Senior Financial Officer Survey

September 2018

Board of Governors of the Federal Reserve System

Summary

The September 2018 Senior Financial Officer Survey collected quantitative and qualitative information from senior financial officers from each respondent bank on their reserve management practices and money market participation.[1] The survey included questions that were organized into three parts. The first part asked respondents at each bank to identify the approximate lowest level of reserve balances that they would feel comfortable holding given the constellation of short-term interest rates prevailing at the time of the survey before taking action to retain or increase their reserve balances.[2] The second part asked respondents to consider reserve balance management in interest rate environments different from the one prevailing at the time of the survey. In particular, this part of the survey asked respondents to consider how an increase in the level of short-term interest rates relative to the interest on excess reserves (IOER) rate could affect the lowest comfortable level of reserve balances that they reported in the first part of the survey. The third part of the survey asked about participation in unsecured overnight wholesale funding markets.

The Federal Reserve received responses from 51 banks. In aggregate, these banks held roughly two-thirds of total reserve balances in the banking system at the time of the survey. Responses were collected from senior financial officers at 30 domestic banks and at 21 U.S. branches and agencies of foreign banking organizations; this group represented a range of asset sizes and business models. The survey was conducted during the period from August 29, 2018, to September 12, 2018. The reference period for most questions was August 2018. Key takeaways from the survey include the following:

- Survey respondents indicated that their lowest comfortable level of reserve balances given the constellation of short-term interest rates prevailing at the time of the survey was notably smaller than the amount they held, on average, in August 2018. The aggregate lowest comfortable level of reserve balances of survey respondents was just over $600 billion, a little less than half the level of the respondent banks' average reserve balance holdings in

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1 The September 2018 survey was conducted by the Board of Governors of the Federal Reserve System in collaboration with the Federal Reserve Bank of New York.

2 Respondents were asked to assume that the "constellation of short-term rates" refers to the rates on federal funds, Eurodollars, repurchase agreements, and short-dated U.S. Treasury bills.

August 2018. Recall that, in aggregate, the respondent banks held roughly two-thirds of total reserve balances at the time of the survey.

- When asked to consider whether they would adjust their assessment of their lowest comfortable level of reserve balances in different interest rate environments where the opportunity cost of holding reserves increased substantially, the respondents were roughly split between those who reported this level would not change and those who indicated that they could economize on their lowest comfortable level of reserve balances.

The remainder of this summary is organized into three parts followed by a tabular presentation of responses.[3]

Part 1. Current Reserve Balance Management Strategies and Practices

(Table 1, questions 1–5)

Question on lowest comfortable level of reserve balances. Senior financial officers at each bank were asked to report the approximate lowest level of reserve balances that they would feel comfortable holding before taking active steps to maintain or increase their bank's reserve balances given the prevailing constellation of short-term interest rates relative to the IOER rate. In aggregate, the lowest comfortable levels of reserve balances reported by all respondents summed to about $600 billion, a little less than half of these banks' average reserve balance holdings in August 2018. Recall that, in aggregate, the respondent banks held roughly two-thirds of total reserve balances at the time of the survey. A majority of these respondents indicated that their lowest comfortable level of reserve balances was between 25 percent and 75 percent of their bank's average August 2018 reserve balances.[4]

Question on drivers of lowest comfortable level of reserve balances. Survey respondents were asked to identify determinants of their lowest comfortable level of reserve balances. A major-

[3] Survey results are organized into three tables to match the three parts of the survey. For the most part, the instructions and survey questions presented in each table mirror the ones distributed to the respondents, with minor adjustments to enhance clarity. As not all respondents answered every question, the number of respondents answering each question is reported in the accompanying data tables.

[4] When describing responses, "remained unchanged" covers percentages from 0 to 5 percent; "modest" refers to percentages greater than 5 and less than or equal to 10 percent; "moderate" refers to percentages greater than 10 and less than or equal to 20 percent; "significant" refers to percentages greater than 20 and less than 50 percent; and "majority" refers to percentages greater than or equal to 50 percent.

ity of the respondents reported that satisfying internal liquidity stress metrics, meeting routine intraday payment flows, and meeting potential deposit outflows were important or very important determinants. Given their assumptions about the ability to monetize various forms of high-quality liquid assets, over one-third of the respondents cited managing their liquidity portfolio as an important or very important driver. Only a moderate fraction of respondents reported seeking to earn the IOER rate instead of the return on other high-quality liquid assets as an important or very important determinant.

