RESEARCH & ANALYSIS

Senior Financial Officer Survey Results

May 2023

BOARD OF GOVERNORS OF THE
FEDERAL RESERVE SYSTEM

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- **promotes the stability of the financial system** and seeks to minimize and contain systemic risks through active monitoring and engagement in the U.S. and abroad;
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- **fosters payment and settlement system safety and efficiency** through services to the banking industry and U.S. government that facilitate U.S.-dollar transactions and payments; and
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Background

In May 2023, the Federal Reserve conducted a Senior Financial Officer Survey (SFOS) to gather views systematically from a number of banks on their reserve balance management strategies and practices, their deposit pricing strategies, their expectations for potential changes in both the size and composition of their balance sheets, and their views regarding Federal Reserve facilities.

The May SFOS was distributed to 98 banks, representing a wide range of asset sizes and business models. The Federal Reserve sent the survey to senior financial officers at these banks on May 5, 2023, with replies due by May 19, 2023. Responses were received from 92 banks, comprising 58 domestic banks and 34 foreign banking organizations (FBOs). In aggregate, respondents held more than three-fourths of total reserve balances in the banking system at the time of the survey.

Part 1: Questions about Reserves and Balance Sheet Management

The questions in Part 1 asked respondents about their bank's strategy over the next six months regarding its balance sheet, and its expectations for changes to the levels of various liability and asset categories.

- Nearly one-third of respondents reported that their bank plans to take actions intended to maintain the current size of its balance sheet over the next six months. One-quarter reported that their bank plans to take actions intended to increase, or limit the decline in, the size of its balance sheet, while the same fraction reported that their bank had neither plans to increase nor decrease the size of its balance sheet. A smaller number of respondents reported that their bank plans to take actions to decrease, or limit the growth in, the size of the balance sheet over the same period.[1]
- For each of the 10 liability and 6 asset categories, excluding respondents who reported "Not applicable (N/A)," at least a plurality of respondents indicated that their bank is not expecting the level of such liability or asset to change over the next six months. Among the categories with respondents reporting changes, the most notable were brokered deposits and CDs and loans. On the liability side, more than one-third of respondents, excluding responses of N/A, reported an expected increase in brokered deposits and brokered CDs of more than 5 percent. For assets, just under one-third of respondents reported an expected increase between 2 and 5 percent in loans.

[1] The survey asked respondents to consider the differences between average values in April 2023 and respondents' expectations for the average values in October 2023.

- When asked about any notable adjustments that their bank made to its balance sheet or funding strategy in response to the banking system stress episode in March 2023, nearly half of respondents reported increased borrowing from Federal Home Loan Banks (FHLB) and a similar number reported an increase in wholesale deposit rates. Among the respondents who reported that their bank takes retail deposits in the course of regular business, a narrow majority reported increasing retail deposit rates.

Part 2: Questions about Preferred Reserve Levels

(Questions 5–9)

The questions in Part 2 asked respondents about their bank's lowest comfortable level of reserves (LCLOR), which is defined in the survey as the lowest dollar level of reserves that their bank would feel comfortable holding before taking actions to maintain or increase its reserve balances.[2]

- Roughly 40 percent of respondents reported an increase in their bank's LCLOR since November 2022, 5 percent reported a decrease, and about half of the respondents reported that their bank's LCLOR has not changed.
- Factors cited by at least a majority of respondents as either very important or important in determining the respondent's bank's LCLOR include satisfying liquidity-testing metrics, meeting projected liquidity outflows over a certain window (more than one business day and under normal market conditions), meeting intraday payment or settlement needs, and the amount of less-stable deposits as a portion of total liabilities.
- When compared to the last survey that asked respondents about the level of their bank's LCLOR, which was in February of 2020, more than half of the respondents that participated in both surveys reported an increase in their LCLOR estimate in this survey of 20 percent or more than their previously reported value in 2020. Most of the remaining respondents reported an estimate that reflects a smaller increase, while only a small number of respondents reported an estimate that reflects a decrease from their previously reported value.
- Seventy-eight percent of total respondents reported that their bank prefers to hold additional reserves above its LCLOR (hereafter referred to as additional reserves), with 35 percent of total respondents preferring to hold additional reserves of at least 50 percent above their LCLOR. Twenty-two percent of total respondents reported preferring not to hold additional reserves.
- Roughly three-quarters of respondents reported that their bank does not allow reserves to fluctuate below its LCLOR. Of the respondents that indicated their bank prefers to hold additional reserves, about three-quarters reported that their bank does allow reserves to fluctuate below its reported additional reserves level.

[2] "Taking action" is defined in the survey as taking active steps to intervene and raise funds to replenish reserves.

Part 3: Questions about Deposit Rates

(Questions 10–13)

The questions in Part 3 asked respondents about their bank's cumulative deposit betas from March 2022 to April 2023, and its outlook for deposit betas through November 2023.[3]

- Among respondents that reported taking retail deposits as part of their bank's regular course of business, a majority reported cumulative retail deposit betas of 20 percent or lower from March 2022 to April 2023. Looking ahead to November of this year, respondents most commonly indicated that their bank expects that cumulative retail deposit betas will be 30 percent or lower.
- From March 2022 to April 2023, respondents that reported taking wholesale operational deposits and/or wholesale non-operational deposits reported deposit betas for both wholesale operational deposits and wholesale non-operational deposits that were generally higher than for retail deposits and were more widely distributed. Looking ahead to the period of April through September of this year, respondents reported similar widely distributed responses for wholesale operational and wholesale non-operational deposits, with deposit betas of 80 percent and 100 percent being the most commonly reported responses, respectively. These projected cumulative deposit betas represent an increase compared to the earlier time period of March 2022 to April 2023.
- When asked about the rationale for deposit betas that most closely aligns with their bank's strategy for each deposit type, betas being set to either increase or maintain deposit balances were the most commonly reported responses across all three deposit types (retail, wholesale operational, and wholesale non-operational).
- A majority of respondents reported that the events of March 2023 did not influence their bank's decisionmaking on how it determines its deposit betas. Of the 28 respondents who elaborated on this question in the provided comment box, a plurality of the commenters noted that there was increased competition surrounding deposits during this time period.

Part 4: Questions about Federal Reserve Facilities

(Questions 14–19)

The questions in Part 4 asked respondents about their bank's usage of and views regarding the Bank Term Funding Program (BTFP) and the discount window.

[3] For the purpose of this survey, "deposit beta" was defined as the basis point change in a bank's average deposit rate on deposits with maturities of seven days or fewer relative to the basis point change in the target range for the federal funds rate.

