March 2021
Senior Financial Officer Survey

Board of Governors of the Federal Reserve System

Summary

In March 2021, the Federal Reserve conducted a Senior Financial Officer Survey (SFOS) to gather views systematically from a number of banks on reserve management experiences in recent months and about expectations for reserve and balance sheet management in the months ahead. In addition, the survey gathered views on certain Federal Reserve liquidity facilities and included new questions on wholesale funding market activity and the potential for additional investment in high-quality liquid assets (HQLA).

As in previous surveys, the banks sampled in the March SFOS represented a wide range of asset sizes and business models. The survey panel comprised 49 domestic banks and 31 foreign banking organizations (FBOs), which, in aggregate, held roughly three-fourths of total reserve balances in the banking system at the time of the survey.[1] The Federal Reserve distributed the survey to senior financial officers at these banks on March 19, 2021, with replies due by April 2, 2021.[2] Responses were received from all 80 banks.

Key takeaways from the survey included the following:

- About 40 percent of respondents whose bank had participated in the September 2020 SFOS reported their bank's average end-of-day reserve balance level grew between August and December 2020 by more than the expectations they reported in the earlier survey. Among these respondents, a larger-than-expected deposit inflow was by far the factor most commonly cited as the most or second most important driver that led to the greater-than-expected reserve balances.
- Almost 40 percent of respondents expect their bank's average end-of-day reserve level in June 2021 to be stable relative to the level in February 2021. The remaining respondents were roughly evenly split between those who expect their bank's reserve balances to increase and those who expect balances to decrease.
    - —One-half of the respondents expect their bank would take no specific actions to adjust the level or growth of its reserve balances to reach the expected level in June, while a slightly smaller number of respondents expect their bank to take actions to reduce either the level or growth of its reserve balances.
- One-third of respondents reported their bank is already taking action to limit the size of its balance sheet and expect their bank to continue to do so. Another one-third reported their bank would take action to preserve or reduce the size of its balance sheet if it grew. The remaining respondents reported their bank would not limit the size of its balance sheet regardless of growth.
    - —Among the two-thirds of respondents who reported their bank is limiting, or would limit under certain growth assumptions, the size of its balance sheet, almost half rated net interest margin pressure and return on assets as important or very important factors in that decision. These same respondents cited allowing outstanding wholesale funding liabilities to mature without replacement and reducing deposit rates on non-operational

1 The FBOs 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 to similarly sized domestic banks.

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

deposits as the most likely liability adjustments that would be used to reduce the level or growth of the balance sheet.

- About one-fourth of respondents reported their bank would increase overnight unsecured borrowing if short-term interest rates fell relative to the interest on excess reserves (IOER) rate. The remaining respondents reported their bank either did not engage in such borrowing or would not increase its borrowing even if short-term interest rates fell more than 10 basis points relative to the IOER rate.
- A large majority of respondents indicated their bank would be willing to borrow discount window primary credit only if other funding sources became less available due to market-wide conditions.
- Some respondents reported that the availability of funding from the Paycheck Protection Program Liquidity Facility (PPPLF) has increased the willingness or ability of their bank—including some banks that have not participated in the PPPLF—to make Paycheck Protection Program (PPP) loans.

The remainder of this summary is organized into three parts that reflect the structure of the survey, and the summary is followed by a detailed tabular presentation of responses.[3]

Part I: Reserve Balance Management Strategies and Practices

(Questions 1–3)

Questions on reserve balance levels. The first two questions in Part I asked respondents about increases in their bank's average end-of-day reserve balances and the factors driving those increases.

The first part of the first question, answered only by the 76 respondents whose bank also participated in the September 2020 SFOS, asked how their bank's average end-of-day reserve balance level in December 2020 changed relative to the level in August 2020 and how their firm's experiences compared with the expectations they expressed in the earlier survey. Of these respondents, 31—about 40 percent—reported their bank's actual average end-of-day reserve balance level grew by more than they predicted in the September SFOS. Domestic bank respondents were much more likely than FBO respondents to report their bank's reserves had grown by more than expected.

In the second part of the first question, the 31 respondents who reported their bank's reserves grew by more than they predicted in the September SFOS were asked to rank, in order of importance, the drivers that lead to the higher-than-expected growth. Of these respondents, 80 percent (25 of the 31) reported that a larger-than-expected deposit inflow was the most or second most important driver. Of these same respondents, 14—about 45 percent—indicated that a lack of attractive alternative investments relative to previous expectations was the most or second most important driver, while 12—about 40 percent—cited lower-than-expected deposit runoff rates.

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3 For the most part, the instructions and survey questions presented in each table are the same as 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.

The first part of the second question asked by how much respondents expect their bank's average end-of-day reserve level in June 2021 to change relative to the average end-of-day reserve balance in February 2021.[4] About 40 percent of respondents (31 of 80) expect their bank to maintain stable reserve levels over this period, and the remaining respondents were evenly split between those who expect an increase in reserve balances and those who expect a decrease. FBO respondents were much more likely than domestic bank respondents to report that they expect their bank's reserves to remain stable.

