UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

(Mark One)

☒ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended June 30, 2023

OR

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from __________ to __________

Commission file number 001-07436

HSBC USA Inc.

(Exact name of registrant as specified in its charter)

Maryland	**13-2764867**
(State of incorporation)	**(I.R.S. Employer Identification No.)**
452 Fifth Avenue, New York, New York	**10018**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code (212) 525-5000

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Trading Symbol(s)	Name of Each Exchange on Which Registered
$100,000,000 Zero Coupon Callable Accreting Notes due January 15, 2043	HUSI/43	New York Stock Exchange
$50,000,000 Zero Coupon Callable Accreting Notes due January 29, 2043	HUSI/43A	New York Stock Exchange

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ☐ Accelerated filer ☐ Non-accelerated filer ☒ Smaller reporting company ☐ Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of July 28, 2023, there were 714 shares of the registrant's common stock outstanding, all of which are owned by HSBC North America Holdings Inc.

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PART I

Item 1. Financial Statements

CONSOLIDATED STATEMENT OF INCOME (UNAUDITED)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	**2022**	**2023**	**2022**
		(in millions)		
Interest income:				
Loans	**$ 861**	$ 437	**$ 1,664**	$ 813
Securities	**368**	169	**691**	310
Trading securities	**60**	55	**109**	118
Short-term investments	**416**	110	**826**	137
Other	**18**	12	**37**	17
Total interest income	**1,723**	783	**3,327**	1,395
Interest expense:				
Deposits	**869**	135	**1,625**	193
Short-term borrowings	**120**	21	**220**	26
Long-term debt	**290**	89	**546**	157
Other	**10**	6	**19**	10
Total interest expense	**1,289**	251	**2,410**	386
Net interest income	**434**	532	**917**	1,009
Provision for credit losses	**36**	69	**56**	80
Net interest income after provision for credit losses	**398**	463	**861**	929
Other revenues:				
Credit card fees, net	**12**	12	**23**	27
Trust and investment management fees	**32**	34	**63**	60
Other fees and commissions	**157**	160	**305**	338
Trading revenue	**228**	61	**453**	133
Other securities gains, net	**—**	9	**3**	29
Servicing and other fees from HSBC affiliates	**77**	87	**151**	188
Gain (loss) on instruments designated at fair value and related derivatives	**2**	19	**(20)**	25
Gain on sale of branch disposal group, net	**—**	—	**—**	111
Other income (loss)	**(60)**	(39)	**(77)**	(82)
Total other revenues	**448**	343	**901**	829
Operating expenses:				
Salaries and employee benefits	**138**	138	**259**	292
Support services from HSBC affiliates	**425**	419	**809**	837
Occupancy expense, net	**10**	13	**40**	30
Other expenses	**74**	123	**168**	220
Total operating expenses	**647**	693	**1,276**	1,379
Income before income tax	**199**	113	**486**	379
Income tax expense	**48**	23	**118**	88
Net income	**$ 151**	$ 90	**$ 368**	$ 291

The accompanying notes are an integral part of the consolidated financial statements.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME (LOSS) (UNAUDITED)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
	(in millions)			
Net income	**$ 151**	$ 90	**$ 368**	$ 291
Net change in unrealized gains (losses), net of tax:				
Investment securities	**(63)**	(574)	**141**	(1,617)
Fair value option liabilities attributable to our own credit spread	**(64)**	51	**(1)**	80
Derivatives designated as cash flow hedges	**(49)**	(62)	**49**	(214)
Total other comprehensive income (loss)	**(176)**	(585)	**189**	(1,751)
Comprehensive income (loss)	**$ (25)**	$ (495)	**$ 557**	$ (1,460)

The accompanying notes are an integral part of the consolidated financial statements.

CONSOLIDATED BALANCE SHEET (UNAUDITED)

	June 30, 2023	December 31, 2022
	(in millions, except share data)	
***Assets*[1]**		
Cash and due from banks	**$ 831**	$ 1,004
Interest bearing deposits with banks	**29,476**	17,744
Federal funds sold and securities purchased under agreements to resell	**12,519**	23,085
Trading assets (includes $1.8 billion and $1.3 billion pledged to creditors at June 30, 2023 and December 31, 2022, respectively)	**19,391**	21,730
Securities available-for-sale (includes amortized cost of $29.1 billion and $30.3 billion at June 30, 2023 and December 31, 2022, respectively, an allowance for credit losses of nil at both June 30, 2023 and December 31, 2022, and $155 million and $55 million pledged to creditors at June 30, 2023 and December 31, 2022, respectively)	**26,259**	27,345
Securities held-to-maturity, net of allowance for credit losses of nil at both June 30, 2023 and December 31, 2022 (fair value of $12.9 billion and $6.9 billion at June 30, 2023 and December 31, 2022, respectively)	**13,428**	7,317
Loans (includes $17 million and $20 million designated under fair value option at June 30, 2023 and December 31, 2022, respectively)	**57,945**	59,380
Less – allowance for credit losses	**605**	584
Loans, net	**57,340**	58,796
Loans held for sale (includes $374 million and $237 million designated under fair value option at June 30, 2023 and December 31, 2022, respectively)	**997**	354
Properties and equipment, net	**47**	68
Goodwill	**458**	458
Other assets, net of allowance for credit losses of nil at both June 30, 2023 and December 31, 2022 (includes $61 million and $325 million designated under fair value option at June 30, 2023 and December 31, 2022, respectively)	**6,182**	6,754
Total assets	**$ 166,928**	$ 164,655
***Liabilities*[1]**		
Debt:		
Domestic deposits:		
Noninterest bearing	**$ 28,165**	$ 29,660
Interest bearing (includes $1.4 billion and $1.6 billion designated under fair value option at June 30, 2023 and December 31, 2022, respectively)	**87,105**	86,469
Foreign deposits - interest bearing	**6,366**	7,094
Total deposits	**121,636**	123,223
Short-term borrowings	**8,227**	5,945
Long-term debt (includes $9.2 billion and $8.4 billion designated under fair value option at June 30, 2023 and December 31, 2022, respectively)	**19,671**	17,591
Total debt	**149,534**	146,759
Trading liabilities	**2,699**	2,803
Interest, taxes and other liabilities (includes $61 million and $325 million designated under fair value option at June 30, 2023 and December 31, 2022, respectively)	**3,038**	2,980
Total liabilities	**155,271**	152,542
Equity		
Preferred stock (no par value; 40,999,000 shares authorized; 265 shares issued and outstanding at both June 30, 2023 and December 31, 2022)	**265**	265
Common equity:		
Common stock ($5 par value; 150,000,000 shares authorized; 714 shares issued and outstanding at both June 30, 2023 and December 31, 2022)	**—**	—
Additional paid-in capital	**12,735**	12,740
Retained earnings	**1,043**	1,683
Accumulated other comprehensive loss	**(2,386)**	(2,575)
Total common equity	**11,392**	11,848
Total equity	**11,657**	12,113
Total liabilities and equity	**$ 166,928**	$ 164,655

[1] The following table summarizes assets and liabilities related to our consolidated variable interest entities ("VIEs") at June 30, 2023 and December 31, 2022. Assets and liabilities exclude intercompany balances that eliminate in consolidation. See Note 17, "Variable Interest Entities," for additional information.

	June 30, 2023	December 31, 2022
	(in millions)	
Assets		
Loans, net	**$ 186**	$ 162
Other assets	**40**	44
Total assets	**$ 226**	$ 206
Liabilities		
Interest, taxes and other liabilities	**$ 35**	$ 22
Total liabilities	**$ 35**	$ 22

The accompanying notes are an integral part of the consolidated financial statements.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (UNAUDITED)

Three Months Ended June 30,	2023	2022
	(in millions)	
Preferred stock		
Balance at beginning and end of period	**$ 265**	$ 1,265
Common stock		
Balance at beginning and end of period	**—**	—
Additional paid-in capital		
Balance at beginning of period	**12,736**	14,740
Employee benefit plans	**(1)**	(3)
Balance at end of period	**12,735**	14,737
Retained earnings		
Balance at beginning of period	**1,900**	1,413
Net income	**151**	90
Cash dividends declared on preferred stock	**(8)**	(38)
Cash dividends declared on common stock	**(1,000)**	—
Balance at end of period	**1,043**	1,465
Accumulated other comprehensive loss		
Balance at beginning of period	**(2,210)**	(1,345)
Other comprehensive loss, net of tax	**(176)**	(585)
Balance at end of period	**(2,386)**	(1,930)
Total common equity	**11,392**	14,272
Total equity	**$ 11,657**	$ 15,537

Six Months Ended June 30,	2023	2022
	(in millions)	
Preferred stock		
Balance at beginning and end of period	**$ 265**	$ 1,265
Common stock		
Balance at beginning and end of period	**—**	—
Additional paid-in capital		
Balance at beginning of period	**12,740**	14,742
Employee benefit plans	**(5)**	(5)
Balance at end of period	**12,735**	14,737
Retained earnings		
Balance at beginning of period	**1,683**	1,212
Net income	**368**	291
Cash dividends declared on preferred stock	**(8)**	(38)
Cash dividends declared on common stock	**(1,000)**	—
Balance at end of period	**1,043**	1,465
Accumulated other comprehensive loss		
Balance at beginning of period	**(2,575)**	(179)
Other comprehensive income (loss), net of tax	**189**	(1,751)
Balance at end of period	**(2,386)**	(1,930)
Total common equity	**11,392**	14,272
Total equity	**$ 11,657**	$ 15,537

The accompanying notes are an integral part of the consolidated financial statements.

CONSOLIDATED STATEMENT OF CASH FLOWS (UNAUDITED)

Six Months Ended June 30,	2023	2022
	(in millions)	
Cash flows from operating activities		
Net income	**$ 368**	$ 291
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	**15**	84
Gain on sale of branch disposal group, net	**—**	(111)
Provision for credit losses	**56**	80
Net realized gains on securities available-for-sale	**(3)**	(29)
Net change in other assets and liabilities	**1,272**	(795)
Net change in loans held for sale:		
Originations and purchases of loans held for sale	**(284)**	(1,097)
Sales and collections of loans held for sale	**161**	1,052
Net change in trading assets and liabilities	**2,235**	6,078
Lower of amortized cost or fair value adjustments on loans held for sale	**37**	6
Loss (gain) on instruments designated at fair value and related derivatives	**20**	(25)
Net cash provided by operating activities	**3,877**	5,534
Cash flows from investing activities		
Net change in federal funds sold and securities purchased under agreements to resell	**10,566**	5,573
Securities available-for-sale:		
Purchases of securities available-for-sale	**(2,092)**	(3,510)
Proceeds from sales of securities available-for-sale	**681**	1,002
Proceeds from paydowns and maturities of securities available-for-sale	**2,625**	3,066
Securities held-to-maturity:		
Purchases of securities held-to-maturity	**(6,479)**	(475)
Proceeds from paydowns and maturities of securities held-to-maturity	**384**	1,003
Change in loans:		
Collections, net of originations	**478**	(5,476)
Loans sold to third parties	**435**	1,136
Net cash provided by (used for) sales (acquisitions) of properties and equipment	**6**	(6)
Net outflow related to the sale of branch disposal group	**—**	(4,621)
Other, net	**6**	(16)
Net cash provided by (used in) investing activities	**6,610**	(2,324)
Cash flows from financing activities		
Net change in deposits	**(1,569)**	(8,580)
Debt:		
Net change in short-term borrowings	**2,282**	(440)
Issuance of long-term debt	**2,909**	2,844
Repayment of long-term debt	**(1,537)**	(1,884)
Other decreases in capital surplus	**(5)**	(5)
Dividends paid	**(1,008)**	(38)
Net cash provided by (used in) financing activities	**1,072**	(8,103)
Net change in cash and due from banks and interest bearing deposits with banks	**11,559**	(4,893)
Cash and due from banks and interest bearing deposits with banks at beginning of period	**18,748**	48,412
Cash and due from banks and interest bearing deposits with banks at end of period	**$ 30,307**	$ 43,519

The accompanying notes are an integral part of the consolidated financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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1. Organization and Presentation

HSBC USA Inc. ("HSBC USA"), incorporated under the laws of Maryland, is a New York State based bank holding company and a wholly-owned subsidiary of HSBC North America Holdings Inc. ("HSBC North America"), which is an indirect wholly-owned subsidiary of HSBC Holdings plc ("HSBC" and, together with its subsidiaries, "HSBC Group"). The accompanying unaudited interim consolidated financial statements of HSBC USA and its subsidiaries (collectively "HUSI") have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP") for interim financial information and with the instructions to Form 10-Q and Article 10 of Regulation S-X, as well as in accordance with predominant practices within the banking industry. Accordingly, they do not include all of the information and footnotes required by generally accepted accounting principles for complete financial statements. HSBC USA's principal U.S. banking subsidiary is HSBC Bank USA, National Association (together with its subsidiaries, "HSBC Bank USA"). In the opinion of management, all normal and recurring adjustments considered necessary for a fair statement of financial position, results of operations and cash flows for the interim periods have been made. HUSI may also be referred to in these notes to the consolidated financial statements as "we," "us" or "our." These unaudited interim consolidated financial statements should be read in conjunction with our Annual Report on Form 10-K for the year ended December 31, 2022 (the "2022 Form 10-K"). Certain reclassifications have been made to prior period amounts to conform to the current period presentation.

The preparation of financial statements in conformity with U.S. GAAP requires the use of estimates and assumptions that affect reported amounts and disclosures. Actual results could differ from those estimates. Interim results should not be considered indicative of results in future periods.

In May 2023, the Federal Deposit Insurance Corporation ("FDIC") issued a proposed rule that would impose a special assessment on certain FDIC-insured banks, including HSBC Bank USA, to recover the loss to the Deposit Insurance Fund arising from the protection of uninsured depositors following a determination of systemic risk in connection with the failures of Silicon Valley Bank and Signature Bank. The special assessment would be based on an insured depository institution's estimated uninsured deposits reported as of December 31, 2022 and would be collected over eight quarterly assessment periods beginning with the first quarter of 2024. If finalized as proposed, the special assessment is expected to result in approximately $225 million of additional deposit insurance assessment fees for HUSI, which will be accrued once the rule becomes final, which may occur as early as the third quarter of 2023. Because the estimated loss to the Deposit Insurance Fund will be periodically adjusted as actual losses are incurred, the FDIC would retain the ability to cease collection early or extend the special assessment collection period, as needed.

2. *Strategic Initiatives*

As discussed in our 2022 Form 10-K, we completed our strategic plan to restructure our operations ("Restructuring Plan") over the three-year period of 2020-2022 and will no longer incur costs related to this plan. During the three and six months ended June 30, 2022, we recorded $41 million and $72 million, respectively, of pre-tax charges in connection with our Restructuring Plan.

The following table summarizes the changes in the liability associated with our Restructuring Plan during the three and six months ended June 30, 2022:

	Severance and Other Employee Costs[1]	Lease Termination and Associated Costs[2]	Other[3]	Total
		(in millions)		
Three Months Ended June 30, 2022				
Restructuring liability at beginning of period	$ 2	$ 38	$ —	$ 40
Restructuring costs accrued during the period	4	—	11	15
Restructuring costs paid during the period	(4)	(4)	(11)	(19)
Restructuring liability at end of period	$ 2	$ 34	$ —	$ 36
Six Months Ended June 30, 2022				
Restructuring liability at beginning of period	$ 10	$ 46	$ —	$ 56
Restructuring costs accrued during the period	4	—	18	22
Restructuring costs paid during the period	(12)	(12)	(18)	(42)
Restructuring liability at end of period[4]	$ 2	$ 34	$ —	$ 36

(1) Severance and other employee costs are included in salaries and employee benefits in the consolidated statement of income. The majority of these costs were reported in the Wealth and Personal Banking business segment. Not included in these costs are allocated severance costs from HSBC Technology & Services (USA) Inc. ("HTSU") discussed further below.

(2) Primarily includes real estate taxes, service charges and decommissioning costs. Lease termination and associated costs are included in occupancy expense, net in the consolidated statement of income and were reported in the Wealth and Personal Banking and the Corporate Center business segments.

(3) Primarily includes professional fees and other staff costs, which are included in other expenses in the consolidated statement of income. The majority of these costs were reported in the Wealth and Personal Banking business segment.

(4) At June 30, 2023, our remaining liability associated with our Restructuring Plan totaled $23 million.

In addition to the restructuring costs reflected in the rollforward table above, during the three and six months ended June 30, 2022, we reversed $4 million and $3 million, respectively, of lease right-of-use ("ROU") asset and leasehold improvement asset impairment charges associated with certain office space that we determined we would exit. Lease impairment charges are reflected in occupancy expense, net in the consolidated statement of income and were reported in the Corporate Center business segment.

Our Restructuring Plan also resulted in costs being allocated to us from HTSU, primarily support service project costs and severance costs, which are reflected in support services from HSBC affiliates in the consolidated statement of income. During the three and six months ended June 30, 2022, we recorded $30 million and $53 million, respectively, of allocated costs from HTSU related to restructuring activities. These costs were reported in the Corporate Center business segment.

HSBC Group Restructuring Separate from the charges related to our Restructuring Plan as detailed above, during the three and six months ended June 30, 2022, we also recorded $25 million and $42 million, respectively, of allocated costs from other HSBC affiliates related to the HSBC Group's restructuring activities, primarily support service project costs and severance costs. These costs are reflected in support services from HSBC affiliates in the consolidated statement of income and were reported in the Corporate Center business segment.

3. *Sale of Certain Branch Assets and Liabilities*

In 2021, as part of our Restructuring Plan we announced that we would exit our mass market retail banking business, including our Personal and Advance propositions as well as retail business banking. In conjunction with the execution of this strategy, we entered into definitive sale agreements with third parties to sell 90 of our retail branches along with substantially all residential mortgage, unsecured and retail business banking loans and deposits in our branch network not associated with our Premier, Jade and Private Banking customers. As a result, assets and liabilities related to these sale agreements were transferred to held for sale. Income before tax of this disposal group was not material.

In February 2022, we completed the sale of the branch disposal group and recognized a gain on sale of $111 million, net of transaction costs. Included in the sale was approximately $2,148 million of loans, $45 million of properties and equipment, $16 million of cash, $6,919 million of deposits, $145 million of lease liabilities and $6 million of other liabilities. Certain assets under management associated with our mass market retail banking operations which are managed by an affiliate were also transferred to one of the buyers. In addition, we have rebranded 22 of our retail branches into international wealth centers and the remaining branches not sold or rebranded have been closed.

Mass market retail banking loans not included in the transaction described above were also transferred to held for sale in 2021 as we did not intend to hold these loans for the foreseeable future. These loans have since been sold or transferred back to held for investment. See Note 8, "Loans Held for Sale," for additional details.

4. *Trading Assets and Liabilities*

Trading assets and liabilities consisted of the following:

	June 30, 2023	December 31, 2022
	(in millions)	
Trading assets:		
U.S. Treasury	**$ 2,791**	$ 1,670
U.S. Government agency issued or guaranteed	**2**	—
U.S. Government sponsored enterprises	**762**	369
Foreign bonds	**1,649**	6,391
Equity securities	**10,261**	7,855
Precious metals	**2,605**	3,831
Derivatives, net	**1,321**	1,614
Total trading assets	**$ 19,391**	$ 21,730
Trading liabilities:		
Securities sold, not yet purchased	**$ 1,267**	$ 837
Derivatives, net	**1,432**	1,966
Total trading liabilities	**$ 2,699**	$ 2,803

At June 30, 2023 and December 31, 2022, the fair value of derivatives included in trading assets is net of $2,299 million and $2,653 million, respectively, relating to amounts recognized for the obligation to return cash collateral received under master netting agreements with derivative counterparties.

At both June 30, 2023 and December 31, 2022, the fair value of derivatives included in trading liabilities is net of $1,180 million relating to amounts recognized for the right to reclaim cash collateral paid under master netting agreements with derivative counterparties.

See Note 10, "Derivative Financial Instruments," for further information on our trading derivatives and related collateral.

Dividend income on equity securities held for trading, which is recorded in interest income in the consolidated statement of income, totaled $36 million and $70 million during the three and six months ended June 30, 2023, respectively, compared with $42 million and $90 million during the three and six months ended June 30, 2022, respectively. Trading security positions are primarily held as economic hedges of derivative products issued to our clients.

