution is not listed, please provide it in the comment box.

¹³ See Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, and Office of the Comptroller of the Currency (2020), “Regulatory Capital Rule: Paycheck Protection Program Lending Facility and Paycheck Protection Program Loans,” interim final rule and request for comment (Docket No. R-1712), *Federal Register*, vol. 85 (April 13), pp. 20387–94.

¹⁴ See Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, and Office of the Comptroller of the Currency (2020), “Liquidity Coverage Ratio Rule: Treatment of Certain Emergency Facilities,” interim final rule and request for comment (Docket No. R-1717), *Federal Register*, vol. 85 (May 6), pp. 32980–90.

- i. Alternative funding sources are lower cost relative to the PPPLF (for example, funding with core deposits)

	All respondents		Domestic	
	Banks	Percent	Banks	Percent
1 (Not important)	3	12.0	3	12.0
2	0	.0	0	.0
3	8	32.0	8	32.0
4	1	4.0	1	4.0
5 (Very important)	13	52.0	13	52.0
Total	25	100.0	25	100.0

- ii. Federal Reserve's disclosure policy

	All respondents		Domestic	
	Banks	Percent	Banks	Percent
1 (Not important)	9	36.0	9	36.0
2	3	12.0	3	12.0
3	8	32.0	8	32.0
4	3	12.0	3	12.0
5 (Very important)	2	8.0	2	8.0
Total	25	100.0	25	100.0

- iii. The PPPLF borrower certification requirements¹⁵

	All respondents		Domestic	
	Banks	Percent	Banks	Percent
1 (Not important)	7	28.0	7	28.0
2	3	12.0	3	12.0
3	2	8.0	2	8.0
4	7	28.0	7	28.0
5 (Very important)	6	24.0	6	24.0
Total	25	100.0	25	100.0

The majority of respondents who provided written comments indicated that they had sufficient liquidity to fund their PPP loans.

¹⁵ PPPLF participants are required to certify that they are not insolvent and that they cannot obtain adequate credit accommodations from other banking institutions.