In the second part of the question, respondents were asked how they expect their bank to reach the reserve level predicted in the first part of the question. Half of the respondents—including a large majority of the FBO respondents—expect their bank would take no specific actions to adjust the level or growth of its reserve balances. A slightly smaller number of respondents (36 of 80) expect their bank to take actions to reduce either the level or growth of its reserve balances, while only a few respondents expect their bank to take actions to increase reserves.

The third part of the second question asked the 36 respondents who expect their bank to take actions to reduce the level or growth of its reserve balances to rank, in order of importance, the factors that could prompt their bank to seek to do so. More than half of these respondents (20 of the 36) reported that concern over net interest margins was the most or second most important factor, and nearly as many cited an increase in the expected return of alternative HQLA Level 1 investments relative to the IOER rate.[5]

As the responses to the first three parts of the second question may depend on the outlook for short-term interest rates, the fourth part of the question asked respondents to characterize their bank's assumptions for the constellation of short-term rates relative to the IOER rate. A little more than half of the respondents reported that the constellation of short-term interest rates relative to the IOER rate does not meaningfully affect their bank's outlook for reserve management in the next few months. In addition, more than one-third expect the constellation to remain, on average, the same as in February 2021. Only a few respondents whose bank's outlook for reserve management is meaningfully affected by the constellation of short-term interest rates expect those rates to decrease or increase.

Question on balance sheet expansion. The third question in Part I asked respondents about their institution's entire balance sheet and about the way their institution may react if its balance sheet expanded over the next several months.

The first part of the third question asked for the level of growth at which the respondent's institution would take action to preserve or reduce the size of its balance sheet relative to the size on December 31, 2020. One-third of respondents (27 of 80) reported that their institution is already taking action to limit the size of its balance sheet and that they expect their institution to continue to limit the size of the balance sheet regardless of the level of balance sheet growth, while another one-third (27 of 80) reported that their institution would take

4 To provide additional context for respondents, the survey question referenced the results of the Federal Reserve's January 2021 Survey of Primary Dealers, which showed dealer expectations that the Federal Reserve would purchase on net an additional $480 billion of U.S. Treasury securities and agency mortgage-backed securities between the beginning of March and the end of June 2021. This projection would be, all else being equal, consistent with continued growth of reserves in the banking system.

5 Level 1 HQLA are defined in section 249.20 of Regulation WW (Liquidity Risk Measurements Standards).

action to limit the size of its balance sheet if it grew. The remaining respondents reported that their institution would not take action to limit the size of its balance sheet.

In the second part of the question, the 54 respondents who reported their bank is limiting, or would limit under certain growth assumptions, the size of its balance sheet were asked to rate the factors that would prompt their bank to seek to reduce its balance sheet. Net interest margin pressure and return on assets were rated as important or very important by almost half of the respondents (26 of 54 and 25 of 54, respectively), while regulatory factors were less often cited as important or very important.

The third part of the third question asked the same 54 respondents who answered the previous part of the question to rate the likelihood that their bank would use specific liability adjustments to reduce the level or growth of its balance sheet if warranted. Among these respondents, the most likely adjustments are allowing outstanding wholesale funding liabilities to mature without replacement, cited as "very likely" by 30 respondents, and reducing deposit rates on non-operational deposits, cited as very likely by 29 respondents.

Part II: Overnight Wholesale Funding Market Activity

(Questions 4–5)

Questions on considerations that motivate banks' activity in overnight wholesale funding markets. Respondents were asked to explain the considerations that motivate their bank's activity in overnight wholesale funding markets such as those for federal funds, Eurodollars, and repurchase agreements (repos).[6]

The fourth question asked respondents to provide the approximate additional volume of overnight unsecured borrowing their institution would conduct if short-term interest rates fell relative to the IOER rate. Banks earn the IOER rate on reserves, and a decline in short-term borrowing rates relative to the IOER rate would, all else being equal, permit banks to earn greater amounts by borrowing at the lower rates and holding the proceeds as reserves. Twenty-five respondents reported their bank does not engage in overnight unsecured borrowing. Of the remaining 55 respondents, 21 indicated their bank would increase such borrowing if the overnight bank funding rate (OBFR), a representative short-term interest rate, fell relative to the IOER rate. However, the remaining 34 respondents reported their bank would not increase such borrowing even if the IOER–OBFR rate spread widened more than 10 basis points.

As noted earlier, banks earn the IOER rate on reserves. The fifth question asked respondents for the level of returns, measured as the spread over the IOER rate, that would be needed for their institution to invest in certain high-quality assets including short- and longer-dated Treasury securities and overnight reverse repurchase agreements collateralized by such securities (Treasury reverse repos). A large majority of respondents (66 of 80) reported that their institution would be willing to invest in Treasury reverse repos at spreads of 0 to 10 basis points above the IOER rate, and a smaller majority (47 of 80) reported that their institution would be willing to invest in short-dated Treasury securities (defined as those with remaining maturity of one year or less) at the same spreads. The returns required to induce investment in longer-term Treasury securities were generally much higher. In particular, of the respon-

[6] Respondents whose banks are affiliated with a broker-dealer were instructed to not include the normal financing activity of the broker-dealer for the purposes of the questions.

dents who reported their bank's willingness to invest in longer-dated Treasury securities (defined as those with remaining maturity of greater than five years), a majority (36 of 56) indicated that a spread of more than 50 basis points over the IOER rate would be needed.