Determinants of the lowest comfortable level of reserve balances varied somewhat depending on whether the respondent represented a domestic or foreign bank. Among domestic banks, the need to accommodate potential deposit outflows was identified as important or very important by the largest fraction of respondents, while the greatest number of respondents at foreign banks cited satisfying internal liquidity stress metrics as important or very important.

Questions on potential use of measures to rebuild reserve balances should they fall below the lowest comfortable level. Survey respondents were also asked to report the likelihood of employing various actions to replenish reserve balances. Respondents were asked to differentiate their strategies depending on whether reserve balances were expected to decline below their lowest comfortable level in the short term (up to a week) or in the long term (over a week). The majority of respondents from domestic banks reported increased borrowing from Federal Home Loan Banks (FHLBs) in the form of advances as a very likely action to rebuild their lowest comfortable level of reserve balances in both the short term and long term. The likelihood reported by domestic banks of taking other actions to rebuild their reserve balances depended greatly on the time horizon. To manage a short-term decline in reserves, a significant fraction of respondents from domestic banks reported being very likely to use unsecured borrowing in tenors less than 30 days. Over a longer horizon, however, the majority of respondents from domestic banks reported raising retail deposit rates as a likely action. Nearly half of the domestic respondents noted offering higher rates on wholesale deposits as another likely action to address a longer-run decline in reserve balances.

A majority of respondents from foreign banks reported raising wholesale deposit rates as a likely action to address a short-term funding need. For a long-term shortfall in reserve balances, the majority of respondents from foreign banks reported borrowing in unsecured markets in tenors greater than 30 days as a very likely action. A similar fraction also reported reducing lending in money markets as a likely action in the long term.

All of the senior financial officers surveyed reported the likelihood of borrowing from the Federal Reserve's discount window to meet reserve balance shortfalls relative to their reported lowest comfortable level of reserve balances as unlikely or very unlikely in the short term or long term.

Part 2. Reserve Balance Management in Different Interest Rate Environments

(Table 2, question 6)

Survey respondents were asked to report how their lowest comfortable level of reserve balances would change, given different opportunity costs of holding these balances. Opportunity cost was defined as the difference between a constellation of short-term interest rates and the current level of the IOER rate. Respondents were asked to consider four different opportunity cost scenarios, in which the opportunity cost (1) fell 5 basis points, (2) rose 5 basis points, (3) rose 25 basis points, or (4) rose 50 basis points. In each of these scenarios, respondents were asked to assume that all short-term interest rates shifted by a similar amount and that the scenario would persist for a significant period of time.

The majority of respondents reported that their lowest comfortable level of reserve balances would remain unchanged if the opportunity cost of holding reserve balances was either 5 basis points lower or higher than prevailed in August 2018. As the opportunity cost of holding reserve balances increased, however, nearly half of the respondents reported that their lowest comfortable level of reserve balances would decrease by some amount, showing some willingness to economize on their lowest comfortable level of reserve balances as the opportunity cost of holding reserves rises.

Responses to this question differed somewhat among respondents by institution type. A moderate fraction of respondents at foreign banks reported that their lowest comfortable level of reserve balances would decrease if the opportunity cost of holding balances was 5 basis points higher, while all domestic bank respondents indicated that their lowest comfortable level of reserve balances would remain unchanged. As the opportunity cost rose 25 basis points and 50 basis points, more respondents indicated a willingness to economize on their lowest comfortable level of reserve balances. Half of respondents from domestic banks and nearly half of respondents from foreign banks reportedly would decrease their lowest comfortable level of reserve balances by some degree if the opportunity cost of holding reserve balances widened by 50 basis points.

Part 3. Unsecured Overnight Wholesale Funding Market Activity

(Table 3, questions 7–11)

Questions on motivations for engaging in unsecured overnight wholesale funding markets. Senior financial officers were asked to denote with a "Yes" or "No" response whether their bank was an active borrower in unsecured overnight wholesale funding markets (for the purposes of this survey, such markets were defined as the federal funds market or the overnight Eurodollar market). The majority of respondents reported "Yes." All but two respondents from foreign banks and a majority of respondents from domestic banks reported that they were active borrowers.