- Over three-fourths of respondents from domestic banks indicated that their bank had either arranged program documentation, pledged collateral, or borrowed from the BTFP.
- When asked about the factors that contribute to their bank's decisionmaking process when considering whether to sign up for or borrow from the BTFP, collateral valuation at par was most commonly rated as strongly encouraging, while public disclosure was mostly commonly rated as strongly discouraging.
- A significant majority of respondents indicated that their bank's view of the discount window had not changed during the March 2022 to April 2023 period.
- When asked about the factors that contribute to their bank's decisionmaking process when considering whether to sign up for/borrow from the discount window, respondents were neutral on nearly all aspects with the exception of public disclosure, which was most commonly rated as strongly discouraging.

This document was prepared by Courtney Demartini, Elizabeth Ellis, David Lowe, Matthew Malloy, and Nicole Trachman, Division of Monetary Affairs, Board of Governors of the Federal Reserve System; and Jack Coolbaugh, Brian Gowen, Natalie Leonard, Jason Miu, Dante Turkow, and Leonard Wei, 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 (N/A)." Components may not sum to totals because of rounding.

Part 1: Reserves and Balance Sheet Management

Questions in Part 1 ask about your bank's expectations for balance sheet management over the next six months.[4] For context, the results of the March 2023 Survey of Primary Dealers showed cumulative median dealer expectations for the size of the Federal Reserve's holdings of U.S. Treasury securities and agency mortgage-backed securities (MBS) to decrease by approximately $480 billion from the end of March 2023 to the end of September 2023.[5] These projections would be consistent with a similar decline in the amount of Federal Reserve liabilities, including, but not limited to, reserve balances in the banking system and overnight reverse repo balances.

Question 1: Looking ahead to the next six months, which statement best characterizes your bank's most likely **strategy** regarding its balance sheet? My bank expects:

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
To take actions intended to decrease, or limit the growth in, the size of its balance sheet	16	17.4	14	24.1	2	5.9
To take actions intended to maintain the current size of its balance sheet	30	32.6	17	29.3	13	38.2
To take actions intended to increase, or limit the decline in, the size of its balance sheet	23	25.0	18	31.0	5	14.7
Not to take specific actions to affect the size of its balance sheet	23	25.0	9	15.5	14	41.2
Total	92	100.0	58	100.0	34	100.0

Question 1b: As you responded to the preceding question by selecting one of the first three options, please describe in the comment box below the specific actions your bank expects to take to accomplish that strategy.

[4] For question 1, consider the potential differences between your bank's balance sheet, on average, in April 2023 and your expectation about your bank's balance sheet, on average, in October 2023.

[5] The expected decrease is 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 from the end of March 2023 to the end of September 2023.

Sixty-five respondents provided substantive comments. Most comments were in line with or elaborated on the survey responses. Some respondents provided more context for their bank's planned actions or lack of actions, but these comments did not have common themes.

Question 2: This question asks about changes to the projected level of different liabilities on your bank's balance sheet. For each of the liability categories listed, please indicate your bank's expectation about the potential change in the average level during April 2023 compared to the average level during October 2023 in the context of your previous responses. *(Please select N/A only if your bank does not or cannot have the liability type.)* My bank expects the level will:

1. Retail deposits

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Decrease more than 5 percent	2	3.3	2	3.6	0	0.0
Decrease more than 2 percent and less than or equal to 5 percent	11	18.3	11	19.6	0	0.0
Remain roughly unchanged (plus or minus 2 percent)	30	50.0	26	46.4	4	100.0
Increase more than 2 percent and less than or equal to 5 percent	13	21.7	13	23.2	0	0.0
Increase more than 5 percent	4	6.7	4	7.1	0	0.0
N/A (only if bank does not or cannot have this liability type)	0	0.0	0	0.0	0	0.0
Total	60	100.0	56	100.0	4	100.0

2. Wholesale operational deposits

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Decrease more than 5 percent	2	3.3	1	2.3	1	5.9
Decrease more than 2 percent and less than or equal to 5 percent	6	9.8	6	13.6	0	0.0
Remain roughly unchanged (plus or minus 2 percent)	36	59.0	25	56.8	11	64.7
Increase more than 2 percent and less than or equal to 5 percent	13	21.3	9	20.5	4	23.5
Increase more than 5 percent	3	4.9	2	4.5	1	5.9
N/A (only if bank does not or cannot have this liability type)	1	1.6	1	2.3	0	0.0
Total	61	100.0	44	100.0	17	100.0

3. Wholesale non-operational deposits

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Decrease more than 5 percent	8	10.5	5	10.6	3	10.3
Decrease more than 2 percent and less than or equal to 5 percent	14	18.4	13	27.7	1	3.4
Remain roughly unchanged (plus or minus 2 percent)	30	39.5	16	34.0	14	48.3
Increase more than 2 percent and less than or equal to 5 percent	18	23.7	10	21.3	8	27.6
Increase more than 5 percent	5	6.6	2	4.3	3	10.3
N/A (only if bank does not or cannot have this liability type)	1	1.3	1	2.1	0	0.0
Total	76	100.0	47	100.0	29	100.0

4. FHLB advances (N/A if your bank is not an FHLB member)

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Decrease more than 5 percent	11	12.0	11	19.0	0	0.0
Decrease more than 2 percent and less than or equal to 5 percent	6	6.5	5	8.6	1	2.9
Remain roughly unchanged (plus or minus 2 percent)	22	23.9	22	37.9	0	0.0
Increase more than 2 percent and less than or equal to 5 percent	4	4.3	4	6.9	0	0.0
Increase more than 5 percent	11	12.0	11	19.0	0	0.0
N/A (only if bank does not or cannot have this liability type)	38	41.3	5	8.6	33	97.1
Total	92	100.0	58	100.0	34	100.0

5. Commercial paper

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Decrease more than 5 percent	2	2.2	0	0.0	2	5.9
Decrease more than 2 percent and less than or equal to 5 percent	0	0.0	0	0.0	0	0.0
Remain roughly unchanged (plus or minus 2 percent)	30	32.6	13	22.4	17	50.0
Increase more than 2 percent and less than or equal to 5 percent	6	6.5	0	0.0	6	17.6
Increase more than 5 percent	4	4.3	1	1.7	3	8.8
N/A (only if bank does not or cannot have this liability type)	50	54.3	44	75.9	6	17.6
Total	92	100.0	58	100.0	34	100.0

6. Institutional/negotiable CDs

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Decrease more than 5 percent	2	2.2	1	1.7	1	3.0
Decrease more than 2 percent and less than or equal to 5 percent	3	3.3	1	1.7	2	6.1
Remain roughly unchanged (plus or minus 2 percent)	40	44.0	20	34.5	20	60.6
Increase more than 2 percent and less than or equal to 5 percent	7	7.7	2	3.4	5	15.2
Increase more than 5 percent	8	8.8	6	10.3	2	6.1
N/A (only if bank does not or cannot have this liability type)	31	34.1	28	48.3	3	9.1
Total	91	100.0	58	100.0	33	100.0