5. *Securities*

Our securities available-for-sale and securities held-to-maturity portfolios consisted of the following:

June 30, 2023	Amortized Cost	Allowance for Credit Losses	Unrealized Gains	Unrealized Losses	Fair Value
			(in millions)		
Securities available-for-sale:					
U.S. Treasury	$ 7,370	$ —	$ 38	$ (188)	$ 7,220
U.S. Government sponsored enterprises:					
Mortgage-backed securities	6,291	—	—	(983)	5,308
Collateralized mortgage obligations	1,490	—	—	(314)	1,176
Direct agency obligations	1,737	—	1	(57)	1,681
U.S. Government agency issued or guaranteed:					
Mortgage-backed securities	7,179	—	—	(721)	6,458
Collateralized mortgage obligations	3,008	—	—	(560)	2,448
Direct agency obligations	213	—	4	(4)	213
Asset-backed securities collateralized by:					
Home equity	14	—	—	(1)	13
Other	104	—	—	(12)	92
Foreign debt securities[1]	1,655	—	1	(6)	1,650
Total available-for-sale securities	$ 29,061	$ —	$ 44	$ (2,846)	$ 26,259
Securities held-to-maturity:					
U.S. Treasury	$ 1,897	$ —	$ —	$ (38)	$ 1,859
U.S. Government sponsored enterprises:					
Mortgage-backed securities	1,104	—	—	(81)	1,023
Collateralized mortgage obligations	326	—	2	(19)	309
U.S. Government agency issued or guaranteed:					
Mortgage-backed securities	8,217	—	1	(252)	7,966
Collateralized mortgage obligations	1,879	—	—	(169)	1,710
Obligations of U.S. states and political subdivisions	4	—	—	—	4
Asset-backed securities collateralized by residential mortgages	1	—	—	—	1
Total held-to-maturity securities	$ 13,428	$ —	$ 3	$ (559)	$ 12,872

December 31, 2022	Amortized Cost	Allowance for Credit Losses	Unrealized Gains	Unrealized Losses	Fair Value
			(in millions)		
Securities available-for-sale:					
U.S. Treasury	$ 7,662	$ —	$ 32	$ (242)	$ 7,452
U.S. Government sponsored enterprises:					
Mortgage-backed securities	6,537	—	—	(1,024)	5,513
Collateralized mortgage obligations	1,549	—	—	(323)	1,226
Direct agency obligations	1,807	—	1	(71)	1,737
U.S. Government agency issued or guaranteed:					
Mortgage-backed securities	7,477	—	—	(772)	6,705
Collateralized mortgage obligations	3,163	—	—	(567)	2,596
Direct agency obligations	165	—	1	(4)	162
Asset-backed securities collateralized by:					
Home equity	16	—	—	(1)	15
Other	105	—	—	(12)	93
Foreign debt securities[1]	1,854	—	1	(9)	1,846
Total available-for-sale securities	$ 30,335	$ —	$ 35	$ (3,025)	$ 27,345
Securities held-to-maturity:					
U.S. Treasury	$ 873	$ —	$ —	$ (15)	$ 858
U.S. Government sponsored enterprises:					
Mortgage-backed securities	$ 1,146	$ —	$ —	$ (80)	$ 1,066
Collateralized mortgage obligations	358	—	3	(19)	342
U.S. Government agency issued or guaranteed:					
Mortgage-backed securities	2,895	—	—	(177)	2,718
Collateralized mortgage obligations	2,039	—	—	(167)	1,872
Obligations of U.S. states and political subdivisions	5	—	—	—	5
Asset-backed securities collateralized by residential mortgages	1	—	—	—	1
Total held-to-maturity securities	$ 7,317	$ —	$ 3	$ (458)	$ 6,862

(1) Foreign debt securities represent public sector entity, bank or corporate debt.

Securities Available-for-Sale The following provides additional information about our portfolio of securities available-for-sale:

Allowance for credit losses On a quarterly basis, we perform an assessment to determine whether there have been any events or economic circumstances to indicate that a debt security available-for-sale in an unrealized loss position has suffered impairment due to credit factors. A debt security available-for-sale is considered impaired if its fair value is less than its amortized cost basis at the reporting date. If impaired, we assess whether the impairment is due to credit factors.

If we intend to sell the debt security or if it is more-likely-than-not that we will be required to sell the debt security before the recovery of its amortized cost basis, the impairment is recognized and the unrealized loss is recorded as a direct write-down of the security's amortized cost basis with an offsetting charge to earnings. If we do not intend to sell the debt security or believe we will not be required to sell the debt security before the recovery of its amortized cost basis, the impairment is assessed to determine if a credit loss component exists. We use a discounted cash flow method to determine the credit loss component. In the event a credit loss exists, an allowance for credit losses is recorded in earnings for the credit loss component of the impairment while the remaining portion of the impairment attributable to factors other than credit loss is recognized, net of tax, in other comprehensive income (loss). The amount of impairment recognized due to credit factors is limited to the excess of the amortized cost basis over the fair value of the security available-for-sale.

In determining whether a credit loss component exists, we consider a series of factors which include:

- The extent to which the fair value is less than the amortized cost basis;

- The credit protection features embedded within the instrument, which includes but is not limited to credit subordination positions, payment structure, overcollateralization, protective triggers and financial guarantees provided by third parties;
- Changes in the near term prospects of the issuer or the underlying collateral of a security such as changes in default rates, loss severities given default and significant changes in prepayment assumptions;
- The level of excess cash flows generated from the underlying collateral supporting the principal and interest payments of the debt securities; and
- Any adverse change to the credit conditions of the issuer, the monoline insurer or the security such as credit downgrades by external rating agencies or changes to internal ratings.

At both June 30, 2023 and December 31, 2022, the allowance for credit losses on securities available-for-sale was nil.

Securities in an unrealized loss position for which no allowance for credit losses has been recognized The following table summarizes gross unrealized losses and related fair values for securities available-for-sale by major security type at June 30, 2023 and December 31, 2022 classified as to the length of time the losses have existed:

	One Year or Less			Greater Than One Year		
	Number of Securities	Gross Unrealized Losses	Aggregate Fair Value of Investment	Number of Securities	Gross Unrealized Losses	Aggregate Fair Value of Investment
	(dollars are in millions)					
At June 30, 2023						
U.S. Treasury	**2**	**$ (2)**	**$ 276**	**40**	**$ (186)**	**$ 4,799**
U.S. Government sponsored enterprises	**9**	**(3)**	**434**	**296**	**(1,351)**	**7,624**
U.S. Government agency issued or guaranteed	**19**	**(1)**	**17**	**139**	**(1,284)**	**8,990**
Asset-backed securities	**—**	**—**	**—**	**6**	**(13)**	**105**
Foreign debt securities	**7**	**—**	**886**	**4**	**(6)**	**180**
Securities available-for-sale	**37**	**$ (6)**	**$ 1,613**	**485**	**$ (2,840)**	**$ 21,698**
At December 31, 2022						
U.S. Treasury	22	$ (105)	$ 2,800	19	$ (137)	$ 2,013
U.S. Government sponsored enterprises	233	(316)	3,270	79	(1,102)	4,959
U.S. Government agency issued or guaranteed	107	(534)	4,547	55	(809)	4,856
Asset-backed securities	3	(1)	14	3	(12)	92
Foreign debt securities	4	(1)	337	3	(8)	286
Securities available-for-sale	369	$ (957)	$ 10,968	159	$ (2,068)	$ 12,206

Gross unrealized losses decreased as compared with December 31, 2022 due primarily to decreasing long-term market rates on U.S. Government sponsored mortgage-backed, U.S. Government agency mortgage-backed and U.S. Treasury securities.

Although the fair value of a particular security may be below its amortized cost, it does not necessarily result in a credit loss and hence an allowance for credit losses. The decline in fair value may be caused by, among other things, higher market rates or the illiquidity of the market. We have reviewed the securities in an unrealized loss position for which no allowance for credit losses has been recognized in accordance with our accounting policies, discussed further above. At June 30, 2023, we do not consider any of these securities to be impaired due to credit factors as we expect to recover their amortized cost basis and we neither intend nor expect to be required to sell these securities prior to recovery, even if that equates to holding them until their individual maturities. However, impairments due to credit factors may occur in future periods if the credit quality of the securities deteriorates.

Securities Held-to-Maturity The following provides additional information about our portfolio of securities held-to-maturity:

Allowance for credit losses We exclude from our calculation of lifetime expected credit losses ("ECL") securities for which we expect that non-payment of the amortized cost basis will be zero ("Zero Expected Credit Loss Exception"). Due to the composition of our portfolio of securities held-to-maturity, substantially all of our portfolio qualifies for the Zero Expected Credit Loss Exception and has been excluded from our lifetime ECL calculation. At both June 30, 2023 and December 31, 2022, the allowance for credit losses on securities held-to-maturity was nil.

At June 30, 2023 and December 31, 2022, none of our securities held-to-maturity were past due or in nonaccrual status.

Credit risk profile Securities are assigned a credit rating based on the estimated probability of default. The credit ratings are used as a credit quality indicator to monitor our securities held-to-maturity portfolio. We utilize Standard and Poor's ("S&P") as

the primary source of our credit ratings. If S&P ratings are not available, ratings by Moody's and Fitch are used in that order. Investment grade includes securities with credit ratings of at least BBB- or above. At June 30, 2023 and December 31, 2022, all of our securities held-to-maturity were investment grade.

Other securities gains, net The following table summarizes realized gains and losses on investment securities transactions attributable to available-for-sale securities:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	**2023**	2022
	(in millions)			
Gross realized gains	**$ —**	$ 10	**$ 3**	$ 30
Gross realized losses	**—**	(1)	**—**	(1)
Net realized gains	**$ —**	$ 9	**$ 3**	$ 29

Contractual Maturities and Yields The following table summarizes the amortized cost and fair values of securities available-for-sale and securities held-to-maturity at June 30, 2023 by contractual maturity. Expected maturities differ from contractual maturities because borrowers have the right to prepay obligations without prepayment penalties in certain cases. The table below also reflects the distribution of maturities of debt securities held at June 30, 2023, together with the approximate yield of the portfolio. The yields shown are calculated by dividing annualized interest income, including the accretion of discounts and the amortization of premiums, by the amortized cost of securities outstanding at June 30, 2023.

	Within One Year		After One But Within Five Years		After Five But Within Ten Years		After Ten Years	
	Amount	Yield	Amount	Yield	Amount	Yield	Amount	Yield
	(dollars are in millions)							
Available-for-sale:								
U.S. Treasury	$ —	— %	$ 3,814	1.65 %	$ 615	1.56 %	$ 2,941	2.71 %
U.S. Government sponsored enterprises	244	.98	1,629	1.96	1,379	2.24	6,266	1.75
U.S. Government agency issued or guaranteed	—	—	68	3.21	1	5.55	10,331	2.59
Asset-backed securities	—	—	—	—	104	4.15	14	5.38
Foreign debt securities	1,036	(.04)	619	3.94	—	—	—	—
Total amortized cost	$ 1,280	.16 %	$ 6,130	1.98 %	$ 2,099	2.14 %	$ 19,552	2.34 %
Total fair value	$ 1,269		$ 5,984		$ 1,984		$ 17,022	
Held-to-maturity:								
U.S. Treasury	$ —	— %	$ 721	3.74 %	$ 1,176	3.72 %	$ —	— %
U.S. Government sponsored enterprises	—	—	90	2.39	863	3.31	477	3.11
U.S. Government agency issued or guaranteed	—	—	1	8.32	7	6.52	10,088	4.23
Obligations of U.S. states and political subdivisions	1	3.48	3	4.23	—	—	—	—
Asset-backed securities	—	—	—	—	—	—	1	7.74
Total amortized cost	$ 1	3.48 %	$ 815	3.60 %	$ 2,046	3.56 %	$ 10,566	4.18 %
Total fair value	$ 1		$ 797		$ 1,964		$ 10,110	

Equity Securities Equity securities that are not classified as trading and are included in other assets consisted of the following:

	June 30, 2023	December 31, 2022
	(in millions)	
Equity securities carried at fair value	**$ 267**	$ 267
Equity securities without readily determinable fair values	**15**	15

On a quarterly basis, we perform an assessment to determine whether any equity securities without readily determinable fair values are impaired. In the event an equity security is deemed impaired, the security is written down to fair value with impairment recorded in earnings. During the six months ended June 30, 2023, we determined that certain equity securities

without readily determinable fair values were impaired and, as a result, we recorded an impairment loss of $4 million as a component of other income (loss) in the consolidated statement of income compared with recording an impairment loss of $3 million during the six months ended June 30, 2022.

Also included in other assets were investments in Federal Home Loan Bank ("FHLB") stock and Federal Reserve Bank stock of $95 million and $438 million, respectively, at June 30, 2023 and $95 million and $498 million, respectively, at December 31, 2022.

6. Loans

Loans consisted of the following:

	June 30, 2023	December 31, 2022
	(in millions)	
Commercial loans:		
Real estate, including construction	**$ 7,185**	$ 7,963
Business and corporate banking	**16,169**	16,075
Global banking[1]	**10,127**	10,578
Other commercial:		
Affiliates[2]	**3,067**	3,557
Other	**3,263**	3,644
Total other commercial	**6,330**	7,201
Total commercial	**39,811**	41,817
Consumer loans:		
Residential mortgages	**17,452**	16,838
Home equity mortgages	**364**	370
Credit cards	**197**	213
Other consumer[3]	**121**	142
Total consumer	**18,134**	17,563
Total loans	**$ 57,945**	$ 59,380

(1) Represents large multinational firms including globally focused U.S. corporate and financial institutions, U.S. dollar lending to multinational banking clients managed by HSBC on a global basis and complex large business clients supported by Global Banking and Markets relationship managers.

(2) See Note 14, "Related Party Transactions," for additional information regarding loans to HSBC affiliates.

(3) Includes certain student loans that we have elected to designate under the fair value option and are therefore carried at fair value, which totaled $17 million and $20 million at June 30, 2023 and December 31, 2022, respectively. See Note 11, "Fair Value Option," for further details.

Net deferred origination costs totaled $22 million and $14 million at June 30, 2023 and December 31, 2022, respectively. At June 30, 2023 and December 31, 2022, we had a net unamortized discount on our loans of $8 million and $10 million, respectively.

Aging Analysis of Past Due Loans The following table summarizes the past due status of our loans at June 30, 2023 and December 31, 2022. The aging of past due amounts is determined based on the contractual delinquency status of payments under the loan. An account is generally considered to be contractually delinquent when payments have not been made in accordance with the loan terms. Delinquency status is affected by customer account management policies and practices such as re-age, which results in the re-setting of the contractual delinquency status to current.

	Past Due		Total Past Due		
	30 - 89 Days	90+ Days	30 Days or More	Current[1]	Total Loans
			(in millions)		
At June 30, 2023					
Commercial loans:					
Real estate, including construction	**$ 168**	**$ 106**	**$ 274**	**$ 6,911**	**$ 7,185**
Business and corporate banking	**110**	**3**	**113**	**16,056**	**16,169**
Global banking	**11**	**47**	**58**	**10,069**	**10,127**
Other commercial	**209**	**—**	**209**	**6,121**	**6,330**
Total commercial	**498**	**156**	**654**	**39,157**	**39,811**
Consumer loans:					
Residential mortgages	**160**	**88**	**248**	**17,204**	**17,452**
Home equity mortgages	**1**	**3**	**4**	**360**	**364**
Credit cards	**2**	**3**	**5**	**192**	**197**
Other consumer	**4**	**2**	**6**	**115**	**121**
Total consumer	**167**	**96**	**263**	**17,871**	**18,134**
Total loans	**$ 665**	**$ 252**	**$ 917**	**$ 57,028**	**$ 57,945**
At December 31, 2022					
Commercial loans:					
Real estate, including construction	$ 27	$ 1	$ 28	$ 7,935	$ 7,963
Business and corporate banking	13	23	36	16,039	16,075
Global banking	—	8	8	10,570	10,578
Other commercial	464	—	464	6,737	7,201
Total commercial	504	32	536	41,281	41,817
Consumer loans:					
Residential mortgages	180	105	285	16,553	16,838
Home equity mortgages	2	3	5	365	370
Credit cards	2	2	4	209	213
Other consumer	2	1	3	139	142
Total consumer	186	111	297	17,266	17,563
Total loans	$ 690	$ 143	$ 833	$ 58,547	$ 59,380

[1] Loans less than 30 days past due are presented as current.

Nonperforming Loans Nonperforming loans, including nonaccrual loans and accruing loans contractually 90 days or more past due, consisted of the following:

	Nonaccrual Loans	Accruing Loans Contractually Past Due 90 Days or More	Nonaccrual Loans With No Allowance For Credit Losses
		(in millions)	
At June 30, 2023			
Commercial loans:			
Real estate, including construction	**$ 107**	**$ —**	**$ 43**
Business and corporate banking	**145**	**1**	**28**
Global banking	**55**	**—**	**53**
Other commercial	**1**	**—**	**1**
Total commercial	**308**	**1**	**125**
Consumer loans:			
Residential mortgages[(1)(2)(3)]	**204**	**—**	**90**
Home equity mortgages[(1)(2)]	**11**	**—**	**5**
Credit cards	**—**	**3**	**—**
Total consumer	**215**	**3**	**95**
Total nonperforming loans	**$ 523**	**$ 4**	**$ 220**
At December 31, 2022			
Commercial loans:			
Real estate, including construction	$ 45	$ —	$ 43
Business and corporate banking	116	1	62
Global banking	54	—	40
Total commercial	215	1	145
Consumer loans:			
Residential mortgages[(1)(2)(3)]	213	—	79
Home equity mortgages[(1)(2)]	7	—	5
Credit cards	—	2	—
Other consumer	—	1	—
Total consumer	220	3	84
Total nonperforming loans	$ 435	$ 4	$ 229

(1) At June 30, 2023 and December 31, 2022, nonaccrual consumer mortgage loans include $120 million and $109 million, respectively, of loans that are carried at the lower of amortized cost or fair value of the collateral less cost to sell.

(2) Nonaccrual consumer mortgage loans include all loans which are 90 or more days contractually delinquent as well as loans discharged under Chapter 7 bankruptcy and not re-affirmed and second lien loans where the first lien loan that we own or service is 90 or more days contractually delinquent.

(3) Nonaccrual consumer mortgage loans for all periods does not include guaranteed loans purchased from the Government National Mortgage Association. Repayment of these loans is predominantly insured by the Federal Housing Administration and as such, these loans have different risk characteristics from the rest of our consumer loan portfolio.

Interest income that was recorded on nonaccrual loans and included in interest income totaled $2 million and $3 million during the three and six months ended June 30, 2023, respectively, compared with $2 million and $5 million during the three and six months ended June 30, 2022, respectively.

Collateral-Dependent Loans Loans for which the repayment is expected to be provided substantially through the operation or sale of the collateral and the borrower is experiencing financial difficulty are considered to be collateral-dependent loans. Collateral can have a significant financial effect in mitigating our exposure to credit risk.

Collateral-dependent residential mortgage loans are carried at the lower of amortized cost or fair value of the collateral less costs to sell, with any excess in the carrying amount of the loan generally charged off at the time foreclosure is initiated or when settlement is reached with the borrower, but not to exceed the end of the month in which the account becomes six months contractually delinquent. Collateral values are based on broker price opinions or appraisals which are updated at least every 180

days less estimated costs to sell. During the quarterly period between updates, real estate price trends are reviewed on a geographic basis and incorporated as necessary. At June 30, 2023 and December 31, 2022, we had collateral-dependent residential mortgage loans totaling $267 million and $249 million, respectively.

For collateral-dependent commercial loans, the allowance for expected credit losses is established on an individual basis ("individually assessed") based on the fair value of the collateral. Various types of collateral are used, including real estate, inventory, equipment, accounts receivable, securities and cash, among others. For commercial real estate loans, collateral values are generally based on appraisals which are updated based on management judgment under the specific circumstances on a case-by-case basis. In situations where an appraisal is not used, borrower-specific factors such as operating results, cash flows and debt service ratios are reviewed along with relevant market data of comparable properties in order to create a 10-year cash flow model to be discounted at appropriate rates to present value. The collateral value for securities is based on their quoted market prices or broker quotes. The collateral value for other financial assets is generally based on appraisals or is estimated using a discounted cash flow analysis. Commercial loan balances are charged off at the time all or a portion of the balance is deemed uncollectible. At June 30, 2023 and December 31, 2022, we had collateral-dependent commercial loans totaling $299 million and $130 million, respectively.

Loan Modifications In conjunction with our loss mitigation activities, we modify certain loans to borrowers experiencing financial difficulty. Modifications may include changes to one or more terms of the loan, including, but not limited to, a change in interest rate, extension of the term, reduction in payment amount and partial forgiveness or deferment of principal, accrued interest or other loan covenants. As a result of adopting new accounting guidance in 2023, beginning January 1, 2023, new loan modifications are no longer required to be evaluated to determine if they should be separately identified and accounted for as troubled debt restructurings ("TDR Loans"). See under the heading "TDR Loans prior to 2023" below for additional information.

The following disclosures provide information about loan payment modifications made to borrowers experiencing financial difficulty in the form of an interest rate reduction, principal forgiveness, a term extension or significant payment deferral, or a combination thereof. Not included are loans with short-term payment modifications (e.g., deferrals of three months or less) and other insignificant modifications, such as covenant waivers and amendments, and deferrals of financial statement and covenant compliance reporting requirements. Commercial loan payment modifications typically involve term extensions. In certain cases, the term extension is coupled with an interest rate increase which is intended to reduce the financial effect of extending the life of the loan. The effects of these interest rate increases are not included in the following disclosures. For consumer loans, payment modifications typically involve payment deferrals or interest rate reductions which lower the amount of interest income we are contractually entitled to receive in future periods. Through lowering the interest rate, we believe we are able to increase the amount of cash flow that will ultimately be collected from the loan, given the borrower's financial condition.

The following table presents information about loan payment modifications made to borrowers experiencing financial difficulty during the three and six months ended June 30, 2023 by type of modification, including the period-end carrying value and as a percentage of total loans:

	Interest Rate Reduction	Principal Forgiveness	Term Extension / Significant Payment Deferral	Combination[1]	Total	% of Total Loans
			(dollars are in millions)			
Three Months Ended June 30, 2023						
Commercial loans:						
Real estate, including construction	$ —	$ —	$ 235	$ —	$ 235	3.3 %
Business and corporate banking	—	—	44	—	44	.3
Global banking	—	—	5	—	5	.0
Total commercial	—	—	284	—	284	.7
Consumer loans:						
Residential mortgages[2]	—	—	7	1	8	.0
Total consumer	—	—	7	1	8	.0
Total	$ —	$ —	$ 291	$ 1	$ 292	.5

	Interest Rate Reduction	Principal Forgiveness	Term Extension / Significant Payment Deferral	Combination[1]	Total	% of Total Loans
			(dollars are in millions)			
Six Months Ended June 30, 2023						
Commercial loans:						
Real estate, including construction	$ —	$ —	$ 235	$ —	$ 235	3.3 %
Business and corporate banking	—	—	97	12	109	.7
Global banking	—	—	5	—	5	.0
Total commercial	—	—	337	12	349	.9
Consumer loans:						
Residential mortgages[2]	—	—	7	1	8	.0
Total consumer	—	—	7	1	8	.0
Total	$ —	$ —	$ 344	$ 13	$ 357	.6

(1) Represents loans with more than one type of payment modification during the period.

(2) During both the three and six months ended June 30, 2023, the carrying value of consumer mortgage loans with a payment modification included $8 million of loans that were recorded at the lower of amortized cost or fair value of the collateral less cost to sell.