Respondents that self-identified their bank as an active borrower were also asked to identify the importance of different motivations for their borrowing. Among the respondents from domestic banks, a majority noted that covering temporary or unexpected shortfalls in their reserve balances was an important or very important motivation for them to borrow in unsecured overnight wholesale funding markets. A significant fraction of respondents at domestic banks also cited working to meet anticipated intraday payment and liquidity needs as an important or very important consideration in their borrowing decisionmaking. Foreign banks' responses differed somewhat from those of domestic banks. For example, the majority of respondents from foreign banks reported that accommodating customers and earning a positive spread to the IOER rate were important or very important motivating factors for borrowing in unsecured overnight wholesale funding markets.

Questions on willingness to lend. All senior financial officers were asked to indicate the spread relative to the IOER rate at which they would be willing to start lending overnight federal funds or Eurodollars. Nearly three-fourths of respondents provided a spread. Among those respondents, required spreads over the IOER rate ranged from as low as 5 basis points to as high as 100 basis points. Slightly over half of these respondents reported being willing to lend at a spread to the IOER rate of less than or equal to 25 basis points, while just under half would require a spread to that rate of above 25 basis points. Reponses from senior financial officers at domestic banks were relatively heterogeneous; a roughly equal number indicated a willingness to lend across the noted range of spreads provided. In contrast, for respondents from foreign banks that reported a spread, the majority indicated a willingness to lend at rates less than 25 basis points. A significant fraction of respondents, evenly split between domestic and foreign, did not provide a rate at which they would be willing to lend or answered “Not applicable.”

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Results

The following results include the instructions provided to the survey respondents. Please note that percentages are based on the number of financial institutions that gave responses other than "Not applicable." Components may not sum to totals because of rounding.

Table 1. Current Reserve Balance Management Strategies and Practices

The following questions ask about your bank's current and prospective demand for reserve balances, conditional on the opportunity cost of holding those balances relative to other liquid assets. Unless otherwise specified, please consider your bank's end-of-day reserve balances when answering the questions. Question 1 asks for the approximate lowest level of reserve balances that your bank is currently comfortable holding, and questions 2 through 4 in this section inquire about considerations related to that determination.

1. Given the constellation of short-term interest rates relative to the interest on excess reserves (IOER) rate over the past month, what is the approximate lowest dollar level of reserve balances that your bank would be comfortable holding before it began taking active steps to maintain or increase its reserve balance position?[5]

	All Respondents	Domestic	Foreign
Totals	(billions of dollars)		
Reported lowest comfortable level of reserve balances	617.2	385.0	232.2
Average reserve balances in August 2018 *	1,368.2	827.5	540.7

* Federal Reserve data.

2. Please rate the importance to your bank of the following considerations in determining the amount you indicated in question 1 on a scale of 1 (not important), 2 (somewhat important), 3 (important), or 4 (very important), or, if the factor is not applicable to your bank (for example, your bank is not subject to the regulatory requirement or does not engage in the described activity), please select "N/A."

[5] For the purposes of this survey, please assume that the "constellation of short-term rates" refers to the rates on federal funds, Eurodollars, repurchase agreements, and short-dated U.S. Treasury bills. Examples of "active steps" includes bidding more aggressively in the federal funds market or other wholesale unsecured funding markets, reducing holdings of other liquid assets, or raising deposit rates. Please respond to this question from a consolidated bank holding company perspective for your institution, if applicable.

A. Meeting routine intraday payment flows:

	All Respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Not important	7	14.0	3	10.0	4	20.0
Somewhat important	13	26.0	10	33.3	3	15.0
Important	9	18.0	5	16.7	4	20.0
Very important	21	42.0	12	40.0	9	45.0
Total	50	100.0	30	100.0	20	100.0

B. Meeting potential deposit outflows:

	All Respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Not important	7	14.0	2	6.7	5	25.0
Somewhat important	14	28.0	6	20.0	8	40.0
Important	12	24.0	7	23.3	5	25.0
Very important	17	34.0	15	50.0	2	10.0
Total	50	100.0	30	100.0	20	100.0

C. Satisfying internal liquid stress metrics:

	All Respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Not important	8	16.0	6	20.0	2	10.0
Somewhat important	8	16.0	5	16.7	3	15.0
Important	14	28.0	8	26.7	6	30.0
Very important	20	40.0	11	36.7	9	45.0
Total	50	100.0	30	100.0	20	100.0

D. Satisfying the bank's reserve requirements:

	All Respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Not important	21	41.2	11	36.7	10	47.6
Somewhat important	6	11.8	4	13.3	2	9.5
Important	6	11.8	4	13.3	2	9.5
Very important	18	35.3	11	36.7	7	33.3
Total	51	100.0	30	100.0	21	100.0