Part III: Federal Reserve Facilities

(Questions 6–9)

Question on banks' view of the discount window. In March 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 of the survey asked respondents to characterize their bank's willingness to borrow discount window primary credit under its existing terms. While a small number of respondents (7 of 80) reported that their bank would be willing to borrow primary credit if other funding sources are more expensive, twice as many reported willingness to borrow only if other funding sources became less available due to a firm-specific strain, and a large majority (50 of 80) of respondents' banks would be willing to borrow only if other funding sources became less available due to market-wide conditions.

Questions on participation in the Paycheck Protection Program Liquidity Facility. The survey's final three questions gathered 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 seventh question asked respondents whether their bank had originated or purchased loans authorized under the PPP. Of the 80 respondents, 44 reported their bank had done so. Almost all respondents who reported participation in the PPP are from domestic banks.

The eighth question asked those 44 respondents whose bank participated in the PPP to describe their bank's view of the PPPLF. Of these respondents, 13—30 percent—reported their bank has borrowed from the PPPLF, and of these, 4 indicated that the availability of funding from the PPPLF increased or was essential to their bank's willingness or ability to make PPP loans. Among the 31 respondents whose bank has made PPP loans but has not participated in the PPPLF, 4 reported that the availability of funding from the PPPLF increased their bank's willingness or ability to make PPP loans even though their bank did not take advantage of it.

The ninth question asked those respondents whose bank participated in the PPPLF in 2020 but has not taken out PPPLF advances collateralized by PPP loans made in 2021 for the reasons for their decisions regarding the PPPLF in 2021. All eight respondents who replied to this question indicated that lower funding needs than in 2020 were an important or very important factor in their bank's decision.

This document was prepared by Courtney Demartini, Lyle Kumasaka, Matthew Malloy, and Abigail Roberts, Division of Monetary Affairs, Board of Governors of the Federal Reserve System; and Samuel Kanson-Benanav, Roseanna Levy, Jason Miu, and Anna Tikonoff, Federal Reserve Bank of New York.

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) indicated by three or more respondents.

Part I: Reserve Balance Management Strategies and Practices

The September 2020 SFOS asked respondents about their expectations for how their individual firm's average end-of-day reserve balance level in December 2020 would change relative to their firm's average end-of-day reserve balance level in August 2020.[7] Question 1 asks respondents about this period and how their experiences compared to expectations expressed in the September 2020 SFOS.

If you did not participate in the September 2020 SFOS, please skip to question 2.

1.

A. Did your institution's actual average end-of-day reserve balance level grow between August and December 2020 by more than your firm's expectations reported in question 3.A of the September 2020 SFOS? [yes/no]

	All respondents	Domestic	Foreign
Yes	31	24	7
No	45	21	24
Total	76	45	31

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 greater average end-of-day reserve balances in December relative to your expectations from those listed in the following table from 1 (least important) to 5 (most important). If an important driver is not listed, please indicate in the comment box.

7 See September 2020 Senior Financial Officer Survey, available: https://www.federalreserve.gov/data/sfos/sep-2020-senior-financial-officer-survey.htm.

i. Lack of attractive alternative investment opportunities relative to my firm's expectations

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Least important)	3	9.7	2	8.3	1	14.3
2	7	22.6	6	25.0	1	14.3
3	7	22.6	7	29.2	0	0.0
4	7	22.6	6	25.0	1	14.3
5 (Most important)	7	22.6	3	12.5	4	57.1
Total	31	100.0	24	100.0	7	100.0

ii. A larger inflow of deposits relative to my firm's expectations

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Least important)	1	3.2	1	4.2	0	0.0
2	0	0.0	0	0.0	0	0.0
3	5	16.1	3	12.5	2	28.6
4	5	16.1	2	8.3	3	42.9
5 (Most important)	20	64.5	18	75.0	2	28.6
Total	31	100.0	24	100.0	7	100.0

iii. My firm's deposit base had a lower runoff rate than expected

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Least important)	7	22.6	4	16.7	3	42.9
2	7	22.6	7	29.2	0	0.0
3	5	16.1	2	8.3	3	42.9
4	10	32.3	9	37.5	1	14.3
5 (Most important)	2	6.5	2	8.3	0	0.0
Total	31	100.0	24	100.0	7	100.0

iv. Actual loan demand during this period was smaller than expected

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Least important)	2	6.5	2	8.3	0	0.0
2	11	35.5	6	25.0	5	71.4
3	11	35.5	10	41.7	1	14.3
4	7	22.6	6	25.0	1	14.3
5 (Most important)	0	0.0	0	0.0	0	0.0
Total	31	100.0	24	100.0	7	100.0

v. A need to provide a larger buffer against general economic or operational uncertainty relative to my firm's expectations

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Least important)	18	58.1	15	62.5	3	42.9
2	6	19.4	5	20.8	1	14.3
3	3	9.7	2	8.3	1	14.3
4	2	6.5	1	4.2	1	14.3
5 (Most important)	2	6.5	1	4.2	1	14.3
Total	31	100.0	24	100.0	7	100.0

Written responses generally reinforced or elaborated on views that had already been expressed.