7. Short-term repurchase agreements (repos)

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Decrease more than 5 percent	5	5.4	4	6.9	1	2.9
Decrease more than 2 percent and less than or equal to 5 percent	1	1.1	1	1.7	0	0.0
Remain roughly unchanged (plus or minus 2 percent)	51	55.4	30	51.7	21	61.8
Increase more than 2 percent and less than or equal to 5 percent	6	6.5	2	3.4	4	11.8
Increase more than 5 percent	3	3.3	3	5.2	0	0.0
N/A (only if bank does not or cannot have this liability type)	26	28.3	18	31.0	8	23.5
Total	92	100.0	58	100.0	34	100.0

8. Brokered deposits/brokered CDs

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Decrease more than 5 percent	7	7.7	6	10.3	1	3.0
Decrease more than 2 percent and less than or equal to 5 percent	2	2.2	2	3.4	0	0.0
Remain roughly unchanged (plus or minus 2 percent)	30	33.0	16	27.6	14	42.4
Increase more than 2 percent and less than or equal to 5 percent	10	11.0	8	13.8	2	6.1
Increase more than 5 percent	24	26.4	23	39.7	1	3.0
N/A (only if bank does not or cannot have this liability type)	18	19.8	3	5.2	15	45.5
Total	91	100.0	58	100.0	33	100.0

9. Bank Term Funding Program (BTFP; N/A if your bank does not have documentation in place to access the BTFP)

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Decrease more than 5 percent	0	0.0	0	0.0	0	0.0
Decrease more than 2 percent and less than or equal to 5 percent	0	0.0	0	0.0	0	0.0
Remain roughly unchanged (plus or minus 2 percent)	42	45.7	36	62.1	6	17.6
Increase more than 2 percent and less than or equal to 5 percent	1	1.1	1	1.7	0	0.0
Increase more than 5 percent	1	1.1	1	1.7	0	0.0
N/A (only if bank does not or cannot have this liability type)	48	52.2	20	34.5	28	82.4
Total	92	100.0	58	100.0	34	100.0

10. Other liabilities (please describe)

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Decrease more than 5 percent	3	3.6	2	4.1	1	2.9
Decrease more than 2 percent and less than or equal to 5 percent	1	1.2	0	0.0	1	2.9
Remain roughly unchanged (plus or minus 2 percent)	22	26.5	12	24.5	10	29.4
Increase more than 2 percent and less than or equal to 5 percent	1	1.2	1	2.0	0	0.0
Increase more than 5 percent	4	4.8	4	8.2	0	0.0
N/A (only if bank does not or cannot have this liability type)	52	62.7	30	61.2	22	64.7
Total	83	100.0	49	100.0	34	100.0

Sixteen respondents provided comments, excluding responses of N/A or that specified that there were no additional comments. Most comments were in line with or elaborated on the survey responses. Some respondents provided more context on their bank's liabilities, but these comments did not have common themes.

Question 3: This question asks about changes to the projected level of different assets on your bank's balance sheet.[6] For each of the asset categories listed, please indicate your bank's expectation about the potential change in the average level during April 2023 compared to the average level during October 2023 in the context of your previous responses. *(Please select N/A only if your bank does not have the asset type.)* My bank expects the level will:

[6] Please refer to Regulation WW for high-quality liquid assets (HQLA) definitions.

1. Reserves

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Decrease more than 5 percent	17	18.5	13	22.4	4	11.8
Decrease more than 2 percent and less than or equal to 5 percent	5	5.4	2	3.4	3	8.8
Remain roughly unchanged (plus or minus 2 percent)	56	60.9	32	55.2	24	70.6
Increase more than 2 percent and less than or equal to 5 percent	7	7.6	6	10.3	1	2.9
Increase more than 5 percent	7	7.6	5	8.6	2	5.9
N/A (only if bank does not or cannot have this asset type)	0	0.0	0	0.0	0	0.0
Total	92	100.0	58	100.0	34	100.0

2. Level 1 securities

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Decrease more than 5 percent	7	7.6	7	12.1	0	0.0
Decrease more than 2 percent and less than or equal to 5 percent	12	13.0	12	20.7	0	0.0
Remain roughly unchanged (plus or minus 2 percent)	56	60.9	31	53.4	25	73.5
Increase more than 2 percent and less than or equal to 5 percent	10	10.9	6	10.3	4	11.8
Increase more than 5 percent	5	5.4	2	3.4	3	8.8
N/A (only if bank does not or cannot have this asset type)	2	2.2	0	0.0	2	5.9
Total	92	100.0	58	100.0	34	100.0

3. Level 2 HQLA

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Decrease more than 5 percent	5	5.4	5	8.6	0	0.0
Decrease more than 2 percent and less than or equal to 5 percent	17	18.5	17	29.3	0	0.0
Remain roughly unchanged (plus or minus 2 percent)	55	59.8	32	55.2	23	67.6
Increase more than 2 percent and less than or equal to 5 percent	3	3.3	2	3.4	1	2.9
Increase more than 5 percent	1	1.1	0	0.0	1	2.9
N/A (only if bank does not or cannot have this asset type)	11	12.0	2	3.4	9	26.5
Total	92	100.0	58	100.0	34	100.0

4. Other securities

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Decrease more than 5 percent	6	6.6	5	8.8	1	2.9
Decrease more than 2 percent and less than or equal to 5 percent	3	3.3	3	5.3	0	0.0
Remain roughly unchanged (plus or minus 2 percent)	61	67.0	40	70.2	21	61.8
Increase more than 2 percent and less than or equal to 5 percent	1	1.1	1	1.8	0	0.0
Increase more than 5 percent	2	2.2	1	1.8	1	2.9
N/A (only if bank does not or cannot have this asset type)	18	19.8	7	12.3	11	32.4
Total	91	100.0	57	100.0	34	100.0

5. Loans

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Decrease more than 5 percent	2	2.2	1	1.7	1	2.9
Decrease more than 2 percent and less than or equal to 5 percent	5	5.4	5	8.6	0	0.0
Remain roughly unchanged (plus or minus 2 percent)	42	45.7	21	36.2	21	61.8
Increase more than 2 percent and less than or equal to 5 percent	30	32.6	21	36.2	9	26.5
Increase more than 5 percent	13	14.1	10	17.2	3	8.8
N/A (only if bank does not or cannot have this asset type)	0	0.0	0	0.0	0	0.0
Total	92	100.0	58	100.0	34	100.0

6. Other assets (please describe)

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Decrease more than 5 percent	1	1.2	1	2.0	0	0.0
Decrease more than 2 percent and less than or equal to 5 percent	1	1.2	1	2.0	0	0.0
Remain roughly unchanged (plus or minus 2 percent)	23	27.7	13	26.0	10	30.3
Increase more than 2 percent and less than or equal to 5 percent	0	0.0	0	0.0	0	0.0
Increase more than 5 percent	0	0.0	0	0.0	0	0.0
N/A (only if bank does not or cannot have this asset type)	58	69.9	35	70.0	23	69.7
Total	83	100.0	50	100.0	33	100.0

Question 4: Please indicate in the table below any notable adjustment your bank made to its balance sheet or funding strategy in response to the **banking system stress episode** of March 2023.