E. Seeking to earn the IOER rate instead of the return on other high-quality liquid assets:

	All Respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Not important	21	41.2	13	43.3	8	38.1
Somewhat important	22	43.1	14	46.7	8	38.1
Important	8	15.7	3	10.0	5	23.8
Very important	0	0.0	0	0.0	0	0.0
Total	51	100.0	30	100.0	21	100.0

F. Managing liquidity portfolio based on monetization assumptions for high-quality liquid assets:

	All Respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Not important	11	21.6	7	23.3	4	19.0
Somewhat important	21	41.2	14	46.7	7	33.3
Important	11	21.6	3	10.0	8	38.1
Very important	8	15.7	6	20.0	2	9.5
Total	51	100.0	30	100.0	21	100.0

3. If your bank's reserve balance fell, or was expected to fall, significantly below the amount you indicated in question 1, in the following table please provide the likelihood that your bank would pursue the following actions in the short term (up to a week) and in the long term (over a week) on a scale of 1 (very unlikely), 2 (unlikely), 3 (likely), or 4 (very likely), or, if the action is not applicable to your bank (for example, your bank does not engage in the described activity), please select "N/A."

A. For a short-term funding need:

i. Borrow in unsecured funding markets in tenors less than 30 days

	All Respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Very unlikely	11	22.0	7	24.1	4	19.0
Unlikely	7	14.0	5	17.2	2	9.5
Likely	12	24.0	5	17.2	7	33.3
Very likely	20	40.0	12	41.4	8	38.1
Total	50	100.0	29	100.0	21	100.0

ii. Borrow in unsecured funding markets in tenors greater than 30 days

	All Respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Very unlikely	14	28.6	12	41.4	2	10.0
Unlikely	19	38.8	9	31.0	10	50.0
Likely	10	20.4	5	17.2	5	25.0
Very likely	6	12.2	3	10.3	3	15.0
Total	49	100.0	29	100.0	20	100.0

iii. Borrow in secured funding markets in tenors less than 30 days

	All Respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Very unlikely	14	28.0	7	23.3	7	35.0
Unlikely	15	30.0	8	26.7	7	35.0
Likely	9	18.0	4	13.3	5	25.0
Very likely	12	24.0	11	36.7	1	5.0
Total	50	100.0	30	100.0	20	100.0

iv. Borrow in secured funding markets in tenors greater than 30 days

	All Respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Very unlikely	20	40.0	12	40.0	8	40.0
Unlikely	20	40.0	11	36.7	9	45.0
Likely	7	14.0	5	16.7	2	10.0
Very likely	3	6.0	2	6.7	1	5.0
Total	50	100.0	30	100.0	20	100.0

v. Borrow from the Federal Reserve discount window

	All Respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Very unlikely	45	90.0	28	93.3	17	85.0
Unlikely	5	10.0	2	6.7	3	15.0
Likely	0	0.0	0	0.0	0	0.0
Very likely	0	0.0	0	0.0	0	0.0
Total	50	100.0	30	100.0	20	100.0

vi. Reduce lending in short-term money markets (for example, markets for repurchase agreements)

	All Respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Very unlikely	14	37.8	10	55.6	4	21.1
Unlikely	4	10.8	1	5.6	3	15.8
Likely	11	29.7	3	16.7	8	42.1
Very likely	8	21.6	4	22.2	4	21.1
Total	37	100.0	18	100.0	19	100.0

vii. Reduce holdings of available-for-sale short-term securities

	All Respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Very unlikely	23	46.0	15	50.0	8	40.0
Unlikely	17	34.0	9	30.0	8	40.0
Likely	8	16.0	5	16.7	3	15.0
Very likely	2	4.0	1	3.3	1	5.0
Total	50	100.0	30	100.0	20	100.0

viii. Increase advances from Federal Home Loan Banks

	All Respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Very unlikely	2	6.9	1	3.6	1	100.0
Unlikely	2	6.9	2	7.1	0	0.0
Likely	6	20.7	6	21.4	0	0.0
Very likely	19	65.5	19	67.9	0	0.0
Total	29	100.0	28	100.0	1	100.0

ix. Raise wholesale deposit rates

	All Respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Very unlikely	10	20.8	10	37.0	0	0.0
Unlikely	16	33.3	10	37.0	6	28.6
Likely	19	39.6	6	22.2	13	61.9
Very likely	3	6.3	1	3.7	2	9.5
Total	48	100.0	27	100.0	21	100.0

x. Raise retail deposit rates

	All Respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Very unlikely	24	68.6	21	75.0	3	42.9
Unlikely	7	20.0	3	10.7	4	57.1
Likely	4	11.4	4	14.3	0	0.0
Very likely	0	0.0	0	0.0	0	0.0
Total	35	100.0	28	100.0	7	100.0

xi. Other (please rate here and explain in 3.C)