2. Question 2 asks about your institution's expectations for how its reserve balance position may change over the next several months. For context, the results of the January Survey of Primary Dealers showed dealer expectations for the total amount of the Federal Reserve's net purchases of U.S. Treasury securities and agency MBS by dealers between the beginning of March to the end of June 2021 was $480 billion.[8] All else equal, these projections are consistent with continued growth of reserve balances in the banking system.

   A. By how much do you expect your institution's average end-of-day reserve level in June 2021 to change relative to the average end-of-day reserve balance your institution held in February 2021? (select one).

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
I. A decrease of greater than 50%	0	0.0	0	0.0	0	0.0
II. A decrease of between 26% and 50%	6	7.5	5	10.2	1	3.2
III. A decrease of between 6% and 25%	19	23.8	15	30.6	4	12.9
IV. Stable reserves (plus or minus 5%)	31	38.8	12	24.5	19	61.3
V. An increase of between 6% and 25%	19	23.8	12	24.5	7	22.6
VI. An increase of between 26% and 50%	2	2.5	2	4.1	0	0.0
VII. An increase of greater than 50%	3	3.8	3	6.1	0	0.0
Total	80	100.0	49	100.0	31	100.0

[8] Based on the sum of the medians of dealers' modal expectations for the monthly amount of net purchases of U.S. Treasury securities and agency MBS. https://www.newyorkfed.org/medialibrary/media/markets/survey/2021/jan-2021-spd-results.pdf.

B. To reach the reserve levels that you expected in question 2.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	36	45.0	33	67.3	3	9.7
II. Not take specific actions to adjust the level or growth in your reserve balances	41	51.2	16	32.7	25	80.6
III. Take actions to increase either the level or growth in your reserve balances	3	3.8	0	0.0	3	9.7
Total	80	100.0	49	100.0	31	100.0

If you answered II or III to question 2.B, please skip to question 2.D.

C. If you selected I in question 2.B, what factors do you anticipate could prompt your institution to seek to reduce the level or growth of your reserve balance position to reach the levels expected in question 2.A? Please rank, in the order of their importance, the factors from 1 (least important) to 5 (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)	9	25.0	7	21.2	2	66.7
2	4	11.1	4	12.1	0	0.0
3	9	25.0	9	27.3	0	0.0
4	6	16.7	5	15.2	1	33.3
5 (Most important)	8	22.2	8	24.2	0	0.0
Total	36	100.0	33	100.0	3	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)	4	11.1	3	9.1	1	33.3
2	6	16.7	5	15.2	1	33.3
3	8	22.2	8	24.2	0	0.0
4	8	22.2	8	24.2	0	0.0
5 (Most important)	10	27.8	9	27.3	1	33.3
Total	36	100.0	33	100.0	3	100.0

iii. Expected resumption of loan demand from creditworthy borrowers

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Least important)	10	27.8	10	30.3	0	0.0
2	14	38.9	13	39.4	1	33.3
3	6	16.7	5	15.2	1	33.3
4	3	8.3	3	9.1	0	0.0
5 (Most important)	3	8.3	2	6.1	1	33.3
Total	36	100.0	33	100.0	3	100.0

iv. A desire to preserve or decrease balance sheet size

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Least important)	11	30.6	11	33.3	0	0.0
2	6	16.7	5	15.2	1	33.3
3	5	13.9	5	15.2	0	0.0
4	7	19.4	5	15.2	2	66.7
5 (Most important)	7	19.4	7	21.2	0	0.0
Total	36	100.0	33	100.0	3	100.0

v. Concern about net interest margins

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Least important)	2	5.6	2	6.1	0	0.0
2	6	16.7	6	18.2	0	0.0
3	8	22.2	6	18.2	2	66.7
4	12	33.3	12	36.4	0	0.0
5 (Most important)	8	22.2	7	21.2	1	33.3
Total	36	100.0	33	100.0	3	100.0

Written responses generally reinforced or elaborated on views that had already been expressed.

D. To the extent that your responses to questions 2.A through 2.C are conditioned on your institution's outlook for short-term interest rates relative to IOER over this period, please indicate which statement best characterizes your assumptions for the constellation of short-term rates relative to IOER, on average, in February 2021:

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
I. The constellation of short-term interest rates relative to IOER does not meaningfully affect our outlook for reserve management in the next few months.	42	52.5	31	63.3	11	35.5
II. We expect the constellation of short-term rates relative to IOER to decrease, increasing the attractiveness of holding reserve balances, all else equal.	6	7.5	3	6.1	3	9.7
III. We expect the constellation of short-term rates relative to IOER to increase, decreasing the attractiveness of holding reserve balances, all else equal.	1	1.3	1	2.0	0	0.0
IV. We expect the constellation of short-term rates relative to IOER remain, on average, the same as February 2021.	31	38.8	14	28.6	17	54.8
Total	80	100.0	49	100.0	31	100.0

3. Question 3 asks about your institution's entire balance sheet and how your institution may act if its balance sheet expanded over the next several months.