Actions (Liabilities):

1. Borrowing in overnight unsecured markets (fed funds and/or Eurodollars)

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Increase	7	7.6	6	10.3	1	2.9
Decrease	7	7.6	2	3.4	5	14.7
No adjustment	78	84.8	50	86.2	28	82.4
Total	92	100.0	58	100.0	34	100.0

2. Issuing CP/CD

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Increase	11	12.2	7	12.5	4	11.8
Decrease	5	5.6	2	3.6	3	8.8
No adjustment	74	82.2	47	83.9	27	79.8
Total	90	100.0	56	100.0	34	100.0

3. Borrowing in secured funding markets (repurchase agreements)

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Increase	17	18.7	13	22.8	4	11.8
Decrease	0	0.0	0	0.0	0	0.0
No adjustment	74	81.3	44	77.2	30	88.2
Total	91	100.0	57	100.0	34	100.0

4. Borrowing from the discount window

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Increase	4	4.4	4	7.0	0	0.0
Decrease	0	0.0	0	0.0	0	0.0
No adjustment	87	95.6	53	93.0	34	100.0
Total	91	100.0	57	100.0	34	100.0

5. Borrowing from the Bank Term Funding Program

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Increase	7	7.7	7	12.3	0	0.0
Decrease	0	0.0	0	0.0	0	0.0
No adjustment	84	92.3	50	87.7	34	100.0
Total	91	100.0	57	100.0	34	100.0

6. Borrowing from FHLBs

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Increase	41	44.6	40	69.0	1	2.9
Decrease	3	3.3	3	5.2	0	0.0
No adjustment	48	52.2	15	25.9	33	97.1
Total	92	100.0	58	100.0	34	100.0

7. Borrowing via brokered deposits/brokered CDs

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Increase	36	39.6	34	58.6	2	6.1
Decrease	0	0.0	0	0.0	0	0.0
No adjustment	55	60.4	24	41.4	31	93.9
Total	91	100.0	58	100.0	33	100.0

8. Adjusting retail deposit rates

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Increase	30	50.8	27	49.1	3	75.0
Decrease	0	0.0	0	0.0	0	0.0
No adjustment	29	49.2	28	50.9	1	25.0
Total	59	100.0	55	100.0	4	100.0

9. Adjusting attractiveness of non-rate terms on retail deposits

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Increase	10	16.9	9	16.4	1	25.0
Decrease	0	0.0	0	0.0	0	0.0
No adjustment	49	83.1	46	83.6	3	75.0
Total	59	100.0	55	100.0	4	100.0

10. Adjusting wholesale deposit rates

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Increase	38	47.5	20	41.7	18	56.3
Decrease	0	0.0	0	0.0	0	0.0
No adjustment	42	52.5	28	58.3	14	43.8
Total	80	100.0	48	100.0	32	100.0

11. Adjusting attractiveness of non-rate terms on wholesale deposits

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Increase	9	11.3	8	16.7	1	3.1
Decrease	0	0.0	0	0.0	0	0.0
No adjustment	71	88.8	40	83.3	31	96.9
Total	80	100.0	48	100.0	32	100.0

12. Borrowing in FX swap market to swap non-U.S. dollar reserves for U.S. dollar reserves

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Increase	6	6.6	2	3.5	4	11.8
Decrease	0	0.0	0	0.0	0	0.0
No adjustment	85	93.4	55	96.5	30	88.2
Total	91	100.0	57	100.0	34	100.0

13. Drawing on revolving credit facilities

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Increase	1	1.1	1	1.8	0	0.0
Decrease	0	0.0	0	0.0	0	0.0
No adjustment	90	98.9	56	98.2	34	100.0
Total	91	100.0	57	100.0	34	100.0

14. Borrowing in long-term debt markets

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Increase	2	2.2	1	1.8	1	2.9
Decrease	0	0.0	0	0.0	0	0.0
No adjustment	88	97.8	55	98.2	33	97.1
Total	90	100.0	56	100.0	34	100.0

15. Other (please describe)

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Increase	4	7.0	1	3.3	3	11.1
Decrease	1	1.8	0	0.0	1	3.7
No adjustment	52	91.2	29	96.7	23	85.2
Total	57	100.0	30	100.0	27	100.0

Actions (Assets):

1. Lending in short-term debt markets (for example, reverse repurchase agreements)

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Increase	2	2.2	1	1.8	1	2.9
Decrease	6	6.6	4	7.0	2	5.9
No adjustment	83	91.2	52	91.2	31	91.2
Total	91	100.0	57	100.0	34	100.0

2. Reserve balances

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Increase	39	42.4	32	55.2	7	20.6
Decrease	4	4.3	1	1.7	3	8.8
No adjustment	49	53.3	25	43.1	24	70.6
Total	92	100.0	58	100.0	34	100.0

3. Non-reserve HQLA holdings

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Increase	2	2.2	2	3.5	0	0.0
Decrease	7	7.7	7	12.3	0	0.0
No adjustment	82	90.1	48	84.2	34	100.0
Total	91	100.0	57	100.0	34	100.0

4. Non-HQLA security holdings

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Increase	2	2.2	2	3.5	0	0.0
Decrease	6	6.6	6	10.5	0	0.0
No adjustment	83	91.2	49	86.0	34	100.0
Total	91	100.0	57	100.0	34	100.0

5. Loan portfolio

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Increase	5	5.5	3	5.3	2	5.9
Decrease	2	2.2	2	3.5	0	0.0
No adjustment	84	92.3	52	91.2	32	94.1
Total	91	100.0	57	100.0	34	100.0

6. Other (please describe)

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Increase	0	0.0	0	0.0	0	0.0
Decrease	1	1.7	0	0.0	1	3.6
No adjustment	57	98.3	30	100.0	27	96.4
Total	58	100.0	30	100.0	28	100.0

Seven respondents provided comments, excluding responses of N/A or that specified that there were no additional comments. Most comments were in line with or elaborated on the survey responses. Some respondents noted using funding from within their organizations.