	All Respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Very unlikely	1	11.1	1	20.0	0	0.0
Unlikely	1	11.1	1	20.0	0	0.0
Likely	5	55.6	3	60.0	2	50.0
Very likely	2	22.2	0	0.0	2	50.0
Total	9	100.0	5	100.0	4	100.0

B. For a long-term funding need:

i. Borrow in unsecured funding markets in tenors less than 30 days

	All Respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Very unlikely	23	46.9	14	48.3	9	45.0
Unlikely	16	32.7	10	34.5	6	30.0
Likely	6	12.2	3	10.3	3	15.0
Very likely	4	8.2	2	6.9	2	10.0
Total	49	100.0	29	100.0	20	100.0

ii. Borrow in unsecured funding markets in tenors greater than 30 days

	All Respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Very unlikely	6	12.0	5	17.2	1	4.8
Unlikely	9	18.0	7	24.1	2	9.5
Likely	14	28.0	7	24.1	7	33.3
Very likely	21	42.0	10	34.5	11	52.4
Total	50	100.0	29	100.0	21	100.0

iii. Borrow in secured funding markets in tenors less than 30 days

	All Respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Very unlikely	23	46.0	13	43.3	10	50.0
Unlikely	18	36.0	12	40.0	6	30.0
Likely	7	14.0	4	13.3	3	15.0
Very likely	2	4.0	1	3.3	1	5.0
Total	50	100.0	30	100.0	20	100.0

iv. Borrow in secured funding markets in tenors greater than 30 days

	All Respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Very unlikely	12	24.0	5	16.7	7	35.0
Unlikely	20	40.0	13	43.3	7	35.0
Likely	12	24.0	7	23.3	5	25.0
Very likely	6	12.0	5	16.7	1	5.0
Total	50	100.0	30	100.0	20	100.0

v. Borrow from the Federal Reserve discount window

	All Respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Very unlikely	48	96.0	29	96.7	19	95.0
Unlikely	2	4.0	1	3.3	1	5.0
Likely	0	0.0	0	0.0	0	0.0
Very likely	0	0.0	0	0.0	0	0.0
Total	50	100.0	30	100.0	20	100.0

vi. Reduce lending in short-term money markets (for example, markets for repurchase agreements)

	All Respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Very unlikely	11	29.7	8	44.4	3	15.8
Unlikely	5	13.5	2	11.1	3	15.8
Likely	15	40.5	4	22.2	11	57.9
Very likely	6	16.2	4	22.2	2	10.5
Total	37	100.0	18	100.0	19	100.0

vii. Reduce holdings of available-for-sale short-term securities

	All Respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Very unlikely	17	34.0	9	30.0	8	40.0
Unlikely	16	32.0	9	30.0	7	35.0
Likely	10	20.0	6	20.0	4	20.0
Very likely	7	14.0	6	20.0	1	5.0
Total	50	100.0	30	100.0	20	100.0

viii. Increase advances from Federal Home Loan Banks

	All Respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Very unlikely	1	3.4	0	0.0	1	100.0
Unlikely	4	13.8	4	14.3	0	0.0
Likely	9	31.0	9	32.1	0	0.0
Very likely	15	51.7	15	53.6	0	0.0
Total	29	100.0	28	100.0	1	100.0

ix. Raise wholesale deposit rates

	All Respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Very unlikely	5	10.4	5	18.5	0	0.0
Unlikely	11	22.9	4	14.8	7	33.3
Likely	23	47.9	13	48.1	10	47.6
Very likely	9	18.8	5	18.5	4	19.0
Total	48	100.0	27	100.0	21	100.0

x. Raise retail deposit rates

	All Respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Very unlikely	10	28.6	7	25.0	3	42.9
Unlikely	6	17.1	4	14.3	2	28.6
Likely	17	48.6	15	53.6	2	28.6
Very likely	2	5.7	2	7.1	0	0.0
Total	35	100.0	28	100.0	7	100.0

xi. Other (please rate here and explain in 3.C)