   A. At what level of growth would your institution take action to preserve or reduce the size of your balance sheet relative to its size on December 31, 2020?

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
I. My institution would not take action to limit the size of our balance sheet	26	32.5	16	32.7	10	32.3
II. An increase of 5-10%	7	8.8	6	12.2	1	3.2
III. An increase of 11-25%	14	17.5	12	24.5	2	6.5
IV. An increase of 26-50%	6	7.5	3	6.1	3	9.7
V. An increase over 50%	0	0.0	0	0.0	0	0.0
VI. My institution is already taking action to limit the size of our balance sheet and expects to continue to limit the size of our balance sheet at any level of growth	27	33.8	12	24.5	15	48.4
Total	80	100.0	49	100.0	31	100.0

   If you answered I to question 3.A, please skip to question 4.

   B. Please rate the factors that would prompt your institution to seek to reduce the size of your balance sheet if it reached the level consistent with your response to question 3.A? Please rate the following factors on a scale of 1 (not important) to 5 (very important). If the factor is not applicable to your institution, please select "N/A". If an important factor for your institution is not listed, or you would like to provide clarification on any factor, please provide it in the comment box.

i. Net interest margin pressure

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Not important)	9	16.7	4	12.1	5	23.8
2	6	11.1	5	15.2	1	4.8
3	13	24.1	7	21.2	6	28.6
4	11	20.4	5	15.2	6	28.6
5 (Very important)	15	27.8	12	36.4	3	14.3
Total	54	100.0	33	100.0	21	100.0

Note: 0 respondents provided an answer of N/A and 0 left it blank.

ii. Return on assets

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Not important)	7	13.2	4	12.5	3	14.3
2	8	15.1	5	15.6	3	14.3
3	13	24.5	5	15.6	8	38.1
4	15	28.3	11	34.4	4	19.0
5 (Very important)	10	18.9	7	21.9	3	14.3
Total	53	100.0	32	100.0	21	100.0

Note: 1 respondent provided an answer of N/A and 0 left it blank.

iii. U.S. tier 1 leverage ratio

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Not important)	6	16.2	4	12.5	2	40.0
2	5	13.5	5	15.6	0	0.0
3	9	24.3	8	25.0	1	20.0
4	3	8.1	3	9.4	0	0.0
5 (Very important)	14	37.8	12	37.5	2	40.0
Total	37	100.0	32	100.0	5	100.0

Note: 17 respondents provided an answer of N/A and 0 left it blank.

iv. U.S. supplementary leverage ratio (SLR) for bank holding companies

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Not important)	6	31.6	5	31.3	1	33.3
2	3	15.8	3	18.8	0	0.0
3	7	36.8	5	31.3	2	66.7
4	0	0.0	0	0.0	0	0.0
5 (Very important)	3	15.8	3	18.8	0	0.0
Total	19	100.0	16	100.0	3	100.0

Note: 35 respondents provided an answer of N/A and 0 left it blank.

v. U.S. enhanced SLR (applicable only to U.S. GSIBs)

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Not important)	2	25.0	2	25.0	Not Applicable	Not Applicable
2	0	0.0	0	0.0	Not Applicable	Not Applicable
3	3	37.5	3	37.5	Not Applicable	Not Applicable
4	0	0.0	0	0.0	Not Applicable	Not Applicable
5 (Very important)	3	37.5	3	37.5	Not Applicable	Not Applicable
Total	8	100.0	8	100.0	Not Applicable	Not Applicable

Note: 46 respondents provided an answer of N/A and 0 left it blank.

vi. U.S. GSIB capital surcharge

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Not important)	0	0.0	0	0.0	Not Applicable	Not Applicable
2	0	0.0	0	0.0	Not Applicable	Not Applicable
3	2	25.0	2	25.0	Not Applicable	Not Applicable
4	4	50.0	4	50.0	Not Applicable	Not Applicable
5 (Very important)	2	25.0	2	25.0	Not Applicable	Not Applicable
Total	8	100.0	8	100.0	Not Applicable	Not Applicable

Note: 46 respondents provided an answer of N/A and 0 left it blank.

vii. U.S. SLR for depository institutions

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Not important)	5	27.8	5	27.8	Not Applicable	Not Applicable
2	4	22.2	4	22.2	Not Applicable	Not Applicable
3	5	27.8	5	27.8	Not Applicable	Not Applicable
4	2	11.1	2	11.1	Not Applicable	Not Applicable
5 (Very important)	2	11.1	2	11.1	Not Applicable	Not Applicable
Total	18	100.0	18	100.0	Not Applicable	Not Applicable

Note: 36 respondents provided an answer of N/A and 0 left it blank.