Part 2: Preferred Reserve Levels

Questions in Part 2 ask about your bank's **lowest comfortable level of reserves** (LCLOR)—the lowest dollar level of reserve balances your bank would feel comfortable holding before it takes action to maintain or increase its reserve balances. **"Taking action"** is defined as taking active steps to intervene and raise funding in the market to replenish reserves. Examples of active steps could include, but are not limited to, borrowing in the fed funds or other wholesale funding markets or bidding more aggressively in those markets, reducing holdings of other liquid assets, or raising deposit rates.

Question 5: What is the estimated lowest comfortable level of reserves (LCLOR) (in **$ millions**) your bank would feel comfortable holding before it **takes action** to maintain or increase its reserves balance position?

LCLOR by depository institution type (estimated dollar ranges)

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
$0–1 billion	21	22.8	15	25.9	6	17.6
$1–5 billion	33	35.9	23	39.7	10	29.4
$5–10 billion	8	8.7	4	6.9	4	11.8
$10–20 billion	15	16.3	7	12.1	8	23.5
$20 billion or more	15	16.3	9	15.5	6	17.6
Total	92	100.0	58	100.0	34	100.0

Question 6: Please rate on a scale from 1 (not important) to 5 (very important) the factors that determine your bank's LCLOR.

1. Satisfying liquidity stress-testing metrics (meeting projected outflows under stressed market conditions)

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1	1	1.1	1	1.7	0	0.0
2	2	2.2	1	1.7	1	2.9
3	10	10.9	6	10.3	4	11.8
4	15	16.3	10	17.2	5	14.7
5	64	69.6	40	69.0	24	70.6
Total	92	100.0	58	100.0	34	100.0

2. Capacity to access liquidity in the market using non-reserve HQLA or other securities

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1	17	18.7	7	12.3	10	29.4
2	13	14.3	7	12.3	6	17.6
3	17	18.7	10	17.5	7	20.6
4	18	19.8	11	19.3	7	20.6
5	26	28.6	22	38.6	4	11.8
Total	91	100.0	57	100.0	34	100.0

3. Capacity to access liquidity through Federal Reserve facilities like the standing repo facility (SRF) or discount window

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1	38	41.3	20	34.5	18	52.9
2	19	20.7	10	17.2	9	26.5
3	17	18.5	13	22.4	4	11.8
4	7	7.6	7	12.1	0	0.0
5	11	12.0	8	13.8	3	8.8
Total	92	100.0	58	100.0	34	100.0

4. Broader market conditions (e.g., level of volatility or stress) that could affect the value of non-reserve HQLA, margin requirements, or other needs

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1	12	13.2	7	12.3	5	14.7
2	13	14.3	6	10.5	7	20.6
3	27	29.7	11	19.3	16	47.1
4	24	26.4	20	35.1	4	11.8
5	15	16.5	13	22.8	2	5.9
Total	91	100.0	57	100.0	34	100.0

5. Amount of less-stable deposits as a portion of total liabilities

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1	12	13.3	4	6.9	8	25.0
2	9	10.0	4	6.9	5	15.6
3	23	25.6	16	27.6	7	21.9
4	30	33.3	20	34.5	10	31.3
5	16	17.8	14	24.1	2	6.3
Total	90	100.0	58	100.0	32	100.0

6. Amount of less-stable or shorter-term wholesale liabilities (excluding deposits) as a portion of total liabilities

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1	13	14.6	8	14.3	5	15.2
2	17	19.1	9	16.1	8	24.2
3	24	27.0	15	26.8	9	27.3
4	26	29.2	17	30.4	9	27.3
5	9	10.1	7	12.5	2	6.1
Total	89	100.0	56	100.0	33	100.0

7. Meeting projected liquidity outflows over a certain window (more than one business day and under normal market conditions)

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1	6	6.5	2	3.4	4	11.8
2	8	8.7	4	6.9	4	11.8
3	11	12.0	9	15.5	2	5.9
4	26	28.3	13	22.4	13	38.2
5	41	44.6	30	51.7	11	32.4
Total	92	100.0	58	100.0	34	100.0

8. Meeting routine intraday payment or settlement needs

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1	7	7.7	1	1.8	6	17.6
2	14	15.4	10	17.5	4	11.8
3	11	12.1	8	14.0	3	8.8
4	17	18.7	10	17.5	7	20.6
5	42	46.2	28	49.1	14	41.2
Total	91	100.0	57	100.0	34	100.0

9. Relative rate of return between reserves and non-reserve HQLA

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1	26	28.6	16	28.1	10	29.4
2	21	23.1	14	24.6	7	20.6
3	33	36.3	19	33.3	14	41.2
4	9	9.9	6	10.5	3	8.8
5	2	2.2	2	3.5	0	0.0
Total	91	100.0	57	100.0	34	100.0

10. Relative rate of return between reserves and other investable assets (loans, non-HQLA securities, etc.)

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1	29	31.5	19	32.8	10	29.4
2	24	26.1	13	22.4	11	32.4
3	24	26.1	15	25.9	9	26.5
4	13	14.1	10	17.2	3	8.8
5	2	2.2	1	1.7	1	2.9
Total	92	100.0	58	100.0	34	100.0

11. Lack of depth in late-day funding markets

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1	23	25.6	12	21.1	11	33.3
2	12	13.3	3	5.3	9	27.3
3	20	22.2	15	26.3	5	15.2
4	18	20.0	13	22.8	5	15.2
5	17	18.9	14	24.6	3	9.1
Total	90	100.0	57	100.0	33	100.0

12. Other (please describe)

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
1	2	40.0	0	0.0	2	66.7
2	0	0.0	0	0.0	0	0.0
3	1	20.0	1	50.0	0	0.0
4	1	20.0	1	50.0	0	0.0
5	1	20.0	0	0.0	1	33.3
Total	5	100.0	2	100.0	3	100.0

Three respondents provided substantive comments. Most comments were in line with or elaborated on the survey responses but these comments did not have common themes.

Question 7: If your bank prefers to hold **additional reserves above LCLOR**, please provide an estimate (in **$ millions**) of the amount of total additional reserves your bank chooses to hold above LCLOR. If your bank does not prefer to hold additional reserves above LCLOR, enter 0.

Additional reserves as percent share of lowest comfortable level of reserves (LCLOR)

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
0	20	22.0	15	26.3	5	14.7
1–10	6	6.6	3	5.3	3	8.8
11–25	19	20.9	11	19.3	8	23.5
26–50	14	15.4	10	17.5	4	11.8
More than 50	32	35.2	18	31.6	14	41.2
Total	91	100.0	57	100.0	34	100.0

Question 8: How has this value changed since November 2022? (Round to the nearest value; if percent change exceeds the range provided, please select the end of the range.)