At June 30, 2023, additional commitments to lend to commercial borrowers who were provided with a loan payment modification during the six months ended June 30, 2023 totaled $40 million.

The following table summarizes the financial effect of loan payment modifications made to borrowers experiencing financial difficulty during the three and six months ended June 30, 2023 by type of modification:

	Weighted-Average Interest Rate Reduction	Principal Forgiven (in millions)	Weighted-Average Term Extension / Payment Deferral (in years)
Three Months Ended June 30, 2023			
Commercial loans:			
Real estate, including construction	— %	$ —	0.4
Business and corporate banking	—	—	1.8
Global banking	—	—	1.5
Consumer loans:			
Residential mortgages	1.7	—	2.1
Six Months Ended June 30, 2023			
Commercial loans:			
Real estate, including construction	— %	$ —	0.4
Business and corporate banking	—	2	2.1
Global banking	—	—	1.5
Consumer loans:			
Residential mortgages	2.2	—	2.2

The effect of most modifications made to borrowers experiencing financial difficulty is already included in the allowance for credit losses because of the methodology used to estimate lifetime ECL, which considers historical loss information including losses from modifications of loans to borrowers experiencing financial difficulty. As a result, a material change to the allowance for credit losses is generally not recorded upon modification. In instances when a loan is modified in the form of principal forgiveness, the amount of principal forgiven is deemed uncollectible and that portion of the loan balance is charged off with a corresponding reduction to the allowance for credit losses.

We closely monitor the performance of modified loans to understand the effectiveness of our loss mitigation efforts. Upon determination that a modified loan or a portion of a modified loan has subsequently been deemed uncollectible, the loan or a portion of the loan is charged off in accordance with our accounting policies with a corresponding reduction to the allowance for credit losses.

During the three and six months ended June 30, 2023, there were no loans to borrowers experiencing financial difficulty with a payment modification during the previous six months which subsequently became 90 days or greater contractually delinquent.

The following table presents the past due status of loans to borrowers experiencing financial difficulty with a payment modification during the previous six months at June 30, 2023:

	Past Due			
	30 - 89 Days	90+ Days	Current[1]	Total
	(in millions)			
At June 30, 2023				
Commercial loans:				
Real estate, including construction	**$ —**	**$ 64**	**$ 171**	**$ 235**
Business and corporate banking	**—**	**—**	**109**	**109**
Global banking	**—**	**—**	**5**	**5**
Total commercial	**—**	**64**	**285**	**349**
Consumer loans:				
Residential mortgages	**—**	**—**	**8**	**8**
Total consumer	**—**	**—**	**8**	**8**
Total loans	**$ —**	**$ 64**	**$ 293**	**$ 357**

(1) Loans less than 30 days past due are presented as current.

TDR Loans prior to 2023 Prior to January 1, 2023, TDR Loans represented loans for which the original contractual terms were modified to provide for terms that were less than what we would have been willing to accept for new loans with comparable risk because of deterioration in the borrower's financial condition. For the comparative periods prior to the adoption of the new accounting guidance, we have retained the following disclosures as previously reported.

Once a consumer loan was classified as a TDR Loan, it continued to be reported as such until it was paid off or charged-off. For commercial loans, if subsequent performance was in accordance with the new terms and the loan was upgraded, the loan may have no longer been reported as a TDR Loan at the earliest one year after the restructuring. During the three and six months ended June 30, 2022, there were no commercial loans that met these criteria and were removed from TDR Loan classification.

The following table summarizes our TDR Loans at December 31, 2022:

	December 31, 2022
	(in millions)
Commercial loans:	
Business and corporate banking	$ 382
Global banking	6
Total commercial[1]	388
Consumer loans:	
Residential mortgages[2]	136
Home equity mortgages[2]	12
Credit cards	2
Total consumer	150
Total TDR Loans[3]	$ 538

(1) Additional commitments to lend to commercial borrowers whose loans have been modified in TDR Loans totaled $38 million at December 31, 2022.

(2) At December 31, 2022, the carrying value of consumer mortgage TDR Loans included $99 million of loans that were recorded at the lower of amortized cost or fair value of the collateral less cost to sell.

(3) At December 31, 2022, the carrying value of TDR Loans included $122 million of loans which were classified as nonaccrual.

The following table presents information about loans which were modified during the three and six months ended June 30, 2022 and as a result of this action became classified as TDR Loans:

	Three Months Ended June 30, 2022	Six Months Ended June 30, 2022
	(in millions)	
Commercial loans:		
Business and corporate banking	$ 99	$ 101
Total commercial	99	101
Consumer loans:		
Residential mortgages	5	12
Home equity mortgages	2	2
Credit cards	1	3
Total consumer	8	17
Total	$ 107	$ 118

The weighted-average contractual rate reduction for consumer loans which became classified as TDR Loans during the three and six months ended June 30, 2022 was 0.14 percent and 0.24 percent, respectively. The weighted-average contractual rate reduction for commercial loans was not significant in either the number of loans or rate.

During the three and six months ended June 30, 2022, there were no consumer or commercial TDR Loans which were classified as TDR Loans during the previous 12 months which subsequently became 60 days or greater contractually delinquent or 90 days or greater contractually delinquent, respectively.

Commercial Loan Credit Quality Indicators and Gross Charge-offs by Year of Origination

The following credit quality indicators are utilized to monitor our commercial loan portfolio:

Criticized loans Criticized loan classifications presented in the table below are determined by the assignment of various criticized facility risk ratings based on the risk rating standards of our regulator. The following facility risk ratings are deemed to be criticized:

Special Mention - generally includes loans that are protected by collateral and/or the credit worthiness of the customer, but are potentially weak based upon economic or market circumstances which, if not checked or corrected, could weaken our credit position at some future date.

Substandard - includes loans that are inadequately protected by the underlying collateral and/or general credit worthiness of the customer. These loans present a distinct possibility that we will sustain some loss if the deficiencies are not corrected.

Doubtful - includes loans that have all the weaknesses exhibited by substandard loans, with the added characteristic that the weaknesses make collection or liquidation in full of the recorded loan highly improbable. However, although the possibility of loss is extremely high, certain factors exist which may strengthen the credit at some future date, and therefore the decision to charge-off the loan is deferred. Loans graded as doubtful are required to be placed in nonaccrual status.

The following table summarizes our criticized commercial loans, including a disaggregation of the loans by year of origination as of June 30, 2023 and December 31, 2022:

	2023	2022	2021	2020	2019	Prior	Revolving Loans	Revolving Loans Converted to Term Loans	Total at Jun. 30, 2023
					(in millions)				
Real estate, including construction:									
Special mention	$ —	$ 96	$ —	$ 69	$ 263	$ 65	$ 54	$ 3	$ 550
Substandard	—	—	—	1	57	1,071	18	—	1,147
Doubtful	—	—	—	—	—	64	—	—	64
Total real estate, including construction	—	96	—	70	320	1,200	72	3	1,761
Business and corporate banking:									
Special mention	—	20	—	10	—	191	353	—	574
Substandard	—	13	—	27	—	145	655	1	841
Doubtful	—	—	72	9	—	8	43	—	132
Total business and corporate banking	—	33	72	46	—	344	1,051	1	1,547
Global banking:									
Special mention	2	—	—	—	—	—	23	—	25
Substandard	—	218	—	—	15	99	47	—	379
Doubtful	—	—	—	—	—	29	12	—	41
Total global banking	2	218	—	—	15	128	82	—	445
Other commercial:									
Substandard	—	—	—	—	—	3	—	—	3
Doubtful	—	—	—	—	—	13	12	—	25
Total other commercial	—	—	—	—	—	16	12	—	28
Total commercial:									
Special mention	2	116	—	79	263	256	430	3	1,149
Substandard	—	231	—	28	72	1,318	720	1	2,370
Doubtful	—	—	72	9	—	114	67	—	262
Total commercial	$ 2	$ 347	$ 72	$ 116	$ 335	$ 1,688	$ 1,217	$ 4	$ 3,781

	2022	2021	2020	2019	2018	Prior	Revolving Loans	Revolving Loans Converted to Term Loans	Total at Dec. 31, 2022
	(in millions)								
Real estate, including construction:									
Special mention	$ 204	$ —	$ 22	$ 212	$ 27	$ 19	$ 63	$ 3	$ 550
Substandard	1	—	48	64	677	891	19	—	1,700
Total real estate, including construction	205	—	70	276	704	910	82	3	2,250
Business and corporate banking:									
Special mention	1	—	16	1	34	116	182	—	350
Substandard	3	43	26	1	10	138	548	1	770
Doubtful	—	—	9	—	15	—	24	4	52
Total business and corporate banking	4	43	51	2	59	254	754	5	1,172
Global banking:									
Special mention	—	—	—	—	—	8	182	—	190
Substandard	232	—	—	16	—	2	186	—	436
Doubtful	—	—	—	—	—	—	15	—	15
Total global banking	232	—	—	16	—	10	383	—	641
Other commercial:									
Substandard	—	—	—	—	—	—	7	—	7
Doubtful	31	—	—	—	—	—	7	—	38
Total other commercial	31	—	—	—	—	—	14	—	45
Total commercial:									
Special mention	205	—	38	213	61	143	427	3	1,090
Substandard	236	43	74	81	687	1,031	760	1	2,913
Doubtful	31	—	9	—	15	—	46	4	105
Total commercial	$ 472	$ 43	$ 121	$ 294	$ 763	$ 1,174	$ 1,233	$ 8	$ 4,108

Nonperforming The following table summarizes the nonperforming status of our commercial loan portfolio, including a disaggregation of the loans by year of origination as of June 30, 2023 and December 31, 2022:

	2023	2022	2021	2020	2019	Prior	Revolving Loans	Revolving Loans Converted to Term Loans	Total at Jun. 30, 2023
					(in millions)				
Real estate, including construction:									
Performing loans	$ 56	$ 1,262	$ 960	$ 388	$ 1,483	$ 2,885	$ 41	$ 3	$ 7,078
Nonaccrual loans	—	—	—	—	41	66	—	—	107
Total real estate, including construction	56	1,262	960	388	1,524	2,951	41	3	7,185
Business and corporate banking:									
Performing loans	490	1,089	816	319	647	4,762	7,626	274	16,023
Nonaccrual loans	—	14	21	9	—	22	79	—	145
Accruing loans contractually past due 90 days or more	—	—	—	—	—	—	1	—	1
Total business and corporate banking	490	1,103	837	328	647	4,784	7,706	274	16,169
Global banking:									
Performing loans	448	1,512	610	162	199	4,067	3,074	—	10,072
Nonaccrual loans	—	—	—	—	10	38	7	—	55
Total global banking	448	1,512	610	162	209	4,105	3,081	—	10,127
Other commercial:									
Performing loans	16	288	290	701	420	909	3,705	—	6,329
Nonaccrual loans	—	—	—	—	—	1	—	—	1
Total other commercial	16	288	290	701	420	910	3,705	—	6,330
Total commercial:									
Performing loans	1,010	4,151	2,676	1,570	2,749	12,623	14,446	277	39,502
Nonaccrual loans	—	14	21	9	51	127	86	—	308
Accruing loans contractually past due 90 days or more	—	—	—	—	—	—	1	—	1
Total commercial	$ 1,010	$ 4,165	$ 2,697	$ 1,579	$ 2,800	$ 12,750	$ 14,533	$ 277	$ 39,811

	2022	2021	2020	2019	2018	Prior	Revolving Loans	Revolving Loans Converted to Term Loans	Total at Dec. 31, 2022
					(in millions)				
Real estate, including construction:									
Performing loans	$ 1,315	$ 854	$ 520	$ 1,671	$ 1,803	$ 1,710	$ 42	$ 3	$ 7,918
Nonaccrual loans	—	—	—	43	—	2	—	—	45
Total real estate, including construction	1,315	854	520	1,714	1,803	1,712	42	3	7,963
Business and corporate banking:									
Performing loans	1,107	828	443	815	292	4,995	7,275	203	15,958
Nonaccrual loans	9	—	32	—	16	24	31	4	116
Accruing loans contractually past due 90 days or more	—	—	—	—	—	—	1	—	1
Total business and corporate banking	1,116	828	475	815	308	5,019	7,307	207	16,075
Global banking:									
Performing loans	2,026	449	212	177	114	4,122	3,424	—	10,524
Nonaccrual loans	8	—	—	—	—	30	16	—	54
Total global banking	2,034	449	212	177	114	4,152	3,440	—	10,578
Other commercial:									
Performing loans	283	354	607	403	86	1,114	4,354	—	7,201
Total other commercial	283	354	607	403	86	1,114	4,354	—	7,201
Total commercial:									
Performing loans	4,731	2,485	1,782	3,066	2,295	11,941	15,095	206	41,601
Nonaccrual loans	17	—	32	43	16	56	47	4	215
Accruing loans contractually past due 90 days or more	—	—	—	—	—	—	1	—	1
Total commercial	$ 4,748	$ 2,485	$ 1,814	$ 3,109	$ 2,311	$ 11,997	$ 15,143	$ 210	$ 41,817

Credit risk profile Commercial loans are assigned a credit rating based on the estimated probability of default. Investment grade includes loans with credit ratings of at least BBB- or above or the equivalent based on our internal credit rating system. The following table summarizes the credit risk profile of our commercial loan portfolio, including a disaggregation of the loans by year of origination as of June 30, 2023 and December 31, 2022:

	2023	2022	2021	2020	2019	Prior	Revolving Loans	Revolving Loans Converted to Term Loans	Total at Jun. 30, 2023
					(in millions)				
Real estate, including construction:									
Investment grade	$ —	$ 20	$ 25	$ 188	$ 115	$ 994	$ —	$ —	$ 1,342
Non-investment grade	56	1,242	935	200	1,409	1,957	41	3	5,843
Total real estate, including construction	56	1,262	960	388	1,524	2,951	41	3	7,185
Business and corporate banking:									
Investment grade	374	325	495	61	362	2,556	3,647	34	7,854
Non-investment grade	116	778	342	267	285	2,228	4,059	240	8,315
Total business and corporate banking	490	1,103	837	328	647	4,784	7,706	274	16,169
Global banking:									
Investment grade	297	1,376	481	157	184	3,129	2,652	—	8,276
Non-investment grade	151	136	129	5	25	976	429	—	1,851
Total global banking	448	1,512	610	162	209	4,105	3,081	—	10,127
Other commercial:									
Investment grade	16	230	70	539	311	743	3,623	—	5,532
Non-investment grade	—	58	220	162	109	167	82	—	798
Total other commercial	16	288	290	701	420	910	3,705	—	6,330
Total commercial:									
Investment grade	687	1,951	1,071	945	972	7,422	9,922	34	23,004
Non-investment grade	323	2,214	1,626	634	1,828	5,328	4,611	243	16,807
Total commercial	$ 1,010	$ 4,165	$ 2,697	$ 1,579	$ 2,800	$ 12,750	$ 14,533	$ 277	$ 39,811

	2022	2021	2020	2019	2018	Prior	Revolving Loans	Revolving Loans Converted to Term Loans	Total at Dec. 31, 2022
					(in millions)				
Real estate, including construction:									
Investment grade	$ 80	$ 45	$ 305	$ 178	$ 783	$ 278	$ —	$ —	$ 1,669
Non-investment grade	1,235	809	215	1,536	1,020	1,434	42	3	6,294
Total real estate, including construction	1,315	854	520	1,714	1,803	1,712	42	3	7,963
Business and corporate banking:									
Investment grade	491	484	122	444	71	2,758	3,657	21	8,048
Non-investment grade	625	344	353	371	237	2,261	3,650	186	8,027
Total business and corporate banking	1,116	828	475	815	308	5,019	7,307	207	16,075
Global banking:									
Investment grade	1,814	449	212	146	84	2,911	3,006	—	8,622
Non-investment grade	220	—	—	31	30	1,241	434	—	1,956
Total global banking	2,034	449	212	177	114	4,152	3,440	—	10,578
Other commercial:									
Investment grade	267	77	518	81	74	935	4,110	—	6,062
Non-investment grade	16	277	89	322	12	179	244	—	1,139
Total other commercial	283	354	607	403	86	1,114	4,354	—	7,201
Total commercial:									
Investment grade	2,652	1,055	1,157	849	1,012	6,882	10,773	21	24,401
Non-investment grade	2,096	1,430	657	2,260	1,299	5,115	4,370	189	17,416
Total commercial	$ 4,748	$ 2,485	$ 1,814	$ 3,109	$ 2,311	$ 11,997	$ 15,143	$ 210	$ 41,817

Gross Charge-offs The following table summarizes gross charge-off dollars in our commercial loan portfolio, disaggregated by year of origination, during the six months ended June 30, 2023:

	2023	2022	2021	2020	2019	Prior	Revolving Loans	Revolving Loans Converted to Term Loans	Total
					(in millions)				
Business and corporate banking	$ —	$ —	$ —	$ —	$ —	$ 3	$ 3	$ —	$ 6
Total commercial	$ —	$ —	$ —	$ —	$ —	$ 3	$ 3	$ —	$ 6

Consumer Loan Credit Quality Indicators and Gross Charge-offs by Year of Origination

The following credit quality indicators are utilized to monitor our consumer loan portfolio:

Delinquency The following table summarizes dollars of two-months-and-over contractual delinquency for our consumer loan portfolio, including a disaggregation of the loans by year of origination as of June 30, 2023 and December 31, 2022:

	2023	2022	2021	2020	2019	Prior	Revolving Loans	Total at Jun. 30, 2023
					(in millions)			
Residential mortgages[1][2]	$ —	$ 7	$ 3	$ 10	$ 2	$ 100	$ —	$ 122
Home equity mortgages[1][2]	—	—	—	—	—	3	—	3
Credit cards	—	—	—	—	—	—	4	4
Other consumer	—	—	—	—	—	2	—	2
Total consumer	$ —	$ 7	$ 3	$ 10	$ 2	$ 105	$ 4	$ 131

	2022	2021	2020	2019	2018	Prior	Revolving Loans	Total at Dec. 31, 2022
					(in millions)			
Residential mortgages[1][2]	$ 6	$ 4	$ 8	$ 16	$ 10	$ 97	$ —	$ 141
Home equity mortgages[1][2]	—	—	—	—	—	3	—	3
Credit cards	—	—	—	—	—	—	3	3
Other consumer	—	—	—	—	—	2	1	3
Total consumer	$ 6	$ 4	$ 8	$ 16	$ 10	$ 102	$ 4	$ 150

(1) At June 30, 2023 and December 31, 2022, consumer mortgage loan delinquency includes $57 million and $60 million, respectively, of loans that are carried at the lower of amortized cost or fair value of the collateral less cost to sell.

(2) At June 30, 2023 and December 31, 2022, consumer mortgage loans include $24 million and $21 million, respectively, of loans that were in the process of foreclosure.

Nonperforming The following table summarizes the nonperforming status of our consumer loan portfolio, including a disaggregation of the loans by year of origination as of June 30, 2023 and December 31, 2022:

	2023	2022	2021	2020	2019	Prior	Revolving Loans	Total at Jun. 30, 2023
	(in millions)							
Residential mortgages:								
Performing loans	**$ 1,183**	**$ 2,800**	**$ 4,186**	**$ 2,853**	**$ 1,266**	**$ 4,960**	**$ —**	**$ 17,248**
Nonaccrual loans	**—**	**14**	**7**	**17**	**17**	**149**	**—**	**204**
Total residential mortgages	**1,183**	**2,814**	**4,193**	**2,870**	**1,283**	**5,109**	**—**	**17,452**
Home equity mortgages:								
Performing loans	**29**	**66**	**11**	**24**	**28**	**195**	**—**	**353**
Nonaccrual loans	**—**	**5**	**—**	**—**	**—**	**6**	**—**	**11**
Total home equity mortgages	**29**	**71**	**11**	**24**	**28**	**201**	**—**	**364**
Credit cards:								
Performing loans	**—**	**—**	**—**	**—**	**—**	**—**	**194**	**194**
Accruing loans contractually past due 90 days or more	**—**	**—**	**—**	**—**	**—**	**—**	**3**	**3**
Total credit cards	**—**	**—**	**—**	**—**	**—**	**—**	**197**	**197**
Other consumer:								
Performing loans	**—**	**13**	**8**	**8**	**4**	**79**	**9**	**121**
Total other consumer	**—**	**13**	**8**	**8**	**4**	**79**	**9**	**121**
Total consumer:								
Performing loans	**1,212**	**2,879**	**4,205**	**2,885**	**1,298**	**5,234**	**203**	**17,916**
Nonaccrual loans	**—**	**19**	**7**	**17**	**17**	**155**	**—**	**215**
Accruing loans contractually past due 90 days or more	**—**	**—**	**—**	**—**	**—**	**—**	**3**	**3**
Total consumer	**$ 1,212**	**$ 2,898**	**$ 4,212**	**$ 2,902**	**$ 1,315**	**$ 5,389**	**$ 206**	**$ 18,134**

	2022	2021	2020	2019	2018	Prior	Revolving Loans	Total at Dec. 31, 2022
	(in millions)							
Residential mortgages:								
Performing loans	$ 2,885	$ 4,272	$ 2,936	$ 1,300	$ 729	$ 4,503	$ —	$ 16,625
Nonaccrual loans	2	8	13	23	22	145	—	213
Total residential mortgages	2,887	4,280	2,949	1,323	751	4,648	—	16,838
Home equity mortgages:								
Performing loans	74	12	24	32	13	208	—	363
Nonaccrual loans	—	—	—	—	—	7	—	7
Total home equity mortgages	74	12	24	32	13	215	—	370
Credit cards:								
Performing loans	—	—	—	—	—	—	211	211
Accruing loans contractually past due 90 days or more	—	—	—	—	—	—	2	2
Total credit cards	—	—	—	—	—	—	213	213
Other consumer:								
Performing loans	14	10	9	6	—	91	11	141
Accruing loans contractually past due 90 days or more	—	—	—	—	—	—	1	1
Total other consumer	14	10	9	6	—	91	12	142
Total consumer:								
Performing loans	2,973	4,294	2,969	1,338	742	4,802	222	17,340
Nonaccrual loans	2	8	13	23	22	152	—	220
Accruing loans contractually past due 90 days or more	—	—	—	—	—	—	3	3
Total consumer	$ 2,975	$ 4,302	$ 2,982	$ 1,361	$ 764	$ 4,954	$ 225	$ 17,563

Gross Charge-offs The following table summarizes gross charge-off dollars in our consumer loan portfolio, disaggregated by year of origination, during the six months ended June 30, 2023:

	2023	2022	2021	2020	2019	Prior	Revolving Loans	Total
				(in millions)				
Residential mortgages	$ —	$ —	$ —	$ —	$ —	$ 4	$ —	$ 4
Home equity mortgages	—	—	—	—	—	1	—	1
Credit cards	—	—	—	—	—	—	4	4
Other consumer	—	—	—	—	—	1	—	1
Total consumer	$ —	$ —	$ —	$ —	$ —	$ 6	$ 4	$ 10

Concentration of Credit Risk At June 30, 2023 and December 31, 2022, our loan portfolios included interest-only residential mortgage and home equity mortgage loans totaling $4,215 million and $4,063 million, respectively. An interest-only residential mortgage loan allows a customer to pay the interest-only portion of the monthly payment for a period of time which results in lower payments during the initial loan period. However, subsequent events affecting a customer's financial position could affect the ability of customers to repay the loan in the future when the principal payments are required which increases the credit risk of this loan type.