	All Respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Very unlikely	1	11.1	1	20.0	0	0.0
Unlikely	0	0.0	0	0.0	0	0.0
Likely	7	77.8	4	80.0	3	75.0
Very likely	1	11.1	0	0.0	1	25.0
Total	9	100.0	5	100.0	4	100.0

C. Other (please explain):

(11 responses)

Some respondents suggested that they would consider reducing their securities portfolio to address a long-term funding need. Other respondents commented on potential actions but did not clearly identify whether these actions would be used in the short term or long term. For instance, several respondents indicated they would engage in foreign exchange swap transactions if their reserve balances fell or were expected to fall significantly below their lowest comfortable level of reserve balances as noted in question 1. Other respondents stated that they would increase funding or borrowing from their affiliated entities in response to a perceived reserve shortfall.

4. If your bank's current level of reserve balances is higher than the amount you indicated in question 1, please provide the primary considerations (the list of considerations from question 2 may or may not be useful) for the difference between the two levels. (If your bank's current level of reserve balances is near the amount you indicated in question 1, please skip to the next question.)

(44 responses)

Many respondents noted that internal liquidity risk management was a primary consideration for the difference in their current reserve levels versus their response to question 1, while several others indicated a driving factor was client or customer needs. Some respondents stated that in the current interest rate environment, the relatively attractive return on reserve balances was a reason for maintaining reserve balances above their answer to question 1.

5. Please provide any additional comments on your bank's current U.S. dollar reserves management strategy and practices (optional).

   (16 responses)

   Several banks indicated that Liquidity Coverage Ratio constraints and the need for sufficient cash buffers were factors in their U.S. dollar reserves management strategy and practices.

Table 2. Reserve Balance Management in Different Interest Rate Environment

6. This question is designed to gain insight into how your bank might adjust its reserve balance holdings in response to changes in the opportunity cost of holding those balances. For the purposes of this question, please assume that the IOER rate remains constant and that the starting point is the constellation of interest rates described in question 1. Please also assume that all short-term interest rates shift by a similar amount and that the interest rate scenario is one that persists for a significant period of time.

   A. Change in the lowest comfortable level of reserve balances as reported in question 1 if the opportunity cost of holding these balances, measured as the difference between the constellation of short-term interest rates and the IOER rate, is **5 basis points lower** in the reference period

	All Respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Decreased	0	0.0	0	0.0	0	0.0
Unchanged	37	75.5	27	90.0	10	52.6
Increased	12	24.5	3	10.0	9	47.4
Total	49	100.0	30	100.0	19	100.0

B. Change in the lowest comfortable level of reserve balances as reported in question 1 if the opportunity cost of holding these balances, measured as the difference between the constellation of short-term interest rates and the IOER rate, is **5 basis points higher** in the reference period

	All Respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Decreased	4	8.0	0	0.0	4	20.0
Unchanged	46	92.0	30	100.0	16	80.0
Increased	0	0.0	0	0.0	0	0.0
Total	50	100.0	30	100.0	20	100.0

C. Change in the lowest comfortable level of reserve balances as reported in question 1 if the opportunity cost of holding these balances, measured as the difference between the constellation of short-term interest rates and the IOER rate, is **25 basis points higher** in the reference period

	All Respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Decreased	23	46.0	14	46.7	9	45.0
Unchanged	27	54.0	16	53.3	11	55.0
Increased	0	0.0	0	0.0	0	0.0
Total	50	100.0	30	100.0	20	100.0

D. Change in lowest comfortable level of reserve balances as reported in question 1 if the opportunity cost of holding these balances, measured as the difference between the constellation of short-term interest rates and the IOER rate, is **50 basis points higher** in the reference period

	All Respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Decreased	24	49.0	15	50.0	9	47.4
Unchanged	25	51.0	15	50.0	10	52.6
Increased	0	0.0	0	0.0	0	0.0
Total	49	100.0	30	100.0	19	100.0

Table 3. Unsecured Overnight Wholesale Funding Market Activity

The questions in this part of the survey ask for you to explain the considerations that motivate your bank's activity in unsecured overnight wholesale funding markets.