Lowest comfortable level of reserves (LCLOR) by depository institution type (percent change since November 2022)

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Down more than 50 percent	1	1.1	0	0.0	1	3.0
Down 10–50 percent	2	2.2	1	1.8	1	3.0
Down 10 percent - Up 10 percent	58	65.2	30	53.6	28	84.8
Up 10–50 percent	14	15.7	13	23.2	1	3.0
Up more than 50 percent	14	15.7	12	21.4	2	6.1
Total	89	100.0	56	100.0	33	100.0

Additional reserves by depository institution type (percent change since November 2022)

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Down more than 50 percent	0	0.0	0	0.0	0	0.0
Down 10–50 percent	5	7.2	3	7.3	2	7.1
Down 10 percent - Up 10 percent	46	66.7	22	53.7	24	85.7
Up 10–50 percent	6	8.7	4	9.8	2	7.1
Up more than 50 percent	12	17.4	12	29.3	0	0.0
Total	69	100.0	41	100.0	28	100.0

Question 8b: Please explain the rationale for why this level (these levels) has (have) changed.

Forty respondents provided substantive comments. Most respondents provided more context for their bank's LCLOR and additional reserves strategy. Some respondents who noted an increase in their LCLOR and additional reserves level cited banking-sector stress and volatility as the main drivers of this shift.

Question 9: Does your bank allow reserves to fluctuate below its:

LCLOR (Yes/No)

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
No	71	77.2	45	77.6	26	76.5
Yes	21	22.8	13	22.4	8	23.5
Total	92	100.0	58	100.0	34	100.0

Additional reserves level (Yes/No)

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
No	15	21.1	8	19.0	7	24.1
Yes	56	78.9	34	81.0	22	75.9
Total	71	100.0	42	100.0	29	100.0

Other reserves target (Yes/No)

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
No	8	66.7	4	57.1	4	80.0
Yes	4	33.3	3	42.9	1	20.0
Total	12	100.0	7	100.0	5	100.0

Question 9b: Please elaborate on the duration and margin of fluctuation, tolerance for fluctuation, and how these fluctuations are managed internally in terms of governance processes.

Five respondents provided substantive comments, excluding responses of N/A or that specified that there were no additional comments. Most respondents cited holding additional cash balances in light of banking stress.

Part 3: Deposit Rates

Questions in Part 3 ask about deposit pricing strategies—in particular, the degree to which your bank passes through changes in the Federal Reserve policy rate to rates offered on deposits. For the purpose of this section, "**deposit beta**" is defined as the ratio of the basis point change in your bank's average deposit rates on deposits with maturities of seven days or fewer relative to the basis point change in the target range for the federal funds rate.

Question 10: For each of the deposit categories below, please indicate your bank's **cumulative** deposit beta from March 2022 through the end of April 2023. For reference, the target range for the federal funds rate over this period increased **475 basis points**.

1. Retail deposits

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
0–20	38	63.3	36	64.3	2	50.0
21–40	9	15.0	9	16.1	0	0.0
41–60	4	6.7	3	5.4	1	25.0
61–80	8	13.3	7	12.5	1	25.0
81–100	1	1.7	1	1.8	0	0.0
Total	60	100.0	56	100.0	4	100.0

2. Wholesale operational deposits

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
0–20	12	19.7	11	25.0	1	5.9
21–40	13	21.3	13	29.5	0	0.0
41–60	9	14.8	8	18.2	1	5.9
61–80	15	24.6	9	20.5	6	35.3
81–100	12	19.7	3	6.8	9	52.9
Total	61	100.0	44	100.0	17	100.0

3. Wholesale non-operational deposits

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
0–20	6	7.9	5	10.6	1	3.4
21–40	12	15.8	10	21.3	2	6.9
41–60	20	26.3	19	40.4	1	3.4
61–80	12	15.8	7	14.9	5	17.2
81–100	26	34.2	6	12.8	20	69.0
Total	76	100.0	47	100.0	29	100.0

Question 11: Looking ahead to November 2023, please select your expectations for your bank's **cumulative** deposit beta since March 2022 for each of the deposit categories below.

1. Retail deposits

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
0–20	16	26.7	14	25.0	2	50.0
21–40	27	45.0	27	48.2	0	0.0
41–60	7	11.7	6	10.7	1	25.0
61–80	7	11.7	6	10.7	1	25.0
81–100	3	5.0	3	5.4	0	0.0
Total	60	100.0	56	100.0	4	100.0

2. Wholesale operational deposits

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
0–20	6	9.8	5	11.4	1	5.9
21–40	10	16.4	10	22.7	0	0.0
41–60	13	21.3	12	27.3	1	5.9
61–80	18	29.5	13	29.5	5	29.4
81–100	14	23.0	4	9.1	10	58.8
Total	61	100.0	44	100.0	17	100.0

3. Wholesale non-operational deposits

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
0–20	4	5.3	3	6.4	1	3.4
21–40	8	10.5	7	14.9	1	3.4
41–60	11	14.5	10	21.3	1	3.4
61–80	24	31.6	19	40.4	5	17.2
81–100	29	38.2	8	17.0	21	72.4
Total	76	100.0	47	100.0	29	100.0

Question 12: Looking ahead to November 2023, please select the rationale that most closely aligns with your bank's strategy for each of the deposit types listed.

1. Retail

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Beta will be set in order to decrease deposit balances	1	1.7	1	1.8	0	0.0
Beta will be set in order to maintain deposit balances	28	46.7	26	46.4	2	50.0
Beta will be set in order to increase deposit balances	31	51.7	29	51.8	2	50.0
Total	60	100.0	56	100.0	4	100.0

2. Wholesale non-operational

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Beta will be set in order to decrease deposit balances	1	1.6	1	2.3	0	0.0
Beta will be set in order to maintain deposit balances	32	52.5	21	47.7	11	64.7
Beta will be set in order to increase deposit balances	28	45.9	22	50	6	35.3
Total	61	100.0	44	100.0	17	100.0

3. Wholesale operational

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Beta will be set in order to decrease deposit balances	7	9.2	7	14.9	0	0.0
Beta will be set in order to maintain deposit balances	47	61.8	24	51.1	23	79.3
Beta will be set in order to increase deposit balances	22	28.9	16	34.0	6	20.7
Total	76	100.0	47	100.0	29	100.0

Question 13: Have the events of March 2023 influenced your bank's decisionmaking on how it determines and sets its deposit betas?