7. Allowance for Credit Losses

We utilize a minimum of four forward-looking economic scenarios to calculate lifetime ECL when estimating the allowance for credit losses for in scope financial assets and the liability for off-balance sheet credit exposures. Three of the scenarios are termed the "Consensus Economic Scenarios" which include a 'most likely outcome' (the "Central scenario") and two less likely 'outer' scenarios, referred to as the "Upside scenario" and the "Downside scenario." The fourth scenario, referred to as the "Alternative Downside scenario," is designed to consider severe downside risks with more extreme economic outcomes. Each scenario is assigned a weighting deemed appropriate for the estimation of lifetime ECL, with the majority of the weighting typically placed on the Central scenario. At management's discretion, changes may be made to the weighting assigned to the four scenarios or additional scenarios may be included in order to consider current economic conditions.

Updates to Economic Scenarios and Other Changes During the Six Months Ended June 30, 2023 During the first quarter of 2023, uncertainties about the future economic environment remained elevated, especially around inflation, interest rates and the expectation for slowing future economic growth. We updated our Consensus Economic Scenarios and our Alternative Downside Scenario to reflect management's view of forecasted economic conditions and utilized the four updated scenarios for estimating lifetime ECL at March 31, 2023. Each of the four scenarios were assigned weightings with the majority of the weighting placed on the Central scenario, the second most weighting placed on the Downside scenario and lower equal weights placed on the Alternative Downside and Upside scenarios. This weighting was deemed appropriate for the estimation of lifetime ECL at that time.

During the second quarter of 2023, high inflation, rising interest rates and the expectation for slowing future economic growth continued to create uncertainty about the future economic environment. We updated our Consensus Economic Scenarios and our Alternative Downside Scenario to reflect management's current view of forecasted economic conditions and utilized the four updated scenarios for estimating lifetime ECL at June 30, 2023. Each of the four scenarios were assigned weightings with the majority of the weighting placed on the Central scenario, the second most weighting placed on the Downside scenario and lower equal weights placed on the Alternative Downside and Upside scenarios. This weighting was deemed appropriate for the estimation of lifetime ECL under current conditions. The following discussion summarizes the Central, Upside, Downside and Alternative Downside scenarios at June 30, 2023. The economic assumptions described in this section have been formed specifically for the purpose of calculating ECL.

In the Central scenario, U.S. Gross Domestic Product ("GDP") growth slows in 2023 and 2024, under the assumption that prevailing economic risks, including those from high inflation and interest rates, impact consumer spending and business investment. With modest economic growth, the unemployment rate upticks, but remains near historic lows, while the high interest rates cause residential housing prices to decelerate and commercial real estate prices to retreat. In the financial markets, growth in financial asset prices remains modest while the Federal Reserve Board ("FRB") continues to tackle inflation with an elevated policy rate and a gradual drop in 2024.

In the Upside scenario, the economy is assumed to grow at a faster pace than in the Central scenario as inflation wanes. As a result, the unemployment rate falls lower than in the Central scenario and both residential housing and commercial real estate prices are higher than in the Central scenario. In this scenario, the equity price index climbs with strong momentum and overall

optimism fueled by easing inflation allows the FRB to normalize its policy rate slightly faster than currently anticipated, which, combined with lower inflation expectations, drive the 10-year U.S. Treasury yield lower than in the Central scenario.

In the Downside scenario, inflation becomes entrenched and the economy enters into a recession, with the unemployment rate reversing its downward trend and remaining at a higher level, while residential housing and commercial real estate prices undergo sharp correction due to weakness in the labor market and rising inflation. In this scenario, the FRB initially tightens aggressively to tackle inflation and the equity price index goes through a substantial correction by mid-2024 driven by an overall erosion of consumer and business sentiments, which eventually results in lower interest rates than in the Central scenario.

In the Alternative Downside scenario, geopolitical tensions escalate significantly and persistent inflationary pressures accompanied by higher interest rates lead the U.S. economy into a deep recession in the second half of 2023 and the first half of 2024, followed by a very anemic recovery starting in late 2024. An extended period of economic contraction keeps the unemployment rate at an elevated level, which pressures residential housing prices to depreciate substantially, while at the same time, contracting corporate activities and rising unemployment pushes the commercial real estate market into a downturn. In this scenario, financial markets experience a major sell-off and volatility in the financial markets remains extremely high over the next year, widening corporate credit spreads substantially, and flight to safe haven assets pushes the 10-year U.S. Treasury yield lower.

The following table presents the forecasted key macroeconomic variables in our Central scenarios used for estimating lifetime ECL at June 30, 2023, March 31, 2023 and December 31, 2022:

	For the Quarter Ended		
	December 31, 2023	**June 30, 2024**	**December 31, 2024**
Unemployment rate (quarterly average):			
Forecast at June 30, 2023	**4.3 %**	**4.6 %**	**4.6 %**
Forecast at March 31, 2023	4.3	4.6	4.5
Forecast at December 31, 2022	4.5	4.5	4.4
GDP growth rate (year-over-year):			
Forecast at June 30, 2023	**0.2**	**0.6**	**1.6**
Forecast at March 31, 2023	0.0	1.0	1.7
Forecast at December 31, 2022	0.3	1.4	1.9

As part of our updates to the economic scenarios, during the six months ended June 30, 2023, we also increased our commercial allowance for credit losses for risk factors associated with large loan exposures.

In addition to the updates to the economic scenarios, during the three and six months ended June 30, 2023, we increased our commercial allowance for credit losses associated with individually assessed loans due primarily to the downgrade of a single client relationship. During the three and six months ended June 30, 2023, we also decreased the management judgment allowance on our commercial loan portfolio for risk factors associated with higher risk industry exposures that are not fully captured in the models. During the three months ended June 30, 2023, we decreased the management judgment allowance on our consumer loan portfolio for risk factors primarily associated with a change in New York State foreclosure law that are not fully captured in the models, while in the year-to-date period, we increased the management judgment allowance on our consumer loan portfolio for risk factors primarily associated with a change in New York State foreclosure law that are not fully captured in the models.

While we believe that the assumptions used in our credit loss models are reasonable within the parameters for which the models have been built and calibrated to operate, high inflation and rising interest rates have resulted in a macroeconomic environment that is outside the parameters for which the models have been built. As a result, adjustments to model outputs to reflect consideration of management judgment are used with stringent governance in place to ensure an appropriate lifetime ECL estimate.

The impacts of high inflation, rising interest rates and the expectation for slowing future economic growth will continue to impact our business and our allowance for credit losses in future periods, the extent of which remains uncertain. We will continue to monitor these situations closely and will continue to adapt our approach as necessary to reflect management's current view of forecasted economic conditions.

Allowance for Credit Losses / Liability for Off-Balance Sheet Credit Exposures The following table summarizes our allowance for credit losses and the liability for off-balance sheet credit exposures:

	June 30, 2023	December 31, 2022
	(in millions)	
Allowance for credit losses:		
Loans	**$ 605**	$ 584
Securities held-to-maturity[1]	**—**	—
Other financial assets measured at amortized cost[2]	**—**	—
Securities available-for-sale[1]	**—**	—
Total allowance for credit losses	**$ 605**	$ 584
Liability for off-balance sheet credit exposures	**$ 143**	$ 117

[1] See Note 5, "Securities," for additional information regarding the allowance for credit losses associated with our security portfolios.

[2] Primarily includes accrued interest receivables and customer acceptances.

The following table summarizes the changes in the allowance for credit losses on loans by product or line of business during the three and six months ended June 30, 2023 and 2022:

	Commercial Loans				Consumer Loans				
	Real Estate, including Construction	Business and Corporate Banking	Global Banking	Other Comm'l	Residential Mortgages	Home Equity Mortgages	Credit Cards	Other Consumer	Total Loans
	(in millions)								
Three Months Ended June 30, 2023									
Allowance for credit losses – beginning of period	**$ 172**	**$ 264**	**$ 132**	**$ 1**	**$ (2)**	**$ 3**	**$ 15**	**$ 3**	**$ 588**
Provision charged (credited) to income	**(26)**	**31**	**19**	**—**	**(12)**	**4**	**1**	**1**	**18**
Charge-offs	**—**	**(1)**	**—**	**—**	**(1)**	**—**	**(2)**	**(1)**	**(5)**
Recoveries	**—**	**1**	**—**	**—**	**2**	**—**	**1**	**—**	**4**
Net (charge-offs) recoveries	**—**	**—**	**—**	**—**	**1**	**—**	**(1)**	**(1)**	**(1)**
Allowance for credit losses – end of period	**$ 146**	**$ 295**	**$ 151**	**$ 1**	**$ (13)**	**$ 7**	**$ 15**	**$ 3**	**$ 605**
Three Months Ended June 30, 2022									
Allowance for credit losses – beginning of period	$ 122	$ 197	$ 120	$ 2	$ 5	$ 6	$ 15	$ —	$ 467
Provision charged (credited) to income	40	22	(2)	(1)	(1)	1	5	(1)	63
Charge-offs	—	(1)	—	—	—	—	—	—	(1)
Recoveries	—	—	—	—	2	—	2	1	5
Net (charge-offs) recoveries	—	(1)	—	—	2	—	2	1	4
Allowance for credit losses – end of period	$ 162	$ 218	$ 118	$ 1	$ 6	$ 7	$ 22	$ —	$ 534

	Commercial Loans				Consumer Loans				
	Real Estate, including Construction	Business and Corporate Banking	Global Banking	Other Comm'l	Residential Mortgages	Home Equity Mortgages	Credit Cards	Other Consumer	Total Loans
	(in millions)								
Six Months Ended June 30, 2023									
Allowance for credit losses – beginning of period	**$ 200**	**$ 230**	**$ 120**	**$ 1**	**$ 11**	**$ 2**	**$ 16**	**$ 4**	**$ 584**
Provision charged (credited) to income	**(54)**	**69**	**31**	**—**	**(22)**	**5**	**1**	**—**	**30**
Charge-offs	**—**	**(6)**	**—**	**—**	**(4)**	**(1)**	**(4)**	**(1)**	**(16)**
Recoveries	**—**	**2**	**—**	**—**	**2**	**1**	**2**	**—**	**7**
Net (charge-offs) recoveries	**—**	**(4)**	**—**	**—**	**(2)**	**—**	**(2)**	**(1)**	**(9)**
Allowance for credit losses – end of period	**$ 146**	**$ 295**	**$ 151**	**$ 1**	**$ (13)**	**$ 7**	**$ 15**	**$ 3**	**$ 605**
Six Months Ended June 30, 2022									
Allowance for credit losses – beginning of period	$ 73	$ 243	$ 100	$ 4	$ 8	$ 5	$ 14	$ —	$ 447
Provision charged (credited) to income	89	(18)	27	(3)	(5)	1	4	(1)	94
Charge-offs	—	(9)	(9)	—	(1)	(1)	—	—	(20)
Recoveries	—	2	—	—	4	2	4	1	13
Net (charge-offs) recoveries	—	(7)	(9)	—	3	1	4	1	(7)
Allowance for credit losses – end of period	$ 162	$ 218	$ 118	$ 1	$ 6	$ 7	$ 22	$ —	$ 534

The following table summarizes the changes in the liability for off-balance sheet credit exposures during the three and six months ended June 30, 2023 and 2022:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
	(in millions)			
Balance at beginning of period	**$ 125**	$ 84	**$ 117**	$ 103
Provision charged (credited) to income	**18**	5	**26**	(14)
Balance at end of period	**$ 143**	$ 89	**$ 143**	$ 89

Accrued Interest Receivables The following table summarizes accrued interest receivables associated with financial assets carried at amortized cost and securities available-for-sale along with the related allowance for credit losses, which are reported net in other assets on the consolidated balance sheet. These accrued interest receivables are excluded from the amortized cost basis disclosures presented elsewhere in these financial statements, including Note 5, "Securities," and Note 6, "Loans."

	June 30, 2023	December 31, 2022
	(in millions)	
Accrued interest receivables:		
Loans	**$ 238**	$ 227
Securities held-to-maturity	**45**	20
Other financial assets measured at amortized cost	**11**	11
Securities available-for-sale	**82**	82
Total accrued interest receivables	**376**	340
Allowance for credit losses	**—**	—
Accrued interest receivables, net	**$ 376**	$ 340

During the three and six months ended June 30, 2023 and 2022, charged-off accrued interest receivables were immaterial.

8. *Loans Held for Sale*

Loans held for sale consisted of the following:

	June 30, 2023	December 31, 2022
	(in millions)	
Commercial loans:		
Real estate, including construction	**$ 507**	$ —
Business and corporate banking	**11**	—
Global banking	**478**	349
Total commercial	**996**	349
Consumer loans:		
Residential mortgages	**1**	5
Total consumer	**1**	5
Total loans held for sale	**$ 997**	$ 354

Commercial Loans During the second quarter of 2023, we transferred certain commercial real estate loans to held for sale with a carrying value of $507 million as part of an effort to reduce exposure to this sector. We recorded a lower of amortized cost or fair value adjustment of $34 million upon transferring these loans to held for sale as a component of other income (loss) in the consolidated statement of income.

Also included in commercial loans held for sale are certain other loans that we no longer intend to hold for investment and were transferred to held for sale which totaled $115 million and $112 million at June 30, 2023 and December 31, 2022, respectively. During the three and six months ended June 30, 2023 and 2022, lower of amortized cost or fair value adjustments on these commercial loans held for sale were immaterial.

Commercial loans held for sale also includes certain loans that we have elected to designate under the fair value option which consists of loans that we originate in connection with our participation in a number of syndicated credit facilities with the intent of selling them to unaffiliated third parties as well as loans that we purchase from the secondary market and hold as hedges against our exposure to certain total return swaps or intend to sell. The fair value of these loans totaled $374 million and $237 million at June 30, 2023 and December 31, 2022, respectively. See Note 11, "Fair Value Option," for additional information.

In addition, during the first quarter of 2022, we completed the sale of the branch disposal group that we previously transferred to held for sale in 2021 as part of our Restructuring Plan. The sale included certain retail business banking loans with a carrying value at the time of sale of $37 million. See Note 3, "Sale of Certain Branch Assets and Liabilities," for additional information.

Consumer Loans Included in residential mortgage loans held for sale are agency-eligible conforming residential mortgage loans which are originated and held for sale to third parties, currently on a servicing retained basis. Gains and losses from the sale of these residential mortgage loans are reflected as a component of other income (loss) in the consolidated statement of income.

In addition, as discussed above, during the first quarter of 2022, we completed the sale of the branch disposal group that we previously transferred to held for sale in 2021 as part of our Restructuring Plan. The sale included certain consumer loans with a carrying value at the time of sale which collectively totaled $2,102 million, including $1,665 million of residential mortgages, $185 million of home equity mortgages, $168 million of credit cards and $84 million of other consumer loans. See Note 3, "Sale of Certain Branch Assets and Liabilities," for additional information.

During the first quarter of 2022, we also sold a portfolio of consumer loans to a third party consisting primarily of certain non-performing mortgage loans and government-backed mortgage loans that we previously transferred to held for sale in 2021 as part of our Restructuring Plan. These mortgage loans had a carrying value at the time of sale which collectively totaled $904 million, including $865 million of residential mortgages and $39 million of home equity mortgages, and we recognized a loss on sale of $35 million, largely reflecting changes in the final terms of the sale. The loss on sale is reflected as a component of other income (loss) in the consolidated statement of income. The loss on sale was increased by $10 million during the second quarter of 2023 reflecting a repricing reserve adjustment.

During the three and six months ended June 30, 2022, lower of amortized cost or fair value adjustments on mass market consumer loans held for sale were immaterial.

Loans held for sale are subject to market risk, liquidity risk and interest rate risk, in that their value will fluctuate as a result of changes in market conditions, as well as the credit environment. Interest rate risk for residential mortgage loans which are

originated and held for sale is partially mitigated through an economic hedging program to offset changes in the fair value of these mortgage loans held for sale, from the time of commitment to sale, attributable to changes in market interest rates. Revenue associated with this economic hedging program, which is reflected as a component of other income (loss) in the consolidated statement of income, was nil during both the three and six months ended June 30, 2023 compared with gains of $3 million and $7 million during the three and six months ended June 30, 2022, respectively.

Valuation Allowances Excluding the loans designated under the fair value option discussed above, loans held for sale are recorded at the lower of amortized cost or fair value, with adjustments to fair value being recorded as a valuation allowance through other revenues. The valuation allowance on commercial loans held for sale was $37 million and nil at June 30, 2023 and December 31, 2022, respectively. The valuation allowance on consumer loans held for sale was nil at both June 30, 2023 and December 31, 2022.

9. Goodwill

Goodwill was $458 million at both June 30, 2023 and December 31, 2022. Goodwill for these periods reflects accumulated impairment losses of $1,819 million, which were recognized in prior periods. During the second quarter of 2023, there were no events or changes in circumstances to indicate that it is more likely than not the fair value of our Commercial Banking reporting unit has been reduced below its carrying amount.

10. Derivative Financial Instruments

In the normal course of business, the derivative instruments we enter into are for trading, market making and risk management purposes. For financial reporting purposes, derivative instruments are designated in one of the following categories: (a) hedging instruments designated as qualifying hedges under derivative and hedge accounting principles, (b) financial instruments held for trading or (c) non-qualifying economic hedges. The derivative instruments held are predominantly swaps, futures, options and forward contracts. All derivatives are stated at fair value. Where we enter into enforceable master netting agreements with counterparties, the master netting agreements permit us to net those derivative asset and liability positions and to offset cash collateral held and posted with the same counterparty.

The following table presents the fair value of derivative contracts by major product type on a gross basis. Gross fair values exclude the effects of both counterparty netting as well as collateral, and therefore are not representative of our exposure. The table below also presents the amounts of counterparty netting and cash collateral that have been offset in the consolidated balance sheet, as well as cash and securities collateral posted and received under enforceable master netting agreements that do not meet the criteria for netting. Derivative assets and liabilities which are not subject to an enforceable master netting agreement, or are subject to a netting agreement where an appropriate legal opinion to determine such agreements are enforceable has not been either sought or obtained, have not been netted in the following table. Where we have received or posted collateral under netting agreements where an appropriate legal opinion to determine such agreements are enforceable has not been either sought or obtained, the related collateral also has not been netted in the following table.

	June 30, 2023		December 31, 2022	
	Derivative Assets	Derivative Liabilities	Derivative Assets	Derivative Liabilities
	(in millions)			
Derivatives accounted for as fair value hedges[1]				
Interest rate contracts - bilateral OTC[2]	**$ 16**	**$ 7**	$ 42	$ 12
Derivatives accounted for as cash flow hedges[1]				
Foreign exchange contracts - bilateral OTC[2]	**70**	**—**	—	70
Interest rate contracts - bilateral OTC[2]	**—**	**1**	—	4
Total derivatives accounted for as hedges	**86**	**8**	42	86
Trading derivatives not accounted for as hedges[3]				
Exchange-traded[2]	**5**	**11**	8	7
OTC-cleared[2]	**—**	**—**	42	—
Bilateral OTC[2]	**1,442**	**1,088**	1,764	1,364
Interest rate contracts	**1,447**	**1,099**	1,814	1,371
Foreign exchange contracts - bilateral OTC[2]	**14,743**	**13,738**	15,744	15,440
Exchange-traded[2]	**—**	**—**	—	4
Bilateral OTC[2]	**285**	**798**	630	266
Equity contracts	**285**	**798**	630	270
Exchange-traded[2]	**7**	**—**	—	1
Bilateral OTC[2]	**1,197**	**1,104**	1,201	1,254
Precious metals contracts	**1,204**	**1,104**	1,201	1,255
Credit contracts - bilateral OTC[2]	**68**	**37**	103	45
Other non-qualifying derivatives not accounted for as hedges[1]				
Interest rate contracts - bilateral OTC[2]	**—**	**97**	—	97
Equity contracts - bilateral OTC[2]	**660**	**276**	398	657
OTC-cleared[2]	**—**	**1**	—	1
Bilateral OTC[2]	**9**	**67**	7	60
Credit contracts	**9**	**68**	7	61
Other contracts - bilateral OTC[2][4]	**3**	**27**	5	38
Total derivatives	**18,505**	**17,252**	19,944	19,320
Less: Gross amounts of receivable / payable subject to enforceable master netting agreements[5][7]	**14,491**	**14,491**	15,625	15,625
Less: Gross amounts of cash collateral received / posted subject to enforceable master netting agreements[6][7]	**2,565**	**1,180**	2,653	1,529
Net amounts of derivative assets / liabilities presented in the balance sheet	**1,449**	**1,581**	1,666	2,166
Less: Gross amounts of financial instrument collateral received / posted subject to enforceable master netting agreements but not offset in the consolidated balance sheet	**101**	**48**	234	32
Net amounts of derivative assets / liabilities	**$ 1,348**	**$ 1,533**	$ 1,432	$ 2,134

(1) Derivative assets / liabilities related to cash flow hedges, fair value hedges and derivative instruments held for purposes other than for trading are recorded in other assets / interest, taxes and other liabilities on the consolidated balance sheet.