7. Is your bank an active borrower in unsecured overnight wholesale funding markets (Yes or No)? If you marked "No," please skip to question 9.

	All Respondents	Domestic	Foreign
Yes	36	17	19
No	15	13	2
Total	51	30	21

8. Please rate the importance of the following possible motivations for your bank's borrowing in unsecured overnight wholesale funding markets (federal funds or Eurodollars) on a scale of 1 (not important), 2 (somewhat important), 3 (important), or 4 (very important).

A. Earning a positive spread to IOER:

	All Respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Not important	13	36.1	9	52.9	4	21.1
Somewhat important	10	27.8	6	35.3	4	21.1
Important	9	25.0	2	11.8	7	36.8
Very important	4	11.1	0	0.0	4	21.1
Total	36	100.0	17	100.0	19	100.0

B. Covering temporary or unexpected shortfalls in reserve balance holdings:

	All Respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Not important	15	41.7	4	23.5	11	57.9
Somewhat important	5	13.9	2	11.8	3	15.8
Important	7	19.4	3	17.6	4	21.1
Very important	9	25.0	8	47.1	1	5.3
Total	36	100.0	17	100.0	19	100.0

C. Meeting anticipated intraday payment and liquidity needs:

	All Respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Not important	16	44.4	7	41.2	9	47.4
Somewhat important	6	16.7	2	11.8	4	21.1
Important	8	22.2	3	17.6	5	26.3
Very important	6	16.7	5	29.4	1	5.3
Total	36	100.0	17	100.0	19	100.0

D. Meeting reserve requirements:

	All Respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Not important	20	55.6	8	47.1	12	63.2
Somewhat important	8	22.2	3	17.6	5	26.3
Important	3	8.3	2	11.8	1	5.3
Very important	5	13.9	4	23.5	1	5.3
Total	36	100.0	17	100.0	19	100.0

E. Borrowing to accommodate customers by providing a short-term investment option:

	All Respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Not important	17	47.2	13	76.5	4	21.1
Somewhat important	5	13.9	3	17.6	2	10.5
Important	8	22.2	1	5.9	7	36.8
Very important	6	16.7	0	0.0	6	31.6
Total	36	100.0	17	100.0	19	100.0

F. Improving or maintaining LCR metrics:

	All Respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Not important	16	44.4	7	41.2	9	47.4
Somewhat important	4	11.1	4	23.5	0	0.0
Important	8	22.2	1	5.9	7	36.8
Very important	8	22.2	5	29.4	3	15.8
Total	36	100.0	17	100.0	19	100.0

G. Other (please rate here and explain in 8.H):

	All Respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
Not important	1	16.7	0	0.0	1	50.0
Somewhat important	2	33.3	2	50.0	0	0.0
Important	2	33.3	1	25.0	1	50.0
Very important	1	16.7	1	25.0	0	0.0
Total	6	100.0	4	100.0	2	100.0

H. Other (please explain):

(5 responses)

Several respondents noted maintaining funding lines and relationships as motivations for borrowing in unsecured overnight wholesale funding markets. Other respondents identified the relatively favorable cost of unsecured funding as another motivation.

9. Generally speaking, and excluding the effects of month-end activity, please specify the spread relative to the IOER rate at which your bank would be willing to start lending federal funds or overnight Eurodollars (in basis points).

	All Respondents		Domestic		Foreign	
	Banks	Percent	Banks	Percent	Banks	Percent
0 to 25 basis points	20	54.1	8	34.8	12	85.7
26 to 50 basis points	9	24.3	7	30.4	2	14.3
51 to 100 basis points	8	21.6	8	34.8	0	0.0
Total	37	100.0	23	100.0	14	100.0

10. Please provide any additional comments about your bank's willingness to borrow or lend in the federal funds and Eurodollar (overnight) markets (optional).

(31 responses)

Multiple respondents indicated that they did not lend, or it was unattractive to lend, in the federal funds and Eurodollar (overnight) markets because of regulatory capital implications and that spreads were too low to compensate for additional credit risk. Several other respondents noted that their willingness to borrow or lend in these markets was driven by a desire to accommodate key partners and maintain relationships.

11. If there is any other information relevant to your bank's management of reserve balances that you would like to provide at this time, please do so below (optional).

(13 responses)

Several respondents noted that their management of reserve balances was a product of liquidity constraints that may be from business operations or regulatory requirements; a few mentioned the IOER rate as another relevant factor.