viii. Other U.S. regulations

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Not important)	8	21.6	7	30.4	1	7.1
2	12	32.4	7	30.4	5	35.7
3	6	16.2	4	17.4	2	14.3
4	2	5.4	2	8.7	0	0.0
5 (Very important)	9	24.3	3	13.0	6	42.9
Total	37	100.0	23	100.0	14	100.0

Note: 17 respondents provided an answer of N/A and 0 left it blank.

ix. Foreign regulations

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Not important)	11	32.4	9	60.0	2	10.5
2	6	17.6	3	20.0	3	15.8
3	6	17.6	1	6.7	5	26.3
4	3	8.8	2	13.3	1	5.3
5 (Very important)	8	23.5	0	0.0	8	42.1
Total	34	100.0	15	100.0	19	100.0

Note: 20 respondents provided an answer of N/A and 0 left it blank.

x. Other (Please specify in comment box)

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Not important)	0	0.0	0	0.0	0	0.0
2	0	0.0	0	0.0	0	0.0
3	0	0.0	0	0.0	0	0.0
4	3	27.3	0	0.0	3	50.0
5 (Very important)	8	72.7	5	100.0	3	50.0
Total	11	100.0	5	100.0	6	100.0

Note: 17 respondents provided an answer of N/A and 26 left it blank.

In written responses, some respondents noted internal metrics for size or growth, the Federal Reserve's tailoring rules that adjust regulatory requirements based on a bank's size and risk profile, and other factors that could prompt their bank to seek to reduce the size of its balance sheet.

C. Please rate the likelihood that your institution would pursue the liability adjustments listed in the table below in order to reduce the level or growth of your balance sheet if it reached the size consistent with your response to question 3.A. Please rate the following actions on a scale of 1 (very unlikely) to 5 (very likely). If the action is not applicable to your bank, please select "N/A". If an action has already been taken and cannot be expanded beyond its current stance, please select "No Room for Further Adjustment". If an important liability adjustment for your institution is not listed, or you would like to provide clarification on any action, please provide it in the comment box.

i. Reduce deposit rates for operational deposits

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Very unlikely)	7	17.9	4	14.8	3	25.0
2	10	25.6	7	25.9	3	25.0
3	7	17.9	5	18.5	2	16.7
4	10	25.6	6	22.2	4	33.3
5 (Very likely)	5	12.8	5	18.5	0	0.0
Total	39	100.0	27	100.0	12	100.0

Note: 4 respondents reported no room for further adjustment, 11 respondents provided an answer of N/A, and 0 left it blank.

ii. Reduce deposit rates for non-operational deposits

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Very unlikely)	1	2.2	1	3.4	0	0.0
2	2	4.3	0	0.0	2	11.8
3	5	10.9	4	13.8	1	5.9
4	9	19.6	4	13.8	5	29.4
5 (Very likely)	29	63.0	20	69.0	9	52.9
Total	46	100.0	29	100.0	17	100.0

Note: 5 respondents reported no room for further adjustment, 3 respondents provided an answer of N/A, and 0 left it blank.

iii. Impose fees on operational deposits

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Very unlikely)	21	52.5	14	50.0	7	58.3
2	13	32.5	10	35.7	3	25.0
3	5	12.5	3	10.7	2	16.7
4	1	2.5	1	3.6	0	0.0
5 (Very likely)	0	0.0	0	0.0	0	0.0
Total	40	100.0	28	100.0	12	100.0

Note: 1 respondent reported no room for further adjustment, 13 respondents provided an answer of N/A, and 0 left it blank.

iv. Impose fees on non-operational deposits

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Very unlikely)	20	42.6	12	38.7	8	50.0
2	9	19.1	5	16.1	4	25.0
3	12	25.5	9	29.0	3	18.8
4	3	6.4	2	6.5	1	6.3
5 (Very likely)	3	6.4	3	9.7	0	0.0
Total	47	100.0	31	100.0	16	100.0

Note: 1 respondent reported no room for further adjustment, 6 respondents provided an answer of N/A, and 0 left it blank.

v. Impose caps on non-operational deposit inflows

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Very unlikely)	10	20.8	8	26.7	2	11.1
2	4	8.3	3	10.0	1	5.6
3	12	25.0	7	23.3	5	27.8
4	6	12.5	6	20.0	0	0.0
5 (Very likely)	16	33.3	6	20.0	10	55.6
Total	48	100.0	30	100.0	18	100.0

Note: 0 respondents reported no room for further adjustment, 5 respondents provided an answer of N/A, and 1 left it blank.

vi. 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)	2	14.3	2	14.3	0	0.0
2	1	7.1	1	7.1	0	0.0
3	2	14.3	2	14.3	0	0.0
4	4	28.6	4	28.6	0	0.0
5 (Very likely)	5	35.7	5	35.7	0	0.0
Total	15	100.0	14	100.0	0	0.0

Note: 15 respondents reported no room for further adjustment, 25 respondents provided an answer of N/A, and 0 left it blank.