(2) Over-the-counter ("OTC") derivatives include derivatives executed and settled bilaterally with counterparties without the use of an organized exchange or central clearing house. The credit risk associated with bilateral OTC derivatives is managed through obtaining collateral and enforceable master netting agreements. OTC-cleared derivatives are executed bilaterally in the OTC market but then novated to a central clearing counterparty, whereby the central clearing counterparty becomes the counterparty to each of the original counterparties. Exchange traded derivatives are executed directly on an organized exchange. Credit risk is minimized for OTC-cleared derivatives and exchange traded derivatives through daily margining requirements. In addition, OTC-cleared interest rate and credit derivatives with certain central clearing counterparties are settled daily.

(3) Trading related derivative assets / liabilities are recorded in trading assets / trading liabilities on the consolidated balance sheet.

(4) Consists of swap agreements entered into in conjunction with the sales of Visa Inc. ("Visa") Class B common shares ("Class B Shares").

(5) Represents the netting of derivative receivable and payable balances for the same counterparty under enforceable netting agreements.

(6) Represents the netting of cash collateral posted and received by counterparty under enforceable netting agreements.

(7) Netting is performed at a counterparty level in cases where enforceable master netting agreements are in place, regardless of the type of derivative instrument. Therefore, we have not allocated netting to the different types of derivative instruments shown in the table above.

See Note 18, "Guarantee Arrangements, Pledged Assets and Repurchase Agreements," for further information on offsetting related to resale and repurchase agreements.

Derivatives Held for Risk Management Purposes Our risk management policy requires us to identify, analyze and manage risks arising from the activities conducted during the normal course of business. We use derivative instruments as an asset and liability management tool to manage our exposures in interest rate, foreign currency and credit risks in existing assets and liabilities, commitments and forecasted transactions. The accounting for changes in fair value of a derivative instrument will depend on whether the derivative has been designated and qualifies for hedge accounting.

We designate derivative instruments to offset the fair value risk and cash flow risk arising from fixed-rate and floating-rate assets and liabilities as well as forecasted transactions. We assess the hedging relationships, both at the inception of the hedge and on an ongoing basis, using a regression approach to determine whether the designated hedging instrument is highly effective in offsetting changes in the fair value or the cash flows attributable to the hedged risk. Accounting principles for qualifying hedges require us to prepare detailed documentation describing the relationship between the hedging instrument and the hedged item, including, but not limited to, the risk management objective, the hedging strategy and the methods to assess and measure the ineffectiveness of the hedging relationship. We discontinue hedge accounting when we determine that the hedge is no longer highly effective, the hedging instrument is terminated, sold or expired, the designated forecasted transaction is not probable of occurring, or when the designation is removed by us.

Fair Value Hedges In the normal course of business, we hold fixed-rate loans and securities, and issue fixed-rate deposits and senior and subordinated debt obligations. The fair value of fixed-rate assets and liabilities fluctuates in response to changes in interest rates. We utilize interest rate swaps, forward and futures contracts to minimize our exposure to changes in fair value caused by interest rate volatility. The changes in the fair value of the hedged item designated in a qualifying hedge are captured as an adjustment to the carrying amount of the hedged item (basis adjustment). If the hedging relationship is discontinued and the hedged item continues to exist, the basis adjustment is amortized over the remaining life of the hedged item.

The following table presents the carrying amount of hedged items in fair value hedges recognized in the consolidated balance sheet at June 30, 2023 and December 31, 2022, along with the cumulative amount of fair value hedging adjustments included in the carrying amount of those hedged items:

	Carrying Amount of Hedged Items[(1)]	Cumulative Amount of Fair Value Hedging Adjustments Increasing (Decreasing) the Carrying Amount of Hedged Items		
		Active	Discontinued	Total
		(in millions)		
At June 30, 2023				
Securities available-for-sale ("AFS")	**$ 13,299**	**$ (1,565)**	**$ 155**	**$ (1,410)**
Deposits	**1,437**	**(145)**	**82**	**(63)**
Long-term debt	**7,452**	**(581)**	**92**	**(489)**
At December 31, 2022				
Securities AFS	15,034	(1,633)	246	(1,387)
Deposits	1,446	(150)	96	(54)
Long-term debt	6,506	(605)	111	(494)

(1) The carrying amount of securities AFS represents the amortized cost basis.

The following table presents information on gains and losses on derivative instruments designated and qualifying as hedging instruments and the hedged items in fair value hedges and their location on the consolidated statement of income:

	Location of Gain (Loss) Recognized in Income	Gain (Loss) on Derivatives	Gain (Loss) on Hedged Items
		(in millions)	
Three Months Ended June 30, 2023			
Interest rate contracts / Securities AFS	Net interest income	**$ 399**	**$ (220)**
Interest rate contracts / Deposits	Net interest income	**(33)**	**(1)**
Interest rate contracts / Long-term debt	Net interest income	**(146)**	**27**
Total		**$ 220**	**$ (194)**
Three Months Ended June 30, 2022			
Interest rate contracts / Securities AFS	Net interest income	$ 748	$ (679)
Interest rate contracts / Deposits	Net interest income	(20)	3
Interest rate contracts / Long-term debt	Net interest income	(90)	69
Total		$ 638	$ (607)
Six Months Ended June 30, 2023			
Interest rate contracts / Securities AFS	Net interest income	**$ 192**	**$ 166**
Interest rate contracts / Deposits	Net interest income	**(27)**	**(38)**
Interest rate contracts / Long-term debt	Net interest income	**(70)**	**(147)**
Total		**$ 95**	**$ (19)**
Six Months Ended June 30, 2022			
Interest rate contracts / Securities AFS	Net interest income	$ 1,407	$ (1,321)
Interest rate contracts / Deposits	Net interest income	(85)	54
Interest rate contracts / Long-term debt	Net interest income	(326)	295
Total		$ 996	$ (972)

Cash Flow Hedges We own or issue floating rate financial instruments and enter into forecasted transactions that give rise to variability in future cash flows. As a part of our risk management strategy, we use interest rate swaps, currency swaps and futures contracts to mitigate risk associated with variability in the cash flows. Changes in fair value of a derivative instrument associated with a qualifying cash flow hedge are recognized in other comprehensive income (loss). When the cash flows being hedged materialize and are recorded in income or expense, the associated gain or loss from the hedging derivative previously recorded in accumulated other comprehensive loss ("AOCI") is reclassified into earnings in the same accounting period in which the designated forecasted transaction or hedged item affects earnings. If a cash flow hedge of a forecasted transaction is discontinued because it is no longer highly effective, or if the hedge relationship is terminated, the cumulative gain or loss on the hedging derivative to that date will continue to be reported in AOCI unless it is probable that the hedged forecasted transaction will not occur by the end of the originally specified time period as documented at the inception of the hedge, at which time the cumulative gain or loss is released into earnings.

At June 30, 2023, active cash flow hedge relationships extend or mature through July 2036. During the three and six months ended June 30, 2023, respectively, $55 million and $100 million of losses related to discontinued cash flow hedge relationships were amortized to earnings from AOCI compared with losses of $1 million and $2 million during the three and six months ended June 30, 2022, respectively. During the next twelve months, we expect to amortize $65 million of remaining losses to earnings resulting from these discontinued cash flow hedges. The interest accrual related to the hedging instruments is recognized in net interest income.

The following table presents information on gains and losses on derivative instruments designated and qualifying as hedging instruments in cash flow hedges (including amounts recognized in AOCI from discontinued cash flow hedges) and their location on the consolidated statement of income:

	Gain (Loss) Recognized in AOCI on Derivatives		Location of Gain (Loss) Reclassified from AOCI into Income	Gain (Loss) Reclassified From AOCI into Income	
	2023	**2022**		**2023**	**2022**
			(in millions)		
Three Months Ended June 30,					
Interest rate contracts	**$ (120)**	$ (82)	Net interest income	**$ (55)**	$ (1)
Total	**$ (120)**	$ (82)		**$ (55)**	$ (1)
Six Months Ended June 30,					
Interest rate contracts	**$ (35)**	$ (283)	Net interest income	**$ (100)**	$ (2)
Total	**$ (35)**	$ (283)		**$ (100)**	$ (2)

Trading Derivatives and Non-Qualifying Hedging Activities In addition to risk management, we also enter into derivative contracts, including buy- and sell-protection credit derivatives, for the purposes of trading and market making, or repackaging risks to form structured trades to meet clients' risk taking objectives. Additionally, we buy or sell securities and use derivatives to mitigate the market risks arising from our trading activities with our clients that exceed our risk appetite. We also use buy-protection credit derivatives to manage our counterparty credit risk exposure. Where we enter into derivatives for trading purposes, realized and unrealized gains and losses are recognized in trading revenue. Counterparty credit risk associated with OTC derivatives, including risk-mitigating buy-protection credit derivatives, are recognized as an adjustment to the fair value of the derivatives and are recorded in trading revenue.

Our non-qualifying hedging and other activities include:

- Derivative contracts related to the fixed-rate long-term debt issuances and hybrid instruments, including all structured notes and deposits, for which we have elected fair value option accounting. These derivative contracts are non-qualifying hedges but are considered economic hedges.
- Credit default swaps which are designated as economic hedges against the credit risks within our loan portfolio. In the event of an impairment loss occurring in a loan that is economically hedged, the impairment loss is recognized as provision for credit losses while the gain on the credit default swap is recorded as other income (loss).
- Swap agreements entered into in conjunction with the sales of Visa Class B Shares to a third party to retain the litigation risk associated with the Class B Shares sold until the related litigation is settled and the Class B Shares can be converted into Class A common shares ("Class A Shares"). See Note 18, "Guarantee Arrangements, Pledged Assets and Repurchase Agreements," for additional information.
- Forward purchases or sales of to-be-announced ("TBA") securities used to economically hedge changes in the fair value of residential mortgage loans which are originated and held for sale attributable to changes in market interest rates. Changes in the fair value of TBA positions, which are considered derivatives, are recorded in other income (loss). See Note 8, "Loans Held for Sale," for additional information.

Derivative instruments designated as economic hedges that do not qualify for hedge accounting are recorded at fair value through profit and loss. Realized and unrealized gains and losses on economic hedges are recognized in gain (loss) on instruments designated at fair value and related derivatives or other income (loss) while the derivative asset or liability positions are reflected as other assets or other liabilities.

The following table presents information on gains and losses on derivative instruments held for trading purposes and their location on the consolidated statement of income:

	Location of Gain (Loss) Recognized in Income on Derivatives	Gain (Loss) Recognized in Income on Derivatives			
		Three Months Ended June 30,		Six Months Ended June 30,	
		2023	2022	2023	2022
		(in millions)			
Interest rate contracts	Trading revenue	**$ (26)**	$ 150	**$ (55)**	$ 376
Foreign exchange contracts	Trading revenue	**105**	(34)	**134**	116
Equity contracts	Trading revenue	**(697)**	1,763	**(1,173)**	2,678
Precious metals contracts	Trading revenue	**13**	104	**149**	41
Credit contracts	Trading revenue	**47**	31	**21**	63
Total		**$ (558)**	$ 2,014	**$ (924)**	$ 3,274

The following table presents information on gains and losses on derivative instruments held for non-qualifying hedging and other activities and their location on the consolidated statement of income:

	Location of Gain (Loss) Recognized in Income on Derivatives	Gain (Loss) Recognized in Income on Derivatives			
		Three Months Ended June 30,		Six Months Ended June 30,	
		2023	2022	2023	2022
		(in millions)			
Interest rate contracts	Gain (loss) on instruments designated at fair value and related derivatives	**$ (53)**	$ (92)	**$ (10)**	$ (215)
Interest rate contracts	Other income (loss)	**—**	3	**—**	7
Foreign exchange contracts	Gain (loss) on instruments designated at fair value and related derivatives	**—**	1	**—**	1
Equity contracts	Gain (loss) on instruments designated at fair value and related derivatives	**294**	(864)	**706**	(1,214)
Credit contracts	Other income (loss)	**(10)**	5	**(25)**	10
Other contracts[1]	Other income (loss)	**(7)**	(30)	**(9)**	(31)
Total		**$ 224**	$ (977)	**$ 662**	$(1,442)

(1) Consists of swap agreements entered into in conjunction with the sales of Visa Class B Shares.

Credit-Risk Related Contingent Features The majority of our derivative contracts contain provisions that require us to maintain a specific credit rating from each of the major credit rating agencies. Sometimes the derivative instrument transactions are a part of broader structured product transactions. If our credit ratings were to fall below the current ratings, the counterparties to our derivative instruments could demand us to post additional collateral. The amount of additional collateral required to be posted will depend on whether we are downgraded by one or more notches. The aggregate fair value of all derivative instruments with credit-risk related contingent features that were in a net liability position at June 30, 2023 was $149 million, for which we had posted collateral of $61 million. The aggregate fair value of all derivative instruments with credit-risk-related contingent features that were in a net liability position at December 31, 2022 was $236 million, for which we had posted collateral of $100 million. Substantially all of the collateral posted is in the form of cash or securities available-for-sale. See Note 18, "Guarantee Arrangements, Pledged Assets and Repurchase Agreements," for further details.

The following table presents the amount of additional collateral that we would be required to post (from the current collateral level) related to derivative instruments with credit-risk related contingent features if our long-term ratings were downgraded by one or two notches. A downgrade by a single rating agency that does not result in a rating lower than a preexisting corresponding rating provided by another rating agency will generally not result in additional collateral.

	One-notch downgrade	Two-notch downgrade
	(in millions)	
Amount of additional collateral to be posted upon downgrade	$ —	$ 40

Notional Value of Derivative Contracts The following table summarizes the notional values of derivative contracts:

	June 30, 2023	December 31, 2022
	(in millions)	
Interest rate:		
Futures and forwards	**$ 93,443**	$ 30,764
Swaps	**110,356**	120,560
Options written	**4,931**	5,855
Options purchased	**4,950**	5,740
Total interest rate	**213,680**	162,919
Foreign exchange:		
Swaps, futures and forwards	**1,077,478**	968,847
Options written	**32,605**	39,969
Options purchased	**32,824**	40,026
Spot	**40,455**	26,809
Total foreign exchange	**1,183,362**	1,075,651
Commodities, equities and precious metals:		
Swaps, futures and forwards	**62,370**	58,371
Options written	**1,844**	1,643
Options purchased	**9,934**	9,689
Total commodities, equities and precious metals	**74,148**	69,703
Credit derivatives	**12,190**	18,547
Other contracts(1)	**1,293**	1,109
Total	**$ 1,484,673**	$ 1,327,929

(1) Consists of swap agreements entered into in conjunction with the sales of Visa Class B Shares.

11. Fair Value Option

We report our results to HSBC in accordance with HSBC Group accounting and reporting policies ("Group Reporting Basis"), which apply International Financial Reporting Standards ("IFRSs") as issued by the International Accounting Standards Board ("IASB"). We typically have elected to apply fair value option ("FVO") accounting to selected financial instruments to align the measurement attributes of those instruments under U.S. GAAP and the Group Reporting Basis and to simplify the accounting model applied to those financial instruments. We elected to apply FVO accounting to certain commercial loans held for sale, certain student loans, certain fixed-rate long-term debt issuances, all of our hybrid instruments, including structured notes and deposits, and certain client share repurchase transactions. Excluding the fair value movement on fair value option liabilities attributable to our own credit spread, which is recorded in other comprehensive income (loss), changes in the fair value of fair value option assets and liabilities as well as the mark-to-market adjustment on the related derivatives and the net realized gains or losses on these derivatives are reported in gain (loss) on instruments designated at fair value and related derivatives in the consolidated statement of income.

Loans and Loans Held For Sale We elected to apply FVO accounting to certain commercial syndicated loans which are originated with the intent to sell and certain commercial loans that we purchased from the secondary market and hold as hedges against our exposure to certain total return swaps or intend to sell and include these loans as loans held for sale in the consolidated balance sheet. We also previously elected to apply FVO accounting to certain student loans (which were subsequently transferred from held for sale to held for investment during 2022). These elections allow us to account for these loans at fair value which is consistent with the manner in which the instruments are managed. Where available, fair value is based on observable market pricing obtained from independent sources, relevant broker quotes or observed market prices of instruments with similar characteristics. Where observable market parameters are not available, fair value is determined based on contractual cash flows adjusted for estimates of prepayment rates, expected default rates and loss severity discounted at management's estimate of the expected rate of return required by market participants. We also consider loan-specific risk mitigating factors such as collateral arrangements in determining the fair value estimate. Interest from these loans is recorded as interest income in the consolidated statement of income. Because a substantial majority of the loans elected for the fair value option are floating-rate commercial loans, changes in their fair value are primarily attributable to changes in loan-specific credit

risk factors. The components of gain (loss) related to loans designated at fair value are summarized in the table below. At June 30, 2023 and December 31, 2022, no loans for which the fair value option has been elected were 90 days or more past due or in nonaccrual status.

Long-Term Debt (Own Debt Issuances) We elected to apply FVO accounting for certain fixed-rate long-term debt for which we had applied or otherwise would elect to apply fair value hedge accounting. The election allows us to achieve a similar accounting effect without having to meet the hedge accounting requirements. The own debt issuances elected under FVO are traded in secondary markets and, as such, the fair value is determined based on observed prices for the specific instruments. The observed market price of these instruments reflects the effect of changes to our own credit spreads and interest rates. Interest on the fixed-rate debt accounted for under FVO is recorded as interest expense in the consolidated statement of income. Excluding the fair value movement attributable to our own credit spread, the components of gain (loss) in the consolidated statement of income related to long-term debt designated at fair value are summarized in the table below.

Hybrid Instruments We elected to apply FVO accounting to all of our hybrid instruments issued, including structured notes and deposits. The valuation of the hybrid instruments is predominantly driven by the derivative features embedded within the instruments and our own credit risk. Cash flows of the hybrid instruments in their entirety, including the embedded derivatives, are discounted at an appropriate rate for the applicable duration of the instrument adjusted for our own credit spreads. The credit spreads applied to structured notes are determined with reference to our own debt issuance rates observed in the primary and secondary markets, internal funding rates, and structured note rates in recent executions while the credit spreads applied to structured deposits are determined using market rates currently offered on comparable deposits with similar characteristics and maturities. Interest on this debt is recorded as interest expense in the consolidated statement of income. Excluding the fair value movement attributable to our own credit spread, the components of gain (loss) in the consolidated statement of income related to hybrid instruments designated at fair value are summarized in the table below.

Client Share Repurchase Transactions From time to time, we enter into agreements with clients to facilitate share repurchase transactions under which the clients make a substantial up-front cash payment in exchange for the delivery of shares. Simultaneously, we enter into corresponding agreements with HSBC Bank plc to execute the share repurchases. We elected to apply FVO accounting to these transactions, which are recorded in other assets and interest, taxes and other liabilities on the consolidated balance sheet.

The following table summarizes the fair value and unpaid principal balance for items we account for under FVO:

	Fair Value	Unpaid Principal Balance	Fair Value Over (Under) Unpaid Principal Balance
		(in millions)	
At June 30, 2023			
Student loans held for investment	**$ 17**	**$ 19**	**$ (2)**
Commercial loans held for sale	**374**	**386**	**(12)**
Client share repurchase asset	**61**	**61**	**—**
Fixed rate long-term debt	**723**	**741**	**(18)**
Hybrid instruments:			
Structured deposits	**1,352**	**1,344**	**8**
Structured notes	**8,483**	**8,191**	**292**
Client share repurchase liability	**61**	**61**	**—**
At December 31, 2022			
Student loans held for investment	$ 20	$ 22	$ (2)
Commercial loans held for sale	237	291	(54)
Client share repurchase asset	325	325	—
Fixed rate long-term debt	706	741	(35)
Hybrid instruments:			
Structured deposits	1,554	1,520	34
Structured notes	7,672	8,051	(379)
Client share repurchase liability	325	325	—

Components of Gain (Loss) on Instruments Designated at Fair Value and Related Derivatives The following table summarizes the components of gain (loss) on instruments designated at fair value and related derivatives reflected in the consolidated statement of income for the three and six months ended June 30, 2023 and 2022:

	Loans and Loans Held for Sale	Long-Term Debt	Hybrid Instruments	Total
		(in millions)		
Three Months Ended June 30, 2023				
Interest rate and other components[1]	**$ —**	**$ 23**	**$ (276)**	**$ (253)**
Credit risk component[2]	**14**	**—**	**—**	**14**
Total mark-to-market on financial instruments designated at fair value	**14**	**23**	**(276)**	**(239)**
Mark-to-market on related derivatives	**—**	**(28)**	**269**	**241**
Net realized gain on related long-term debt derivatives	**—**	**—**	**—**	**—**
Gain (loss) on instruments designated at fair value and related derivatives	**$ 14**	**$ (5)**	**$ (7)**	**$ 2**
Three Months Ended June 30, 2022				
Interest rate and other components[1]	$ —	$ 65	$ 936	$ 1,001
Credit risk component[2][3]	(27)	—	—	(27)
Total mark-to-market on financial instruments designated at fair value	(27)	65	936	974
Mark-to-market on related derivatives	—	(70)	(893)	(963)
Net realized gain on related long-term debt derivatives	—	8	—	8
Gain (loss) on instruments designated at fair value and related derivatives	$ (27)	$ 3	$ 43	$ 19
Six Months Ended June 30, 2023				
Interest rate and other components[1]	**$ —**	**$ 2**	**$ (726)**	**$ (724)**
Credit risk component[2]	**8**	**—**	**—**	**8**
Total mark-to-market on financial instruments designated at fair value	**8**	**2**	**(726)**	**(716)**
Mark-to-market on related derivatives	**—**	**(5)**	**700**	**695**
Net realized gain on related long-term debt derivatives	**—**	**1**	**—**	**1**
Gain (loss) on instruments designated at fair value and related derivatives	**$ 8**	**$ (2)**	**$ (26)**	**$ (20)**
Six Months Ended June 30, 2022				
Interest rate and other components[1]	$ —	$ 139	$ 1,349	$ 1,488
Credit risk component[2][3]	(35)	—	—	(35)
Total mark-to-market on financial instruments designated at fair value	(35)	139	1,349	1,453
Mark-to-market on related derivatives	—	(155)	(1,290)	(1,445)
Net realized gain on related long-term debt derivatives	—	17	—	17
Gain (loss) on instruments designated at fair value and related derivatives	$ (35)	$ 1	$ 59	$ 25

(1) As it relates to hybrid instruments, interest rate and other components primarily includes interest rate and equity contract risks.