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
No	60	65.9	34	58.6	26	78.8
Yes	31	34.1	24	41.4	7	21.2
Total	91	100.0	58	100.0	33	100.0

Question 13b: Please describe how your bank considered these events when determining how to set the aforementioned deposit betas.

Twenty-eight respondents provided substantive comments. Most respondents cited increased competition and pressure to retain deposits as the main drivers for how the events of March 2023 influenced their bank's decisionmaking on setting deposit betas.

Part 4: Federal Reserve Facilities

Questions in Part 4 seek to gather information about the Federal Reserve's discount window and Bank Term Funding Program (BTFP). The BTFP offers loans of up to one year in length to banks, savings associations, credit unions, and other eligible depository institutions pledging any collateral eligible for purchase by the Federal Reserve Banks in open market operations.[7] The BTFP was established in March 2023 pursuant to section 13(3) of the Federal Reserve Act, and at the time of survey distribution, BTFP advances could be requested until at least March 1, 2024.

[7] See "Federal Reserve Board Announces It Will Make Available Additional Funding to Eligible Depository Institutions to Help Assure Banks Have the Ability to Meet the Needs of All Their Depositors," March 12, 2023, https://www.federalreserve.gov/newsevents/pressreleases/monetary20230312a.htm.

Question 14: With regard to the BTFP, my bank has to date:

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Arranged program documentation but not pledged collateral	16	17.4	11	19.0	5	14.7
Pledged collateral but not borrowed	23	25.0	21	36.2	2	5.9
Borrowed from the BTFP	14	15.2	13	22.4	1	2.9
None of the above	39	42.4	13	22.4	26	76.5
Total	92	100.0	58	100.0	34	100.0

Question 15: On a scale of -2 (strongly discourages) to +2 (strongly encourages), please rate the below factors to indicate the contribution each makes to your bank's decisionmaking process when considering whether or not to sign-up for/borrow from the BTFP.

1. Enrollment process

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
-2	0	0.0	0	0.0	0	0.0
-1	2	2.2	1	1.7	1	2.9
0	67	72.8	37	63.8	30	88.2
1	4	4.3	4	6.9	0	0.0
2	19	20.7	16	27.6	3	8.8
Total	92	100.0	58	100.0	34	100.0

2. Length of available term of funding

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
-2	0	0.0	0	0.0	0	0.0
-1	1	1.1	1	1.7	0	0.0
0	35	38.0	22	37.9	13	38.2
1	28	30.4	17	29.3	11	32.4
2	28	30.4	18	31.0	10	29.4
Total	92	100.0	58	100.0	34	100.0

3. Eligible collateral asset classes

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
-2	2	2.2	1	1.7	1	3.0
-1	8	8.8	5	8.6	3	9.1
0	36	39.6	21	36.2	15	45.5
1	22	24.2	14	24.1	8	24.2
2	23	25.3	17	29.3	6	18.2
Total	91	100.0	58	100.0	33	100.0

4. Collateral market valuation at par

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
-2	0	0.0	0	0.0	0	0.0
-1	0	0.0	0	0.0	0	0.0
0	22	23.9	11	19.0	11	32.4
1	17	18.5	11	19.0	6	17.6
2	53	57.6	36	62.1	17	50.0
Total	92	100.0	58	100.0	34	100.0

5. Collateral margin of 100 percent

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
-2	0	0.0	0	0.0	0	0.0
-1	0	0.0	0	0.0	0	0.0
0	36	39.6	21	36.2	15	45.5
1	14	15.4	9	15.5	5	15.2
2	41	45.1	28	48.3	13	39.4
Total	91	100.0	58	100.0	33	100.0

6. Interest rate

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
-2	0	0.0	0	0.0	0	0.0
-1	1	1.1	1	1.7	0	0.0
0	43	46.7	27	46.6	16	47.1
1	24	26.1	16	27.6	8	23.5
2	24	26.1	14	24.1	10	29.4
Total	92	100.0	58	100.0	34	100.0

7. Ability to refinance loans at lower rate

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
-2	1	1.1	1	1.7	0	0.0
-1	1	1.1	1	1.7	0	0.0
0	59	64.1	35	60.3	24	70.6
1	16	17.4	11	19.0	5	14.7
2	15	16.3	10	17.2	5	14.7
Total	92	100.0	58	100.0	34	100.0

8. Prepayment option

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
-2	0	0.0	0	0.0	0	0.0
-1	1	1.1	1	1.7	0	0.0
0	33	35.9	18	31.0	15	44.1
1	26	28.3	16	27.6	10	29.4
2	32	34.8	23	39.7	9	26.5
Total	92	100.0	58	100.0	34	100.0

9. Availability of FHLB advances

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
-2	16	17.4	15	25.9	1	2.9
-1	15	16.3	14	24.1	1	2.9
0	51	55.4	20	34.5	31	91.2
1	5	5.4	4	6.9	1	2.9
2	5	5.4	5	8.6	0	0.0
Total	92	100.0	58	100.0	34	100.0

10. Availability of the discount window

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
-2	1	1.1	1	1.7	0	0.0
-1	12	13.0	8	13.8	4	11.8
0	68	73.9	40	69.0	28	82.4
1	4	4.3	3	5.2	1	2.9
2	7	7.6	6	10.3	1	2.9
Total	92	100.0	58	100.0	34	100.0

11. Supervisory or regulatory treatment

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
-2	16	17.4	12	20.7	4	11.8
-1	12	13.0	10	17.2	2	5.9
0	50	54.3	29	50.0	21	61.8
1	9	9.8	3	5.2	6	17.6
2	5	5.4	4	6.9	1	2.9
Total	92	100.0	58	100.0	34	100.0

12. Public disclosure of borrower-level advance and data[8]

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
-2	44	47.8	31	53.4	13	38.2
-1	22	23.9	14	24.1	8	23.5
0	21	22.8	10	17.2	11	32.4
1	4	4.3	2	3.4	2	5.9
2	1	1.1	1	1.7	0	0.0
Total	92	100.0	58	100.0	34	100.0

13. Federal Reserve public communications regarding the BTFP

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
-2	13	14.1	11	19.0	2	5.9
-1	8	8.7	7	12.1	1	2.9
0	56	60.9	28	48.3	28	82.4
1	12	13	9	15.5	3	8.8
2	3	3.3	3	5.2	0	0.0
Total	92	100.0	58	100.0	34	100.0

14. Federal Reserve's recourse to borrowers (beyond collateral)

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
-2	8	8.7	5	8.6	3	8.8
-1	14	15.2	13	22.4	1	2.9
0	67	72.8	38	65.5	29	85.3
1	2	2.2	1	1.7	1	2.9
2	1	1.1	1	1.7	0	0.0
Total	92	100.0	58	100.0	34	100.0

Question 16: Please add any additional comments regarding the **BTFP** in the box below.