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

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Very unlikely)	2	4.3	2	8.0	0	0.0
2	3	6.5	1	4.0	2	9.5
3	3	6.5	1	4.0	2	9.5
4	8	17.4	4	16.0	4	19.0
5 (Very likely)	30	65.2	17	68.0	13	61.9
Total	46	100.0	25	100.0	21	100.0

Note: 7 respondents reported no room for further adjustment, 1 respondent provided an answer of N/A, and 0 left it blank.

viii. Other (please explain in comment box)

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Very unlikely)	1	25.0	1	25.0	0	0.0
2	1	25.0	1	25.0	0	0.0
3	1	25.0	1	25.0	0	0.0
4	0	0.0	0	0.0	0	0.0
5 (Very likely)	1	25.0	1	25.0	0	0.0
Total	4	100.0	4	100.0	0	0.0

Note: 14 respondents provided an answer of N/A, and 36 left it blank.

Written responses generally reinforced or elaborated on views that had already been expressed.

Part II: Overnight Wholesale Funding Market Activity

The questions in Part 2 of the survey ask you to explain the considerations that motivate your bank's activity in overnight wholesale funding markets such as fed funds, Eurodollars, and repurchase agreements. If your bank is affiliated with a broker-dealer, do not include the normal financing activity of your broker-dealer for the purposes of these questions.

4. For each change in the level of short-term interest rates shown in the first column of the following table, please provide the approximate additional volume of overnight unsecured borrowing your institution would conduct. For the purposes of this question, please assume that IOER remains constant and that the starting point is the average spread of the overnight bank funding rate (OBFR) relative to IOER during February 2021 (i.e. IOER minus 3 basis points). Please also assume that the interest rate scenario is one that persists for a significant period of time. Please enter "$0" if changes in the level of short-term interest rates relative to IOER would not affect your activity in overnight unsecured markets compared to February 2021. Please enter "N/A" if you do not engage in this activity.

   Change in the amount of your institution's average daily overnight unsecured borrowing activity if:

   - Relative to the level of IOER, the OBFR is at the same level as averaged during February 2021

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Increased	1	1.3	1	2.0	0	0.0
Not active	26	32.5	23	46.9	3	9.7
Unchanged	53	66.3	25	51.0	28	90.3
Total	80	100.0	49	100.0	31	100.0

- Relative to the level of IOER, the OBFR is 2-5 basis points lower than it averaged during February 2021

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Increased	12	15.0	3	6.1	9	29.0
Not active	25	31.3	23	46.9	2	6.5
Unchanged	43	53.8	23	46.9	20	64.5
Total	80	100.0	49	100.0	31	100.0

- Relative to the level of IOER, the OBFR is 6-10 basis points lower than it averaged during February 2021

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Increased	19	23.8	4	8.2	15	48.4
Not active	25	31.3	23	46.9	2	6.5
Unchanged	36	45.0	22	44.9	14	45.2
Total	80	100.0	49	100.0	31	100.0

- Relative to the level of IOER, the OBFR is more than 10 basis points lower than it averaged during February 2021

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Increased	21	26.3	5	10.2	16	51.6
Not active	25	31.3	23	46.9	2	6.5
Unchanged	34	42.5	21	42.9	13	41.9
Total	80	100.0	49	100.0	31	100.0

5. What is the smallest spread *above* IOER at which your institution would be willing to invest reserve balances into the following high-quality liquid assets?

   i. Overnight Treasury reverse repos (in bps)

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
0-10 bps	66	89.2	41	87.2	25	92.6
11-25 bps	6	8.1	5	10.6	1	3.7
26-50 bps	1	1.4	1	2.1	0	0.0
51 bps or more	1	1.4	0	0.0	1	3.7
Total	74	100.0	47	100.0	27	100.0

Note: 6 respondents left it blank.

ii. Short-dated Treasury securities (remaining maturity of 1 year or less) (in bps)

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
0-10 bps	47	68.1	25	54.3	22	95.7
11-25 bps	16	23.2	15	32.6	1	4.3
26-50 bps	5	7.2	5	10.9	0	0.0
51 bps or more	1	1.4	1	2.2	0	0.0
Total	69	100.0	46	100.0	23	100.0

Note: 11 respondents left it blank.

iii. Intermediate Treasury securities (remaining maturity between 1 year and 5 years) (bps)

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
0-10 bps	15	25.0	5	11.9	10	55.6
11-25 bps	14	23.3	7	16.7	7	38.9
26-50 bps	12	20.0	12	28.6	0	0.0
51 bps or more	19	31.7	18	42.9	1	5.6
Total	60	100.0	42	100.0	18	100.0

Note: 20 respondents left it blank.

iv. Longer-dated Treasury securities (remaining maturity greater than 5 years) (bps)

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
0-10 bps	4	7.1	2	4.8	2	14.3
11-25 bps	12	21.4	4	9.5	8	57.1
26-50 bps	4	7.1	3	7.1	1	7.1
51 bps or more	36	64.3	33	78.6	3	21.4
Total	56	100.0	42	100.0	14	100.0

Note: 24 respondents left it blank.

Part III: Federal Reserve Facilities

Discount Window

6. Which of the following statements best characterizes your bank's willingness to borrow discount window primary credit *under its existing terms*?