(2) The fair value movement on fair value option liabilities attributable to our own credit spread is recorded in other comprehensive income (loss).

(3) During the three and six months ended June 30, 2022, the losses in the credit risk component for loans held for sale was attributable to the widening of credit spreads associated with certain commercial loans which were impacted by the weakening of market conditions.

12. Accumulated Other Comprehensive Loss

Accumulated other comprehensive loss includes certain items that are reported directly within a separate component of equity. The following table presents changes in accumulated other comprehensive loss balances:

Three Months Ended June 30,	2023	2022
	(in millions)	
Unrealized gains (losses) on investment securities:		
Balance at beginning of period	**$ (2,066)**	$ (1,108)
Other comprehensive income (loss) for period:		
Net unrealized losses arising during period, net of tax of $(21) million and $(182) million, respectively	**(64)**	(573)
Reclassification adjustment for gains realized in net income, net of tax of nil and $(2) million, respectively[1]	**—**	(7)
Provision for credit losses realized in net income, net of tax of nil and less than $1 million, respectively[2]	**—**	2
Amortization of net unrealized losses on securities transferred from available-for-sale to held-to-maturity realized in net income, net of tax of less than $1 million and $1 million, respectively[3]	**1**	4
Total other comprehensive loss for period	**(63)**	(574)
Balance at end of period	**(2,129)**	(1,682)
Unrealized gains (losses) on fair value option liabilities attributable to our own credit spread:		
Balance at beginning of period	**149**	56
Other comprehensive income (loss) for period:		
Net unrealized gains (losses) arising during period, net of tax of $(22) million and $16 million, respectively	**(64)**	51
Total other comprehensive income (loss) for period	**(64)**	51
Balance at end of period	**85**	107
Unrealized gains (losses) on derivatives designated as cash flow hedges:		
Balance at beginning of period	**(298)**	(290)
Other comprehensive income (loss) for period:		
Net unrealized losses arising during period, net of tax of $(29) million and $(19) million, respectively	**(91)**	(63)
Reclassification adjustment for losses realized in net income, net of tax of $13 million and less than $1 million, respectively[4]	**42**	1
Total other comprehensive loss for period	**(49)**	(62)
Balance at end of period	**(347)**	(352)
Pension and postretirement benefit liability:		
Balance at beginning and end of period	**5**	(3)
Total accumulated other comprehensive loss at end of period	**$ (2,386)**	$ (1,930)

Six Months Ended June 30,	2023	2022
	(in millions)	
Unrealized gains (losses) on investment securities:		
Balance at beginning of period	**$ (2,270)**	$ (65)
Other comprehensive income (loss) for period:		
Net unrealized gains (losses) arising during period, net of tax of $47 million and $(509) million, respectively	**143**	(1,602)
Reclassification adjustment for gains realized in net income, net of tax of less than $(1) million and $(7) million, respectively[1]	**(2)**	(22)
Provision for credit losses realized in net income, net of tax of nil and less than $1 million, respectively[2]	**—**	1
Amortization of net unrealized losses on securities transferred from available-for-sale to held-to-maturity realized in net income, net of tax of nil and $2 million, respectively[3]	**—**	6
Total other comprehensive income (loss) for period	**141**	(1,617)
Balance at end of period	**(2,129)**	(1,682)
Unrealized gains (losses) on fair value option liabilities attributable to our own credit spread:		
Balance at beginning of period	**86**	27
Other comprehensive income (loss) for period:		
Net unrealized gains (losses) arising during period, net of tax of less than $(1) million and $25 million, respectively	**(1)**	80
Total other comprehensive income (loss) for period	**(1)**	80
Balance at end of period	**85**	107
Unrealized gains (losses) on derivatives designated as cash flow hedges:		
Balance at beginning of period	**(396)**	(138)
Other comprehensive income (loss) for period:		
Net unrealized losses arising during period, net of tax of $(8) million and $(67) million, respectively	**(27)**	(216)
Reclassification adjustment for losses realized in net income, net of tax of $24 million and less than $1 million, respectively[4]	**76**	2
Total other comprehensive income (loss) for period	**49**	(214)
Balance at end of period	**(347)**	(352)
Pension and postretirement benefit liability:		
Balance at beginning and end of period	**5**	(3)
Total accumulated other comprehensive loss at end of period	**$ (2,386)**	$ (1,930)

(1) Amount reclassified to net income is included in other securities gains, net in our consolidated statement of income.

(2) Changes in the allowance for credit losses on securities available-for-sale are included in the provision for credit losses in our consolidated statement of income.

(3) Amount amortized to net income is included in interest income in our consolidated statement of income. During 2014, we transferred securities from available-for-sale to held-to-maturity. At the date of transfer, AOCI included net pretax unrealized losses related to the transferred securities which are being amortized over the remaining contractual life of each security as an adjustment of yield in a manner consistent with the amortization of any premium or discount.

(4) Amount reclassified to net income is included in net interest income in our consolidated statement of income.

13. Fee Income from Contracts with Customers

The following table summarizes fee income from contracts with customers disaggregated by type of activity, as well as a reconciliation to total other revenues, during the three and six months ended June 30, 2023 and 2022. See Note 23, "Fee Income from Contracts with Customers," in our 2022 Form 10-K for a description of the various types of fee-based activities and how revenue associated with these activities is recognized. There have been no significant changes in these activities since December 31, 2022.

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	**2022**	**2023**	**2022**
	(in millions)			
Credit card fees, net	**$ 12**	$ 12	**$ 23**	$ 27
Trust and investment management fees	**32**	34	**63**	60
Other fees and commissions:				
Account services	**73**	70	**139**	137
Credit facilities	**76**	71	**149**	171
Other fees	**8**	19	**17**	30
Total other fees and commissions	**157**	160	**305**	338
Servicing and other fees from HSBC affiliates	**77**	87	**151**	188
Insurance[1]	**1**	1	**2**	2
Total fee income from contracts with customers	**279**	294	**544**	615
Other non-fee revenue	**169**	49	**357**	214
Total other revenues[2]	**$ 448**	$ 343	**$ 901**	$ 829

(1) Included within other income (loss) in the consolidated statement of income.

(2) See Note 15, "Business Segments," for a reconciliation of total other revenues on a U.S. GAAP basis to other operating income for each business segment under the Group Reporting Basis.

Credit card fees, net We recognized interchange fees of $27 million and $53 million during the three and six months ended June 30, 2023, respectively, compared with $29 million and $54 million during the three and six months ended June 30, 2022, respectively. Credit card rewards program costs totaled $17 million and $33 million during the three and six months ended June 30, 2023, respectively, compared with $15 million and $30 million during the three and six months ended June 30, 2022, respectively.

Deferred Fee Income

Information related to deferred fee income on loan commitments, revolving credit facilities and standby letters of credit is included in Note 18, "Guarantee Arrangements, Pledged Assets and Repurchase Agreements," and Note 19, "Fair Value Measurements." Excluding these items, we had deferred fee income related to certain account service fees that are paid upfront and recognized over the service period and annual fees on credit cards which collectively was $3 million at both June 30, 2023 and December 31, 2022. We expect to recognize this revenue over a remaining period of one year or less.

We do not use significant judgments in the determination of the amount and timing of fee income from contracts with customers. Additionally, costs to obtain or fulfill contracts with customers were immaterial.

14. Related Party Transactions

In the normal course of business, we conduct transactions with HSBC and its subsidiaries. HSBC policy requires that these transactions occur at prevailing market rates and terms and, where applicable, these transactions are compliant with United States banking regulations. All extensions of credit by (and certain credit exposures of) HSBC Bank USA to other HSBC affiliates (other than Federal Deposit Insurance Corporation insured banks) are legally required to be secured by eligible collateral. The following tables present related party balances and the income (expense) generated by related party transactions:

	June 30, 2023	December 31, 2022
	(in millions)	
Assets:		
Cash and due from banks	**$ 290**	$ 313
Interest bearing deposits with banks	**118**	21
Securities purchased under agreements to resell[1]	**569**	756
Trading assets	**113**	20
Loans	**3,067**	3,557
Other[2]	**577**	744
Total assets	**$ 4,734**	$ 5,411
Liabilities:		
Deposits	**$ 11,769**	$ 11,357
Trading liabilities	**62**	110
Short-term borrowings	**1,374**	1,009
Long-term debt	**6,010**	6,011
Other[2]	**300**	326
Total liabilities	**$ 19,515**	$ 18,813

(1) Reflects purchases of securities under which other HSBC affiliates have agreed to repurchase.

(2) Other assets and other liabilities primarily consist of derivative balances associated with hedging activities and other miscellaneous account receivables and payables. Other assets also includes receivables from HSBC Bank plc associated with certain client share repurchase transactions.

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
	(in millions)			
Income (Expense):				
Interest income	**$ 57**	$ 16	**$ 114**	$ 22
Interest expense	**(124)**	(60)	**(243)**	(112)
Net interest expense	**(67)**	(44)	**(129)**	(90)
Trading revenue (expense)	**(637)**	1,330	**(1,415)**	2,605
Servicing and other fees from HSBC affiliates:				
HSBC Bank plc	**37**	48	**78**	108
HSBC Markets (USA) Inc. ("HMUS")	**19**	17	**37**	42
Other HSBC affiliates	**21**	22	**36**	38
Total servicing and other fees from HSBC affiliates	**77**	87	**151**	188
Gain (loss) on instruments designated at fair value and related derivatives	**268**	(894)	**700**	(1,290)
Support services from HSBC affiliates:				
HTSU	**(245)**	(244)	**(465)**	(504)
HMUS	**(55)**	(46)	**(108)**	(83)
Other HSBC affiliates	**(125)**	(129)	**(236)**	(250)
Total support services from HSBC affiliates	**(425)**	(419)	**(809)**	(837)
Rental income from HSBC affiliates, net[1]	**7**	9	**16**	19
Stock based compensation expense[2]	**(5)**	(3)	**(10)**	(7)

(1) We receive rental income from our affiliates, and in some cases pay rental expense to our affiliates, for certain office space. Net rental income from our affiliates is recorded as a component of occupancy expense, net in our consolidated statement of income.

(2) Employees may participate in one or more stock compensation plans sponsored by HSBC. These expenses are included in salaries and employee benefits in our consolidated statement of income. Certain employees are also eligible to participate in a defined benefit pension plan and other postretirement plans sponsored by HSBC North America which are discussed in Note 22, "Pension and Other Postretirement Benefits," in our 2022 Form 10-K.

Funding Arrangements with HSBC Affiliates:

We use HSBC affiliates to fund a portion of our borrowing and liquidity needs. At both June 30, 2023 and December 31, 2022, long-term debt with affiliates reflected $6.0 billion of borrowings from HSBC North America. The outstanding balances include $2.0 billion of fixed-rate senior debt which matures in June 2025, $2.0 billion of fixed-rate senior debt which matures in September 2025, $0.5 billion of fixed-rate senior debt which matures in December 2027 and $1.5 billion of fixed-rate senior debt which matures in June 2030.

We have a $4.0 billion uncommitted line of credit with HSBC North America. The available borrowing capacity under this facility is fungible between HSBC USA, HSBC Securities (USA) Inc. ("HSI") and HSBC North America, but total borrowings cannot collectively exceed $4.0 billion at any time. We had no outstanding borrowing under this credit facility at either June 30, 2023 or December 31, 2022.

We also incur short-term borrowings with certain affiliates. In addition, certain affiliates have placed deposits with us.

Lending and Derivative Related Arrangements Extended to HSBC Affiliates:

At June 30, 2023 and December 31, 2022, we had the following loan balances outstanding with HSBC affiliates:

	June 30, 2023	December 31, 2022
	(in millions)	
HMUS and subsidiaries	**$ 1,495**	$ 2,243
HSBC North America	**1,550**	1,250
Other short-term affiliate lending	**22**	64
Total loans	**$ 3,067**	$ 3,557

HMUS and subsidiaries We have extended loans and lines of credit, some of them uncommitted, to HMUS and its subsidiaries in the amount of $10.0 billion and $12.8 billion at June 30, 2023 and December 31, 2022, respectively, of which $1.5 billion

and $2.2 billion, respectively, was outstanding. The maturities of the outstanding balances range from overnight to one month. Each borrowing is re-evaluated prior to its maturity date and either extended or allowed to mature.

HSBC North America Under the $4.0 billion uncommitted fungible line of credit with HSBC North America as discussed above, there was $1.6 billion and $1.3 billion outstanding at June 30, 2023 and December 31, 2022, respectively. The outstanding balances mature in the second half of 2023.

We have extended lines of credit to various other HSBC affiliates totaling $4.0 billion which did not have any outstanding balances at either June 30, 2023 or December 31, 2022.

Other short-term affiliate lending In addition to loans and lines extended to affiliates discussed above, from time to time we may extend loans to affiliates which are generally short term in nature. At June 30, 2023 and December 31, 2022, there were $22 million and $64 million, respectively, of these loans outstanding.

Derivative contracts As part of a global HSBC strategy to offset interest rate or other market risks associated with certain securities, debt issues and derivative contracts with unaffiliated third parties, we routinely enter into derivative transactions with HSBC Bank plc and other HSBC affiliates. The notional value of derivative contracts related to these transactions was approximately $798.2 billion and $789.2 billion at June 30, 2023 and December 31, 2022, respectively. The net credit exposure (defined as the net fair value of derivative assets and liabilities, including any collateral received) related to the contracts was approximately $138 million and $24 million at June 30, 2023 and December 31, 2022, respectively. We account for these transactions on a mark to market basis, with the change in value of contracts with HSBC affiliates substantially offset by the change in value of related contracts entered into with unaffiliated third parties.

Services Provided Between HSBC Affiliates:

Under multiple service level agreements, we provide services to and receive services from various HSBC affiliates. These activities are summarized in Note 24, "Related Party Transactions," in our 2022 Form 10-K. There have been no significant changes in these activities since December 31, 2022.

Other Transactions with HSBC Affiliates:

At both June 30, 2023 and December 31, 2022, we had $265 million of non-cumulative preferred stock issued and outstanding to HSBC North America. See Note 19, "Preferred Stock," in our 2022 Form 10-K for additional details.

During the second quarter of 2023, we paid a dividend on our common stock of $1.0 billion from retained earnings to HSBC North America. See Note 16, "Retained Earnings and Regulatory Capital Requirements," for additional details.

15. Business Segments

We have distinct businesses, which are aligned with HSBC's global business strategy: Wealth and Personal Banking ("WPB"), Commercial Banking ("CMB") and Global Banking and Markets ("GBM"). These businesses and a Corporate Center ("CC") serve as our reportable segments with the exception of GBM. Our GBM business is comprised of three distinct operating segments: Global Banking ("GB"), Markets and Securities Services ("MSS"), and Global Banking and Markets Other ("GBM Other"), which are separately reported. There have been no changes in the basis of our segmentation as compared with the presentation in our 2022 Form 10-K.

Net interest income of each segment represents the difference between actual interest earned on assets and interest incurred on liabilities of the segment, adjusted for a funding charge or credit that includes both interest rate and liquidity components. Segments are charged a cost to fund assets (e.g., customer loans) and receive a funding credit for funds provided (e.g., customer deposits) based on equivalent market rates that incorporate both repricing (interest rate risk) and tenor (liquidity) characteristics. The objective of these charges/credits is to transfer interest rate risk to one centralized unit in Markets Treasury. Markets Treasury income statement and balance sheet results are allocated to each of the global businesses based upon tangible equity levels and levels of any surplus liabilities.

Certain other revenue and operating expense amounts are also apportioned among the business segments based upon the benefits derived from this activity or the relationship of this activity to other segment activity. These inter-segment transactions have not been eliminated, and we generally account for them as if they were with third parties.

Our segment results are presented in accordance with HSBC Group accounting and reporting policies, which apply IFRSs as issued by the IASB. As a result, our segment results are prepared and presented using financial information prepared on the Group Reporting Basis as operating results are monitored and reviewed, trends are evaluated and decisions about allocating resources, such as employees, are primarily made on this basis. We continue, however, to monitor capital adequacy and report to regulatory agencies on a U.S. GAAP basis.

During the second quarter of 2023, we implemented a change to our internal management reporting to report net funding charges associated with MSS trading activities within other operating income to better align with the trading revenue generated by such activities. Historically, these funding charges were reported within net interest income (expense). There was no impact to consolidated net interest income (expense) or other operating income as these net funding charges are reversed back into net interest income (expense) in the CC. As a result, we have aligned our segment reporting for MSS and CC to reflect this change for all periods presented. The impact of this change on reported segment net interest income (expense) and other operating income for the three and six months ended June 30, 2022 was not material.

There have been no other changes in the measurement of segment profit as compared with the presentation in our 2022 Form 10-K.

A summary of significant differences between U.S. GAAP and the Group Reporting Basis as they impact our results are summarized in Note 25, "Business Segments," in our 2022 Form 10-K. There have been no significant changes since December 31, 2022 in the differences between U.S. GAAP and the Group Reporting Basis impacting our results.

During the second quarter of 2023, we recorded a reversal of $149 million of impairment charges under the Group Reporting Basis related to capitalized software and leasehold improvements primarily associated with our Wealth and Personal Banking business segment which were previously written-off. During the second quarter of 2023, we determined that the cash generating unit was no longer impaired under the Group Reporting Basis and that its estimated fair value exceeded its carrying value, which resulted in the re-establishment of these assets at their recoverable amount net of amortization that would have been recorded had no impairment loss been recognized and excluding any assets that have since been sold.

The following table summarizes the results for each segment on a Group Reporting Basis, as well as provides a reconciliation of total results under the Group Reporting Basis to U.S. GAAP consolidated totals:

	Group Reporting Basis Consolidated Amounts									
			GBM							
	WPB	CMB	GB	MSS	GBM Other	CC	Total	Group Reporting Basis Adjust-ments[(1)]	Group Reporting Basis Reclassi-fications[(2)]	U.S. GAAP Consolidated Totals
						(in millions)				
Three Months Ended June 30, 2023										
Net interest income (expense)	**$ 194**	**$ 288**	**$ 123**	**$ 15**	**$ (12)**	**$ (106)**	**$ 502**	**$ 2**	**$ (70)**	**$ 434**
Other operating income	**52**	**79**	**92**	**50**	**25**	**106**	**404**	**(42)**	**86**	**448**
Total operating income	**246**	**367**	**215**	**65**	**13**	**—**	**906**	**(40)**	**16**	**882**
Expected credit losses / provision for credit losses	**(8)**	**14**	**27**	**—**	**—**	**—**	**33**	**3**	**—**	**36**
	254	**353**	**188**	**65**	**13**	**—**	**873**	**(43)**	**16**	**846**
Operating expenses	**51**	**159**	**141**	**71**	**14**	**36**	**472**	**159**	**16**	**647**
Profit (loss) before income tax	**$ 203**	**$ 194**	**$ 47**	**$ (6)**	**$ (1)**	**$ (36)**	**$ 401**	**$ (202)**	**$ —**	**$ 199**
Three Months Ended June 30, 2022										
Net interest income (expense)	$ 185	$ 220	$ 106	$ 8	$ 1	$ (20)	$ 500	$ —	$ 32	$ 532
Other operating income	32	73	130	92	26	24	377	(11)	(23)	343
Total operating income	217	293	236	100	27	4	877	(11)	9	875
Expected credit losses / provision for credit losses	(6)	54	(3)	—	1	—	46	23	—	69
	223	239	239	100	26	4	831	(34)	9	806
Operating expenses	197	143	115	80	21	115	671	13	9	693
Profit (loss) before income tax	$ 26	$ 96	$ 124	$ 20	$ 5	$ (111)	$ 160	$ (47)	$ —	$ 113

	Group Reporting Basis Consolidated Amounts							Group Reporting Basis Adjust-ments[(1)]	Group Reporting Basis Reclassi-fications[(2)]	U.S. GAAP Consolidated Totals
			GBM							
	WPB	CMB	GB	MSS	GBM Other	CC	Total			
					(in millions)					
Six Months Ended June 30, 2023										
Net interest income (expense)	**$ 407**	**$ 573**	**$ 262**	**$ 28**	**$ (12)**	**$ (213)**	**$ 1,045**	**$ 3**	**$ (131)**	**$ 917**
Other operating income	**104**	**151**	**146**	**146**	**46**	**197**	**790**	**(49)**	**160**	**901**
Total operating income (expense)	**511**	**724**	**408**	**174**	**34**	**(16)**	**1,835**	**(46)**	**29**	**1,818**
Expected credit losses / provision for credit losses	**2**	**30**	**30**	**—**	**—**	**—**	**62**	**(6)**	**—**	**56**
	509	**694**	**378**	**174**	**34**	**(16)**	**1,773**	**(40)**	**29**	**1,762**
Operating expenses	**226**	**309**	**276**	**140**	**32**	**68**	**1,051**	**196**	**29**	**1,276**
Profit (loss) before income tax	**$ 283**	**$ 385**	**$ 102**	**$ 34**	**$ 2**	**$ (84)**	**$ 722**	**$ (236)**	**$ —**	**$ 486**
Balances at end of period:										
Total assets	**$ 42,727**	**$ 53,983**	**$ 9,898**	**$ 38,003**	**$ 37,603**	**$ 3,115**	**$ 185,329**	**$ (18,401)**	**$ —**	**$ 166,928**
Total loans, net	**22,654**	**23,739**	**9,234**	**215**	**305**	**—**	**56,147**	**(144)**	**1,337**	**57,340**
Goodwill	**—**	**358**	**—**	**—**	**—**	**—**	**358**	**100**	**—**	**458**
Total deposits	**30,085**	**45,836**	**38,689**	**862**	**2,633**	**—**	**118,105**	**(2,575)**	**6,106**	**121,636**
Six Months Ended June 30, 2022										
Net interest income (expense)	$ 354	$ 405	$ 184	$ 17	$ (1)	$ (14)	$ 945	$ 1	$ 63	$ 1,009
Other operating income	195	156	254	241	50	9	905	(31)	(45)	829
Total operating income (expense)	549	561	438	258	49	(5)	1,850	(30)	18	1,838
Expected credit losses / provision for credit losses	(2)	27	(5)	—	1	—	21	59	—	80
	551	534	443	258	48	(5)	1,829	(89)	18	1,758
Operating expenses	439	290	232	149	45	181	1,336	25	18	1,379
Profit (loss) before income tax	$ 112	$ 244	$ 211	$ 109	$ 3	$ (186)	$ 493	$ (114)	$ —	$ 379
Balances at end of period:										
Total assets	$ 43,510	$ 52,351	$ 12,385	$ 40,413	$ 41,225	$ 2,314	$ 192,198	$ (20,966)	$ —	$ 171,232
Total loans, net	21,994	25,454	11,780	131	528	—	59,887	(890)	2,267	61,264
Goodwill	—	358	—	—	—	—	358	100	—	458
Total deposits	37,395	40,170	41,995	1,193	1,409	—	122,162	(3,434)	8,535	127,263

(1) Represents adjustments associated with differences between U.S. GAAP and the Group Reporting Basis.