Forty-four respondents provided comments, excluding responses of N/A or that specified that their bank is not eligible. Most comments elaborated on the survey responses and some respondents specified that public disclosure is a concern for usage. Some respondents also noted that their bank views the program as a good funding source regardless of if the bank has used or anticipates usage of the facility.

[8] Under section 11(s) of the Federal Reserve Act, the Federal Reserve will publicly disclose information concerning the program one year after it ends (the program is currently scheduled to end in March 2024). For further details, please consult the Federal Reserve's BTFP FAQs at https://www.federalreserve.gov/financial-stability/files/bank-term-funding-program-faqs.pdf.

Question 17: 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 to support the flow of credit to households and businesses.[9] Taking into account developments that have transpired between March 2020 and April 2023, please indicate how your bank's view of the discount window has changed (on net).

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Less likely to consider the discount window as a source, regardless of liquidity needs	4	4.3	3	5.2	1	2.9
More likely to consider the discount window as a source to meet liquidity needs	13	14.1	12	20.7	1	2.9
Unchanged	75	81.5	43	74.1	32	94.1
Total	92	100.0	58	100.0	34	100.0

Question 18: On a scale from -2 (strongly discourages) to +2 (strongly encourages), please rate the below factors to indicate the contribution each makes to your bank's decisionmaking process when considering whether or not to sign up for/borrow from the discount window.

1. Enrollment process

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
-2	1	1.1	1	1.7	0	0.0
-1	2	2.2	1	1.7	1	2.9
0	77	83.7	46	79.3	31	91.2
1	2	2.2	1	1.7	1	2.9
2	10	10.9	9	15.5	1	2.9
Total	92	100.0	58	100.0	34	100.0

2. Length of available term of funding

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
-2	1	1.1	1	1.7	0	0.0
-1	7	7.6	4	6.9	3	8.8
0	59	64.1	37	63.8	22	64.7
1	13	14.1	8	13.8	5	14.7
2	12	13.0	8	13.8	4	11.8
Total	92	100.0	58	100.0	34	100.0

[9] See "Federal Reserve Actions to Support the Flow of Credit to Households and Businesses," March 15, 2020, https://www.federalreserve.gov/newsevents/pressreleases/monetary20200315b.htm.

3. Eligible collateral asset classes

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
-2	2	2.2	1	1.7	1	3.0
-1	2	2.2	1	1.7	1	3.0
0	44	48.4	25	43.1	19	57.6
1	18	19.8	14	24.1	4	12.1
2	25	27.5	17	29.3	8	24.2
Total	91	100.0	58	100.0	33	100.0

4. Collateral valuation at market value

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
-2	0	0.0	0	0.0	0	0.0
-1	10	10.9	6	10.3	4	11.8
0	64	69.6	42	72.4	22	64.7
1	6	6.5	3	5.2	3	8.8
2	12	13.0	7	12.1	5	14.7
Total	92	100.0	58	100.0	34	100.0

5. OMO eligible collateral margin of 100 percent

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
-2	0	0.0	0	0.0	0	0.0
-1	0	0.0	0	0.0	0	0.0
0	70	76.1	43	74.1	27	79.4
1	9	9.8	6	10.3	3	8.8
2	13	14.1	9	15.5	4	11.8
Total	92	100.0	58	100.0	34	100.0

6. Interest rate

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
-2	0	0.0	0	0.0	0	0.0
-1	10	10.9	5	8.6	5	14.7
0	69	75.0	46	79.3	23	67.6
1	8	8.7	3	5.2	5	14.7
2	5	5.4	4	6.9	1	2.9
Total	92	100.0	58	100.0	34	100.0

7. Prepayment option

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
-2	0	0.0	0	0.0	0	0.0
-1	0	0.0	0	0.0	0	0.0
0	61	66.3	39	67.2	22	64.7
1	17	18.5	11	19.0	6	17.6
2	14	15.2	8	13.8	6	17.6
Total	92	100.0	58	100.0	34	100.0

8. Availability of BTFP

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
-2	7	7.6	4	6.9	3	8.8
-1	31	33.7	24	41.4	7	20.6
0	46	50.0	25	43.1	21	61.8
1	2	2.2	0	0.0	2	5.9
2	6	6.5	5	8.6	1	2.9
Total	92	100.0	58	100.0	34	100.0

9. Availability of FHLB advances

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
-2	17	18.5	16	27.6	1	2.9
-1	16	17.4	15	25.9	1	2.9
0	52	56.5	20	34.5	32	94.1
1	2	2.2	2	3.4	0	0.0
2	5	5.4	5	8.6	0	0.0
Total	92	100.0	58	100.0	34	100.0

10. Supervisory or regulatory treatment

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
-2	20	21.7	13	22.4	7	20.6
-1	16	17.4	13	22.4	3	8.8
0	48	52.2	26	44.8	22	64.7
1	4	4.3	3	5.2	1	2.9
2	4	4.3	3	5.2	1	2.9
Total	92	100.0	58	100.0	34	100.0

11. Public disclosure of borrower-level advance and data[10]

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
-2	49	53.3	34	58.6	15	44.1
-1	20	21.7	11	19.0	9	26.5
0	19	20.7	11	19.0	8	23.5
1	3	3.3	1	1.7	2	5.9
2	1	1.1	1	1.7	0	0.0
Total	92	100.0	58	100.0	34	100.0

12. Federal Reserve public communications regarding the discount window

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
-2	15	16.3	13	22.4	2	5.9
-1	13	14.1	11	19.0	2	5.9
0	54	58.7	27	46.6	27	79.4
1	8	8.7	5	8.6	3	8.8
2	2	2.2	2	3.4	0	0.0
Total	92	100.0	58	100.0	34	100.0

13. Federal Reserve's recourse to borrowers (beyond collateral)

	All respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
-2	9	9.8	7	12.1	2	5.9
-1	13	14.1	10	17.2	3	8.8
0	66	71.7	38	65.5	28	82.4
1	3	3.3	2	3.4	1	2.9
2	1	1.1	1	1.7	0	0.0
Total	92	100.0	58	100.0	34	100.0

Question 19: Please add any additional comments regarding the discount window in the box below.

Twenty-one respondents provided comments, excluding responses of N/A or that specified that there were no additional comments. Many respondents noted that public perception remains a hurdle for discount window usage at their bank.

[10] Under provisions of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, the Federal Reserve provides detailed information about its loans to depository institutions and others. The Federal Reserve releases discount window transaction data quarterly, with an approximately two-year lag. For further details, please see the Federal Reserve's website (https://www.federalreserve.gov).

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