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
I. Would be willing to borrow primary credit if other funding sources are more expensive.	7	8.8	7	14.3	0	0.0
II. Would be willing to borrow primary credit to lend at higher rates in money markets.	0	0.0	0	0.0	0	0.0
III. Would be willing to borrow primary credit only if other funding sources became less available due to a firm-specific strain.	14	17.5	10	20.4	4	12.9
IV. Would be willing to borrow primary credit only if other funding sources became less available due to market-wide conditions.	50	62.5	26	53.1	24	77.4
V. Other (if you do not have discount window borrowing arrangements in place, please indicate here)	9	11.3	6	12.2	3	9.7
Total	80	100.0	49	100.0	31	100.0

Written responses generally reinforced the views that had already been expressed, and often emphasized the respondent's reluctance to borrow from the discount window.

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). 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 7 through 9 of this survey are not intended to solicit views about the PPP.

7. Has your bank originated loans or purchased loans authorized under the Small Business Administration's Paycheck Protection Program (PPP) in either 2020 or 2021? [Yes/No]

	All Respondents	Domestic	Foreign
Yes	44	41	3
No	36	8	28
Total	80	49	31

If "yes," please proceed to question 8. If "no," please skip the remaining questions.

8. If your bank has originated PPP loans, which of the following statements best describes your bank's view of the PPPLF? (choose one)

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
I. Have not borrowed from the PPPLF, and the availability of funding from the PPPLF has not changed our ability/willingness to make PPP loans.	27	61.4	26	63.4	1	33.3
II. Have not borrowed from the PPPLF, but the availability of funding from the PPPLF has increased our willingness/ability to make PPP loans.	4	9.1	4	9.8	0	0.0
III. Have borrowed from the PPPLF, but the availability of funding from the PPPLF has not changed our ability/willingness to make PPP loans.	9	20.5	7	17.1	2	66.7
IV. Have borrowed from the PPPLF, and the availability of funding from the PPPLF has increased our willingness/ability to make PPP loans.	3	6.8	3	7.3	0	0.0
V. Have borrowed from the PPPLF, and the availability of funding from the PPPLF is essential to our willingness/ability to make PPP loans.	1	2.3	1	2.4	0	0.0
Total	44	100.0	41	100.0	3	100.0

Question 9 seeks information on potential reasons why PPP lenders that took out PPPLF advances in 2020 may not have participated in the PPPLF in 2021. If you have participated in the PPPLF *but have not taken out PPPLF advances collateralized by PPP loans made in 2021*, please answer question 9.

If you have taken out PPPLF advances collateralized by PPP loans made in 2021, or have not participated in the PPPLF altogether, please skip this question.

9. If you took out PPPLF advances collateralized by PPP loans made in 2020 *but have not taken out advances collateralized by PPP loans made in 2021* please rate the following factors affecting your decisions regarding the PPPLF in 2021 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. Institution no longer makes PPP loans

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Not important)	3	100.0	1	100.0	2	100.0
2	0	0.0	0	0.0	0	0.0
3	0	0.0	0	0.0	0	0.0
4	0	0.0	0	0.0	0	0.0
5 (Very important)	0	0.0	0	0.0	0	0.0
Total	3	100.0	1	100.0	2	100.0

Note: 7 respondents provided an answer of N/A

ii. Institution's funding needs are lower now than in 2020

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Not important)	0	0.0	0	0.0	0	0.0
2	0	0.0	0	0.0	0	0.0
3	0	0.0	0	0.0	0	0.0
4	1	12.5	1	16.7	0	0.0
5 (Very important)	7	87.5	5	83.3	2	100.0
Total	8	100.0	6	100.0	2	100.0

Note: 2 respondents provided an answer of N/A

iii. PPPLF terms are less advantageous relative to other funding options now than in 2020 (e.g., alternative funding sources are lower cost relative to the PPPLF in 2021 when compared to 2020)

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Not important)	1	12.5	0	0.0	1	50.0
2	4	50.0	4	66.7	0	0.0
3	1	12.5	1	16.7	0	0.0
4	2	25.0	1	16.7	1	50.0
5 (Very important)	0	0.0	0	0.0	0	0.0
Total	8	100.0	6	100.0	2	100.0

Note: 2 respondents provided an answer of N/A

iv. Concern over the requirement to complete a new PPPLF Letter of Agreement

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Not important)	5	62.5	4	66.7	1	50.0
2	2	25.0	1	16.7	1	50.0
3	1	12.5	1	16.7	0	0.0
4	0	0.0	0	0.0	0	0.0
5 (Very important)	0	0.0	0	0.0	0	0.0
Total	8	100.0	6	100.0	2	100.0

Note: 2 respondents provided an answer of N/A

v. Concern over the administrative burden with previous PPPLF advances

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1 (Not important)	2	25.0	1	16.7	1	50.0
2	2	25.0	2	33.3	0	0.0
3	2	25.0	1	16.7	1	50.0
4	2	25.0	2	33.3	0	0.0
5 (Very important)	0	0.0	0	0.0	0	0.0
Total	8	100.0	6	100.0	2	100.0

Note: 2 respondents provided an answer of N/A

Written responses to this question generally reinforced the views that had already been expressed.