(2) Represents differences in financial statement presentation between U.S. GAAP and the Group Reporting Basis.

16. *Retained Earnings and Regulatory Capital Requirements*

Bank dividends are one of the sources of funds used for payment of shareholder dividends and other HSBC USA cash needs. Approval from the Office of the Comptroller of the Currency ("OCC") is required if the total of all dividends HSBC Bank USA declares in any year exceeds the cumulative net income for that year, combined with the net income for the two preceding years reduced by dividends attributable to those years. OCC approval also is required for a reduction of permanent capital of HSBC Bank USA. Under a separate restriction, payment of dividends is prohibited in amounts greater than undivided profits then on hand, after deducting actual losses and bad debts. Bad debts are debts due and unpaid for a period of six months unless well secured, as defined, and in the process of collection.

We are subject to regulatory capital rules issued by U.S. banking regulators including Basel III (the "Basel III rule"). A bank or bank holding company's failure to meet minimum capital requirements can result in certain mandatory actions and possibly additional discretionary actions by its regulators. The following table summarizes the capital amounts and ratios of HSBC USA and HSBC Bank USA, calculated in accordance with the Basel III rule at June 30, 2023 and December 31, 2022:

	June 30, 2023			December 31, 2022		
	Capital Amount	Well-Capitalized Ratio[1]	Actual Ratio	Capital Amount	Well-Capitalized Ratio[1]	Actual Ratio
	(dollars are in millions)					
Common equity Tier 1 ratio:						
HSBC USA	**$ 13,305**	**4.5 %** [2]	**13.2 %**	$ 13,950	4.5 % [2]	13.5 %
HSBC Bank USA	**16,016**	**6.5**	**16.0**	16,492	6.5	16.3
Tier 1 capital ratio:						
HSBC USA	**13,570**	**6.0**	**13.4**	14,215	6.0	13.8
HSBC Bank USA	**17,516**	**8.0**	**17.5**	17,992	8.0	17.8
Total capital ratio:						
HSBC USA	**15,983**	**10.0**	**15.8**	16,579	10.0	16.1
HSBC Bank USA	**19,676**	**10.0**	**19.7**	20,114	10.0	19.9
Tier 1 leverage ratio:						
HSBC USA	**13,570**	**4.0** [2]	**8.1**	14,215	4.0 [2]	8.5
HSBC Bank USA	**17,516**	**5.0**	**10.6**	17,992	5.0	10.9
Risk-weighted assets:[3]						
HSBC USA	**101,165**			103,101		
HSBC Bank USA	**99,890**			101,331		
Adjusted quarterly average assets:[4]						
HSBC USA	**168,374**			167,866		
HSBC Bank USA	**165,382**			164,564		

(1) HSBC USA and HSBC Bank USA are categorized as "well-capitalized," as defined by their principal regulators. To be categorized as well-capitalized under regulatory guidelines, a banking institution must maintain capital equal to or in excess of the ratios reflected in the above table, and must not be subject to a directive, order, or written agreement to meet and maintain specific capital levels.

(2) There are no common equity Tier 1 or Tier 1 leverage ratio components in the definition of a well-capitalized bank holding company. The ratios shown are the regulatory minimums.

(3) Calculated using the Standardized Approach.

(4) Represents the Tier 1 leverage ratio denominator which reflects quarterly average assets adjusted for amounts permitted to be deducted from Tier 1 capital.

During the second quarter of 2023, HSBC USA received a common stock dividend of $1.0 billion from its subsidiary, HSBC Bank USA, and paid a dividend on its common stock of $1.0 billion from retained earnings to its parent, HSBC North America.

17. Variable Interest Entities

In the ordinary course of business, we have organized special purpose entities ("SPEs") primarily to structure financial products to meet our clients' investment needs, to facilitate clients to access and raise financing from capital markets and to securitize financial assets held to meet our own funding needs. For disclosure purposes, we aggregate SPEs based on the purpose, risk characteristics and business activities of the SPEs. An SPE is a VIE if it lacks sufficient equity investment at risk to finance its activities without additional subordinated financial support or, as a group, the holders of the equity investment at risk lack either a) the power through voting or similar rights to direct the activities of the entity that most significantly impacts the entity's economic performance; or b) the obligation to absorb the entity's expected losses, the right to receive the expected residual returns, or both.

Variable Interest Entities We consolidate VIEs in which we hold a controlling financial interest as evidenced by the power to direct the activities of a VIE that most significantly impact its economic performance and the obligation to absorb losses of, or the right to receive benefits from, the VIE that could potentially be significant to the VIE and therefore are deemed to be the primary beneficiary. We take into account our entire involvement in a VIE (explicit or implicit) in identifying variable interests that individually or in the aggregate could be significant enough to warrant our designation as the primary beneficiary and hence require us to consolidate the VIE or otherwise require us to make appropriate disclosures. We consider our involvement to be potentially significant where we, among other things, (i) enter into derivative contracts to absorb the risks and benefits from the VIE or from the assets held by the VIE; (ii) provide a financial guarantee that covers assets held or liabilities issued by a VIE; (iii) sponsor the VIE in that we design, organize and structure the transaction; and (iv) retain a financial or servicing interest in the VIE.

We are required to evaluate whether to consolidate a VIE when we first become involved and on an ongoing basis. In almost all cases, a qualitative analysis of our involvement in the entity provides sufficient evidence to determine whether we are the primary beneficiary. In rare cases, a more detailed analysis to quantify the extent of variability to be absorbed by each variable interest holder is required to determine the primary beneficiary.

Consolidated VIEs The following table summarizes assets and liabilities related to our consolidated VIEs at June 30, 2023 and December 31, 2022 which are consolidated on our balance sheet. Assets and liabilities exclude intercompany balances that eliminate in consolidation.

	June 30, 2023		December 31, 2022	
	Consolidated Assets	Consolidated Liabilities	Consolidated Assets	Consolidated Liabilities
	(in millions)			
Low income housing limited liability partnership:				
Other assets	**$ 28**	**$ —**	$ 36	$ —
Interest, taxes and other liabilities	**—**	**27**	—	14
Subtotal	**28**	**27**	36	14
Venture debt financing entity:				
Loans, net	**186**	**—**	162	—
Other assets	**12**	**—**	8	—
Interest, taxes and other liabilities	**—**	**8**	—	8
Subtotal	**198**	**8**	170	8
Total	**$ 226**	**$ 35**	$ 206	$ 22

Low income housing limited liability partnership In 2009, all low income housing investments held by us at the time were transferred to a Limited Liability Partnership ("LLP"). The LLP was created in order to ensure the utilization of future tax benefits from these low income housing tax projects. The LLP was deemed to be a VIE because it does not have sufficient equity investment at risk to finance its activities. Upon entering into this transaction, we concluded that we were the primary beneficiary of the LLP due to the nature of our continuing involvement and, as a result, we consolidate the LLP and report the assets of the LLP in other assets on our consolidated balance sheet. The investments held by the LLP represent equity investments in the underlying low income housing partnerships. The LLP does not consolidate the underlying partnerships because it does not have the power to direct the activities of the partnerships that most significantly impact the economic performance of the partnerships.

We amortize our low income housing investments in proportion to the allocated tax benefits under the proportional amortization method and present the associated tax benefits net of investment amortization in income tax expense.

Venture debt financing entity HSBC USA has organized and provided equity financing to HSBC Ventures USA Inc. ("HSBC Ventures"), an entity designed to provide debt financing to venture capital-backed companies generally in the form of term or revolving loans, or loan commitments. Given the generally early stage and development of the companies, the loans are typically collateralized by all of the company's assets and intellectual property, or by specific items such as receivables or equipment. The loan terms may, at times, also include warrants for company stock granting HSBC Ventures a share of the financial returns in case of a positive realization event. HSBC USA also provides debt financing to HSBC Ventures in the form of loans on an as-needed basis. HSBC Ventures is a VIE because it does not have sufficient equity investment at risk to finance its activities. As the sole investor, HSBC USA is considered to be the primary beneficiary because it has the obligation to absorb losses and the right to receive benefits that could be potentially significant to HSBC Ventures. As a result, we consolidate HSBC Ventures and report the third party loans and warrants, if any, on our consolidated balance sheet.

Unconsolidated VIEs We also have variable interests in other VIEs that are not consolidated because we are not the primary beneficiary. The following table provides additional information on these unconsolidated VIEs, including the variable interests held by us and our maximum exposure to loss arising from our involvement in these VIEs, at June 30, 2023 and December 31, 2022:

	Total Assets Held by Unconsolidated VIEs	Carrying Value of Variable Interests Held Reported as		Maximum Exposure to Loss
		Assets	Liabilities	
	(in millions)			
At June 30, 2023				
Limited partnership investments	**$ 6,440**	**$ 811**	**$ 392**	**$ 811**
Asset-backed financing SPE	**777**	**614**	**—**	**614**
Total	**$ 7,217**	**$ 1,425**	**$ 392**	**$ 1,425**
At December 31, 2022				
Limited partnership investments	$ 6,611	$ 796	$ 360	$ 796
Asset-backed financing SPE	777	616	—	616
Total	$ 7,388	$ 1,412	$ 360	$ 1,412

Information on the types of VIEs with which we are involved, the nature of our involvement and the variable interests held in those entities is presented below.

Limited partnership investments We invest as a limited partner in partnerships that operate qualified affordable housing, renewable energy and community development projects. The returns of these investments are generated primarily from the tax benefits, including Federal tax credits and tax deductions from operating losses in the project companies. In addition, some of the investments help us comply with the Community Reinvestment Act. Certain limited partnership structures are considered to be VIEs because either (a) they do not have sufficient equity investment at risk or (b) the limited partners with equity at risk do not have substantive kick-out rights through voting rights or substantive participating rights over the general partner. As a limited partner, we are not the primary beneficiary of the VIEs and do not consolidate them. Our investments in these partnerships are recorded in other assets on the consolidated balance sheet. The maximum exposure to loss shown in the table above represents our recorded investments as well as any outstanding funding commitments extended to the partnerships.

Asset-backed financing SPE In 2021, we sold a portfolio of commercial real estate loans and provided a loan to the third-party buyer sponsored SPE for a portion of the purchase price. The SPE is an asset-backed financing entity that issued residual beneficial interests to third-party investors. The loan we provided to the SPE is senior to the residual beneficial interests and is secured by the commercial real estate loans held by the SPE. Cash flows from the commercial real estate loans will be used first to settle the interest and principal payments of the loan, with any excess cash flows attributable to the residual interest holders. The SPE is a VIE in which we have a variable interest through our ownership of the loan, which is an arm’s-length transaction. We do not have the power to direct the activities that most significantly impact the VIE’s economic performance. In addition, the VIE is designed such that the residual interest holders absorb any expected loss and/or benefit that could be potentially significant to the VIE and, therefore, we are not the primary beneficiary. The maximum exposure to loss shown in the table above represents our recorded investment in the loan without consideration of any recovery benefits from the value of the commercial real estate loans.

Third-party sponsored securitization entities We invest in asset-backed securities issued by third-party sponsored securitization entities which may be considered VIEs. The investments are transacted at arm's-length and decisions to invest are based on a credit analysis of the underlying collateral assets or the issuer. We are a passive investor in these issuers and do not have the power to direct the activities of these issuers. As such, we do not consolidate these securitization entities. Additionally, we do not have other involvements in servicing or managing the collateral assets or provide financial or liquidity support to these issuers which potentially give rise to risk of loss exposure. These investments are an integral part of the disclosure in Note 4,

"Trading Assets and Liabilities," Note 5, "Securities," and Note 19, "Fair Value Measurements," and, therefore, are not disclosed in this note to avoid redundancy.

In addition to the above, we have established and manage money market funds and non-money market mutual funds to provide customers with investment opportunities. As fund manager, we may be entitled to receive management fees based on the assets under management. We do not consolidate the funds because we do not absorb the majority of the expected future risk associated with the fund's assets, including interest rate, liquidity, credit and other relevant risks that are expected to affect the value of the assets.

18. Guarantee Arrangements, Pledged Assets and Repurchase Agreements

Guarantee Arrangements As part of our normal operations, we enter into credit derivatives and various off-balance sheet guarantee arrangements with affiliates and third parties. These arrangements arise principally in connection with our lending and client intermediation activities and include standby letters of credit and certain credit derivative transactions. The contractual amounts of these arrangements represent our maximum possible credit exposure in the event that we are required to fulfill the maximum obligation under the contractual terms of the guarantee.

The following table presents total carrying value and contractual amounts of our sell protection credit derivatives and major off-balance sheet guarantee arrangements at June 30, 2023 and December 31, 2022. Following the table is a description of the various arrangements.

	June 30, 2023		December 31, 2022	
	Carrying Value	Notional / Maximum Exposure to Loss	Carrying Value	Notional / Maximum Exposure to Loss
	(in millions)			
Credit derivatives[1][2]	**$ 24**	**$ 2,783**	$ 40	$ 3,949
Financial standby letters of credit, net of participations[3][4]	**—**	**5,777**	—	6,000
Performance standby letters of credit, net of participations[3][4]	**—**	**3,289**	—	3,264
Total	**$ 24**	**$ 11,849**	$ 40	$ 13,213

(1) Includes $1,886 million and $2,744 million of notional issued for the benefit of HSBC affiliates at June 30, 2023 and December 31, 2022, respectively.

(2) For credit derivatives, the maximum loss is represented by the notional amounts without consideration of mitigating effects from collateral or recourse arrangements.

(3) Includes $2,118 million and $2,069 million of both financial and performance standby letters of credit issued for the benefit of HSBC affiliates at June 30, 2023 and December 31, 2022, respectively.

(4) For standby letters of credit, maximum loss represents losses to be recognized assuming the letters of credit have been fully drawn and the obligors have defaulted with zero recovery.

Credit-Risk Related Guarantees

Credit derivatives Credit derivatives are financial instruments that transfer the credit risk of a reference obligation from the credit protection buyer to the credit protection seller who is exposed to the credit risk without buying the reference obligation. We sell credit protection on underlying reference obligations (such as loans or securities) by entering into credit derivatives, primarily in the form of credit default swaps, with various institutions. We account for all credit derivatives at fair value. Where we sell credit protection to a counterparty that holds the reference obligation, the arrangement is effectively a financial guarantee on the reference obligation. Under a credit derivative contract, the credit protection seller will reimburse the credit protection buyer upon occurrence of a credit event (such as bankruptcy, insolvency, restructuring or failure to meet payment obligations when due) as defined in the derivative contract, in return for a periodic premium. Upon occurrence of a credit event, we will pay the counterparty the stated notional amount of the derivative contract and receive the underlying reference obligation. The recovery value of the reference obligation received could be significantly lower than its notional principal amount when a credit event occurs.

Certain derivative contracts are subject to master netting arrangements and related collateral agreements. A party to a derivative contract may demand that the counterparty post additional collateral in the event its net exposure exceeds certain predetermined limits and when the credit rating falls below a certain grade. We set the collateral requirements by counterparty such that the collateral covers various transactions and products, and is not allocated to specific individual contracts.

We manage our exposure to credit derivatives using a variety of risk mitigation strategies where we enter into offsetting hedge positions or transfer the economic risks, in part or in entirety, to investors through the issuance of structured credit products. We actively manage the credit and market risk exposure in the credit derivative portfolios on a net basis and, as such, retain no or a limited net position at any time. The following table summarizes our net credit derivative positions at June 30, 2023 and December 31, 2022:

	June 30, 2023		December 31, 2022	
	Carrying / Fair Value	Notional	Carrying / Fair Value	Notional
	(in millions)			
Sell-protection credit derivative positions	**$ 24**	**$ 2,783**	$ 40	$ 3,949
Buy-protection credit derivative positions	**(47)**	**9,407**	(32)	14,598
Net position[(1)]	**$ (23)**	**$ 6,624**	$ 8	$ 10,649

(1) Positions are presented net in the table above to provide a complete analysis of our risk exposure and depict the way we manage our credit derivative portfolio. The offset of the sell-protection credit derivatives against the buy-protection credit derivatives may not be legally binding in the absence of master netting agreements with the same counterparty. Furthermore, the credit loss triggering events for individual sell-protection credit derivatives may not be the same or occur in the same period as those of the buy-protection credit derivatives thereby not providing an exact offset.

Standby letters of credit A standby letter of credit is issued to a third party for the benefit of a client and is a guarantee that the client will perform or satisfy certain obligations under a contract. It irrevocably obligates us to pay a specified amount to the third party beneficiary if the client fails to perform the contractual obligation. We issue two types of standby letters of credit: performance and financial. A performance standby letter of credit is issued where the client is required to perform some non-financial contractual obligation, such as the performance of a specific act, whereas a financial standby letter of credit is issued where the client's contractual obligation is of a financial nature, such as the repayment of a loan or debt instrument.

The issuance of a standby letter of credit is subject to our credit approval process and collateral requirements. We charge fees for issuing letters of credit commensurate with the client's credit evaluation and the nature of any collateral. Included in other liabilities are deferred fees on standby letters of credit amounting to $52 million at both June 30, 2023 and December 31, 2022. Also included in other liabilities is an allowance for credit losses on unfunded standby letters of credit of $44 million and $15 million at June 30, 2023 and December 31, 2022, respectively.

The following table summarizes the credit ratings related to guarantees including the ratings of counterparties against which we sold credit protection and financial standby letters of credit at June 30, 2023 as an indicative proxy of payment risk:

Notional/Contractual Amounts	Average Life (in years)	Credit Ratings of the Obligors		
		Investment Grade	Non-Investment Grade	Total
		(dollars are in millions)		
Sell-protection Credit Derivatives[(1)]				
Single name credit default swaps	1.2	$ 1,099	$ 574	$ 1,673
Index credit derivatives	7.9	725	385	1,110
Subtotal		1,824	959	2,783
Standby Letters of Credit[(2)]	0.9	6,175	2,891	9,066
Total		$ 7,999	$ 3,850	$ 11,849

(1) The credit ratings in the table represent external credit ratings for classification as investment grade and non-investment grade.

(2) External ratings for most of the obligors are not available. Presented above are the internal credit ratings which are developed using similar methodologies and rating scale equivalent to external credit ratings for purposes of classification as investment grade and non-investment grade.

Our internal credit ratings are determined based on HSBC's risk rating systems and processes which assign a credit grade based on a scale which ranks the risk of default of a client. The credit grades are assigned and used for managing risk and determining level of credit exposure appetite based on the client's operating performance, liquidity, capital structure and debt service ability. In addition, we also incorporate subjective judgments into the risk rating process concerning such things as industry trends, comparison of performance to industry peers and perceived quality of management. We compare our internal risk ratings to outside external rating agency benchmarks, where possible, at the time of formal review and regularly monitor whether our risk ratings are comparable to the external ratings benchmark data.

A non-investment grade rating of a referenced obligor has a negative impact to the fair value of the credit derivative and increases the likelihood that we will be required to perform under the credit derivative contract. We employ market-based parameters and, where possible, use the observable credit spreads of the referenced obligors as measurement inputs in

determining the fair value of the credit derivatives. We believe that such market parameters are more indicative of the current status of payment/performance risk than external ratings by the rating agencies which may not be forward-looking in nature and, as a result, lag behind those market-based indicators.

Non Credit-Risk Related Guarantees and Other Arrangements

Visa covered litigation In 2008, we received Class B Shares as part of Visa's initial public offering ("IPO"). Pursuant to the IPO, we, along with all the other Class B shareholders, agreed to indemnify Visa for the claims and obligations arising from certain specific covered litigation. The Class B Shares are not eligible to be converted into publicly traded Class A Shares until settlement of the covered litigation described in Note 30, "Litigation and Regulatory Matters" in our 2022 Form 10-K. Accordingly, the Class B Shares are considered restricted and are only transferable under limited circumstances, which include transfers to other Class B shareholders.

In 2016 and 2017, we sold substantially all of our Visa Class B Shares to a third party. Under the terms of the sale agreements, we entered into swap agreements with the purchaser to retain the litigation risk associated with the Class B Shares sold until the related litigation is settled and the Class B Shares can be converted into Class A Shares. These swaps had a carrying value of $27 million and $38 million at June 30, 2023 and December 31, 2022, respectively. The swap agreements we entered into with the purchaser require us to (a) make periodic payments, calculated by reference to the market price of Class A Shares and (b) make or receive payments based on subsequent changes in the conversion rate of Class B Shares into Class A Shares. We have entered into a total return swap position to economically hedge the periodic payments made under these swap agreements. The payments under the derivative will continue until the Class B Shares are able to be converted into Class A Shares. The fair value of the swap agreements is estimated using a discounted cash flow methodology and is dependent upon the final resolution of the related litigation. Changes in fair value between periods are recognized in other income (loss). In the second quarter of 2023, we recorded a loss of $6 million related to a change in the Visa Class B share conversion rate. In the second quarter of 2022, we recorded a loss of $31 million related to extending the expected timing of the final resolution of the related litigation and, to a lesser extent, a change in the Visa Class B Share conversion rate. See Note 10, "Derivative Financial Instruments," for further information.

Clearing houses and exchanges We are a member of various exchanges and clearing houses that trade and clear securities and/or derivatives contracts. Under the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, members of a clearing house may be required to contribute to a guaranty fund to backstop members' obligations to the clearing house. As a member, we may be required to pay a proportionate share of the financial obligations of another member who defaults on its obligations to the exchange or the clearing house. Our guarantee obligations would arise only if the exchange or clearing house had exhausted its resources. Any potential contingent liability under these membership agreements cannot be estimated.

Lease Obligations We are obligated under a number of noncancellable operating leases for premises and equipment. See Note 12, "Leases," in our 2022 Form 10-K for a full discussion of our leases, including a maturity analysis of our operating lease liabilities.

Mortgage Loan Repurchase Obligations We originate and sell mortgage loans to third parties and provide various representations and warranties related to, among other things, the ownership of the loans, the validity of the liens, the loan selection and origination process, and the compliance to the origination criteria established by the government agencies. In the event of a breach of our representations and warranties, we may be obligated to repurchase the loans with identified defects or to indemnify the buyers. Our contractual obligation arises only when the breach of representations and warranties are discovered and repurchase is demanded.

In estimating our repurchase liability arising from breaches of representations and warranties, we consider historical losses on residual risks not covered by settlement agreements adjusted for any risk factors not captured in the historical losses as well as the level of outstanding repurchase demands received. Outstanding repurchase demands received were immaterial at June 30, 2023 and December 31, 2022.

Our estimated repurchase liability for obligations arising from the breach of representations and warranties associated with mortgage loans sold was $24 million and $15 million at June 30, 2023 and December 31, 2022, respectively. Our repurchase liability represents our best estimate of the loss that has been incurred, including interest, arising from breaches of representations and warranties associated with mortgage loans sold. Because the level of mortgage loan repurchase losses is dependent upon economic factors, investor demand strategies and other external risk factors such as housing market trends that may change, the level of the liability for mortgage loan repurchase losses requires significant judgment. We continue to evaluate our methods of determining the best estimate of loss based on recent trends. As these estimates are influenced by factors outside our control, there is uncertainty inherent in these estimates making it reasonably possible that they could change. The range of reasonably possible losses in excess of our recorded repurchase liability is between zero and $30 million at June 30, 2023. This estimated range of reasonably possible losses was determined primarily based upon modifying the assumptions utilized in our best estimate of probable losses to reflect what we believe to be reasonably possible adverse assumptions.

Securitization Activity In addition to the repurchase risk described above, we have also been involved as a sponsor/seller of loans used to facilitate whole loan securitizations underwritten by our affiliate, HSI. In this regard, we began acquiring residential mortgage loans in 2005 which were warehoused on our balance sheet with the intent of selling them to HSI to facilitate HSI's whole loan securitization program which was discontinued in 2007. During 2005-2007, we purchased and sold $24 billion of such loans to HSI which were subsequently securitized and sold by HSI to third parties. See "Mortgage Securitization Matters" in Note 30, "Litigation and Regulatory Matters," in our 2022 Form 10-K for additional discussion of related exposure. The outstanding principal balance on these loans was approximately $2.4 billion and $2.5 billion at June 30, 2023 and December 31, 2022, respectively.

Pledged Assets

Pledged assets included in the consolidated balance sheet consisted of the following:

	June 30, 2023	December 31, 2022
	(in millions)	
Interest bearing deposits with banks[1]	**$ 595**	$ 878
Trading assets[2]	**1,795**	1,255
Securities available-for-sale[3]	**3,459**	3,179
Securities held-to-maturity[3]	**616**	466
Loans[4]	**17,696**	17,530
Other assets[5]	**1,028**	1,319
Total	**$ 25,189**	$ 24,627

(1) Represents gross amount of cash on deposit with banks primarily related to derivative collateral-support agreements, of which a majority has been netted against derivative liabilities on the consolidated balance sheet.

(2) Trading assets are primarily pledged against liabilities associated with repurchase agreements.

(3) Securities are primarily pledged against derivatives, public fund deposits, trust deposits and various short-term and long term borrowings, as well as providing capacity for potential secured borrowings from the FHLB and the Federal Reserve Bank of New York.

(4) Loans are primarily residential mortgage loans pledged against current and potential borrowings from the FHLB and the Federal Reserve Bank of New York.

(5) Represents gross amount of cash on deposit with non-banks primarily related to derivative collateral support agreements, of which a majority has been netted against derivative liabilities on the consolidated balance sheet.

Debt securities pledged as collateral under repurchase agreements that can be sold or repledged by the secured party continue to be reported on the consolidated balance sheet. The fair value of securities available-for-sale that could be sold or repledged was $155 million and $55 million at June 30, 2023 and December 31, 2022, respectively. The fair value of trading assets that could be sold or repledged was $1,795 million and $1,255 million at June 30, 2023 and December 31, 2022, respectively.

The fair value of collateral we accepted under security resale agreements but was not reported on the consolidated balance sheet was $16,044 million and $27,913 million at June 30, 2023 and December 31, 2022, respectively. Of this collateral, $15,369 million and $25,838 million could be sold or repledged at June 30, 2023 and December 31, 2022, respectively, of which $1,672 million and $3,290 million, respectively, had been sold or repledged as collateral under repurchase agreements or to cover short sales.

Repurchase Agreements

We enter into purchases of securities under agreements to resell (resale agreements) and sales of securities under agreements to repurchase (repurchase agreements) identical or substantially the same securities. Resale and repurchase agreements are accounted for as secured lending and secured borrowing transactions, respectively.

Repurchase agreements may require us to deposit cash or other collateral with the lender. In connection with resale agreements, it is our policy to obtain possession of collateral, which may include the securities purchased, with market value in excess of the principal amount loaned. The market value of the collateral subject to the resale and repurchase agreements is regularly monitored, and additional collateral is obtained or provided when appropriate, to ensure appropriate collateral coverage of these secured financing transactions.

The following table provides information about resale and repurchase agreements that are subject to offset at June 30, 2023 and December 31, 2022:

	Gross Amounts Recognized	Gross Amounts Offset in the Balance Sheet[1]	Net Amounts Presented in the Balance Sheet	Gross Amounts Not Offset in the Balance Sheet		Net Amount[3]
				Financial Instruments[2]	Cash Collateral Received / Pledged	
			(in millions)			
At June 30, 2023						
Assets:						
Securities purchased under resale agreements	**$ 16,194**	**$ 3,675**	**$ 12,519**	**$ 12,414**	**$ 44**	**$ 61**
Liabilities:						
Securities sold under repurchase agreements	**$ 3,675**	**$ 3,675**	**$ —**	**$ —**	**$ —**	**$ —**
At December 31, 2022						
Assets:						
Securities purchased under resale agreements	$ 27,795	$ 4,710	$ 23,085	$ 23,082	$ —	$ 3
Liabilities:						
Securities sold under repurchase agreements	$ 4,710	$ 4,710	$ —	$ —	$ —	$ —

(1) Represents recognized amount of resale and repurchase agreements with counterparties subject to legally enforceable netting agreements that meet the applicable netting criteria as permitted by generally accepted accounting principles.

(2) Represents securities received or pledged to cover financing transaction exposures.

(3) Represents the amount of our exposure that is not collateralized / covered by pledged collateral.

The following table provides the class of collateral pledged and remaining contractual maturity of repurchase agreements accounted for as secured borrowings at June 30, 2023 and December 31, 2022:

	Overnight and Continuous	Up to 30 Days	31 to 90 Days	91 Days to One Year	Greater Than One Year	Total
			(in millions)			
At June 30, 2023						
U.S. Treasury, U.S. Government sponsored and U.S. Government agency securities	**$ 1,633**	**$ 757**	**$ 586**	**$ 699**	**$ —**	**$ 3,675**
At December 31, 2022						
U.S. Treasury, U.S. Government sponsored and U.S. Government agency securities	$ 2,729	$ 1,074	$ 386	$ 521	$ —	$ 4,710

19. Fair Value Measurements

Accounting principles related to fair value measurements provide a framework for measuring fair value that focuses on the exit price that would be received to sell an asset or paid to transfer a liability in the principal market (or in the absence of the principal market, the most advantageous market) accessible in an orderly transaction between willing market participants (the "Fair Value Framework"). Where required by the applicable accounting standards, assets and liabilities are measured at fair value using the "highest and best use" valuation premise. Fair value measurement guidance clarifies that financial instruments do not have alternative use and, as such, the fair value of financial instruments should be determined using an "in-exchange" valuation premise. However, the fair value measurement guidance provides a valuation exception and permits an entity to measure the fair value of a group of financial assets and financial liabilities with offsetting credit risks and/or market risks based on the exit price it would receive or pay to transfer the net risk exposure of a group of assets or liabilities if certain conditions are met. We elected to apply the measurement exception to a group of derivative instruments with offsetting credit risks and market risks, which primarily relate to interest rate, foreign currency, debt and equity price risk, and commodity price risk as of the reporting date.

Fair Value Adjustments The best evidence of fair value is quoted market price in an actively traded market, where available. In the event listed price or market quotes are not available, valuation techniques that incorporate relevant transaction data and market parameters reflecting the attributes of the asset or liability under consideration are applied. Where applicable, fair value adjustments are made to ensure the financial instruments are appropriately recorded at fair value. The fair value adjustments reflect the risks associated with the products, contractual terms of the transactions, and the liquidity of the markets in which the transactions occur. The fair value adjustments are broadly categorized by the following major types:

Credit valuation adjustment - The credit valuation adjustment is an adjustment to a group of financial assets and financial liabilities, predominantly derivative assets and derivative liabilities, to reflect the credit quality of the parties to the transaction in arriving at fair value. A credit valuation adjustment to a financial asset is required to reflect the default risk of the counterparty. A debit valuation adjustment to a financial liability is recorded to reflect the default risk of HUSI. See "Valuation Techniques - Derivatives" below for additional details.

Liquidity risk adjustment - The liquidity risk adjustment (primarily in the form of bid-offer adjustment) reflects the cost that would be incurred to close out the market risks by hedging, disposing or unwinding the position. Valuation models generally produce mid-market values. The bid-offer adjustment is made in such a way that results in a measure that reflects the exit price that most represents the fair value of the financial asset or financial liability under consideration or, where applicable, the fair value of the net market risk exposure of a group of financial assets or financial liabilities. These adjustments relate primarily to Level 2 assets.

Model valuation adjustment - Where fair value measurements are determined using an internal valuation model based on observable and unobservable inputs, certain valuation inputs may be less readily determinable. There may be a range of possible valuation inputs that market participants may assume in determining the fair value measurement. The resultant fair value measurement has inherent measurement risk if one or more parameters are unobservable and must be estimated. An input valuation adjustment is necessary to reflect the likelihood that market participants may use different input parameters, and to mitigate the possibility of measurement error. In addition, the values derived from valuation techniques are affected by the choice of valuation model and model limitation. When different valuation techniques are available, the choice of valuation model can be subjective. Furthermore, the valuation model applied may have measurement limitations. In those cases, an additional valuation adjustment is also applied to mitigate the measurement risk. Model valuation adjustments are not material and relate primarily to Level 2 instruments.

We apply stress scenarios in determining appropriate liquidity risk and model risk adjustments for Level 3 fair values by reviewing the historical data for unobservable inputs (e.g., correlation, volatility). Some stress scenarios involve at least a 95 percent confidence interval (i.e., two standard deviations). We also utilize unobservable parameter adjustments when instruments are valued using internally developed models which reflects the uncertainty in the value estimates provided by the model.

Funding Fair Value Adjustment ("FFVA") - The FFVA reflects the estimated present value of the future market funding cost or benefit associated with funding uncollateralized derivative exposure at unsecured funding spreads. See "Valuation Techniques - Derivatives" below for additional details.

Fair Value Hierarchy The Fair Value Framework establishes a three-tiered fair value hierarchy as follows:

Level 1 *quoted market price* - Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2 *valuation technique using observable inputs* - Level 2 inputs include quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are inactive, and measurements

determined using valuation models where all significant inputs are observable, such as interest rates and yield curves that are observable at commonly quoted intervals.

Level 3 *valuation technique with significant unobservable inputs* - Level 3 inputs are unobservable inputs for the asset or liability and include situations where fair values are measured using valuation techniques based on one or more significant unobservable inputs.

Classification within the fair value hierarchy is based on whether the lowest hierarchical level input that is significant to the fair value measurement is observable. As such, the classification within the fair value hierarchy is dynamic and can be transferred to other hierarchy levels in each reporting period.

Where fair value measurements are determined based on information obtained from independent pricing services or brokers, Finance applies appropriate validation procedures to substantiate fair value. For price validation purposes, quotations from at least two independent pricing sources are obtained for each financial instrument, where possible.

The following factors are considered in determining fair values:

- similarities between the asset or the liability under consideration and the asset or liability for which quotation is received;
- collaboration of pricing by referencing to other independent market data such as market transactions and relevant benchmark indices;
- consistency among different pricing sources;
- the valuation approach and the methodologies used by the independent pricing sources in determining fair value;
- the elapsed time between the date to which the market data relates and the measurement date;
- the source of the fair value information; and
- whether the security is traded in an active or inactive market.

Greater weight is given to quotations of instruments with recent market transactions, pricing quotes from dealers who stand ready to transact, quotations provided by market-makers who structured such instrument and market consensus pricing based on inputs from a large number of survey participants. Any significant discrepancies among the external quotations are reviewed and adjustments to fair values are recorded where appropriate. Where the transaction volume of a specific instrument has been reduced and the fair value measurement becomes less transparent, Finance will apply more detailed procedures to understand and challenge the appropriateness of the unobservable inputs and the valuation techniques used by the independent pricing service. Where applicable, Finance will develop a fair value estimate using its own pricing model inputs to test reasonableness. Where fair value measurements are determined using internal valuation models, Finance will validate the fair value measurement by either developing unobservable inputs based on the industry consensus pricing surveys in which we participate or back testing by observing the actual settlements occurring soon after the measurement date.

Assets and Liabilities Recorded at Fair Value on a Recurring Basis The following table presents information about our assets and liabilities measured at fair value on a recurring basis at June 30, 2023 and December 31, 2022, and indicates the fair value hierarchy of the valuation techniques utilized to determine such fair value. Unless otherwise noted below, assets and liabilities in the following table are recorded at fair value through net income.

	Fair Value Measurements on a Recurring Basis					
June 30, 2023	**Level 1**	**Level 2**	**Level 3**	**Gross Balance**	**Netting[1]**	**Net Balance**
			(in millions)			
Assets:						
Trading assets, excluding derivatives:						
U.S. Treasury, U.S. Government agencies and sponsored enterprises	$ 2,791	$ 764	$ —	$ 3,555	$ —	$ 3,555
Debt securities issued by foreign entities	1,649	—	—	1,649	—	1,649
Equity securities	10,261	—	—	10,261	—	10,261
Precious metals trading	—	2,605	—	2,605	—	2,605
Derivatives:[2]						
Interest rate contracts	5	1,457	1	1,463	—	1,463
Foreign exchange contracts	—	14,805	8	14,813	—	14,813
Equity contracts	—	775	170	945	—	945
Precious metals contracts	7	1,197	—	1,204	—	1,204
Credit contracts	—	75	2	77	—	77
Other contracts[3]	—	—	3	3	—	3
Derivatives netting	—	—	—	—	(17,056)	(17,056)
Total derivatives	12	18,309	184	18,505	(17,056)	1,449
Securities available-for-sale:[4]						
U.S. Treasury, U.S. Government agencies and sponsored enterprises	8,236	16,268	—	24,504	—	24,504
Asset-backed securities:						
Home equity	—	—	13	13	—	13
Other	—	—	92	92	—	92
Debt securities issued by foreign entities	1,543	107	—	1,650	—	1,650
Loans[5]	—	17	—	17	—	17
Loans held for sale[5]	—	371	3	374	—	374
Other assets:						
Mortgage servicing rights	—	—	21	21	—	21
Equity securities	—	126	—	126	—	126
Equity securities measured at net asset value[6]	—	—	—	141	—	141
Other[5][7]	—	61	—	61	—	61
Total assets	$ 24,492	$ 38,628	$ 313	$ 63,574	$ (17,056)	$ 46,518
Liabilities:						
Domestic deposits[5]	$ —	$ 1,111	$ 241	$ 1,352	$ —	$ 1,352
Trading liabilities, excluding derivatives	1,267	—	—	1,267	—	1,267
Derivatives:[2]						
Interest rate contracts	11	1,187	6	1,204	—	1,204
Foreign exchange contracts	—	13,730	8	13,738	—	13,738
Equity contracts	—	879	195	1,074	—	1,074
Precious metals contracts	—	1,104	—	1,104	—	1,104
Credit contracts	—	105	—	105	—	105
Other contracts[3]	—	—	27	27	—	27
Derivatives netting	—	—	—	—	(15,671)	(15,671)
Total derivatives	11	17,005	236	17,252	(15,671)	1,581
Long-term debt[5]	—	6,915	2,291	9,206	—	9,206
Other liabilities[5][7]	—	61	—	61	—	61
Total liabilities	$ 1,278	$ 25,092	$ 2,768	$ 29,138	$ (15,671)	$ 13,467

December 31, 2022	Fair Value Measurements on a Recurring Basis					
	Level 1	Level 2	Level 3	Gross Balance	Netting[1]	Net Balance
	(in millions)					
Assets:						
Trading assets, excluding derivatives:						
U.S. Treasury, U.S. Government agencies and sponsored enterprises	$ 1,670	$ 369	$ —	$ 2,039	$ —	$ 2,039
Debt securities issued by foreign entities	6,337	54	—	6,391	—	6,391
Equity securities	7,855	—	—	7,855	—	7,855
Precious metals trading	—	3,831	—	3,831	—	3,831
Derivatives:[2]						
Interest rate contracts	8	1,846	2	1,856	—	1,856
Foreign exchange contracts	—	15,734	10	15,744	—	15,744
Equity contracts	—	956	72	1,028	—	1,028
Precious metals contracts	—	1,201	—	1,201	—	1,201
Credit contracts	—	108	2	110	—	110
Other contracts[3]	—	—	5	5	—	5
Derivatives netting	—	—	—	—	(18,278)	(18,278)
Total derivatives	8	19,845	91	19,944	(18,278)	1,666
Securities available-for-sale:[4]						
U.S. Treasury, U.S. Government agencies and sponsored enterprises	8,195	17,196	—	25,391	—	25,391
Asset-backed securities:						
Home equity	—	—	15	15	—	15
Other	—	—	93	93	—	93
Debt securities issued by foreign entities	1,740	106	—	1,846	—	1,846
Loans[5]	—	20	—	20	—	20
Loans held for sale[5]	—	188	49	237	—	237
Other assets:						
Mortgage servicing rights	—	—	22	22	—	22
Equity securities		127		127	—	127
Equity securities measured at net asset value[6]	—	—	—	140	—	140
Other[5][7]	—	325	—	325	—	325
Total assets	$ 25,805	$ 42,061	$ 270	$ 68,276	$ (18,278)	$ 49,998
Liabilities:						
Domestic deposits[5]	$ —	$ 1,181	$ 373	$ 1,554	$ —	$ 1,554
Trading liabilities, excluding derivatives	837	—	—	837	—	837
Derivatives:[2]						
Interest rate contracts	6	1,471	7	1,484	—	1,484
Foreign exchange contracts	—	15,500	10	15,510	—	15,510
Equity contracts	4	625	298	927	—	927
Precious metals contracts	1	1,254	—	1,255	—	1,255
Credit contracts	—	106	—	106	—	106
Other contracts[3]	—	—	38	38	—	38
Derivatives netting	—	—	—	—	(17,154)	(17,154)
Total derivatives	11	18,956	353	19,320	(17,154)	2,166
Long-term debt[5]	—	5,739	2,639	8,378	—	8,378
Other liabilities[5][7]	—	325	—	325	—	325
Total liabilities	$ 848	$ 26,201	$ 3,365	$ 30,414	$ (17,154)	$ 13,260

(1) Represents counterparty and cash collateral netting which allow the offsetting of amounts relating to certain contracts if certain conditions are met.

(2) Includes trading derivative assets of $1,321 million and $1,614 million and trading derivative liabilities of $1,432 million and $1,966 million at June 30, 2023 and December 31, 2022, respectively, as well as derivatives held for hedging and other non-qualifying economic hedging activities. See Note 10, "Derivative Financial Instruments," for additional information. Excluding changes in fair value of a derivative instrument associated with a qualifying cash flow hedge, which are recognized initially in other comprehensive income (loss), derivative assets and liabilities are recorded at fair value through net income.

(3) Consists of swap agreements entered into in conjunction with the sales of Visa Class B Shares.

(4) Securities available-for-sale are recorded at fair value through other comprehensive income (loss). Changes in the allowance for credit losses on securities available-for-sale are recorded through net income.

(5) See Note 11, "Fair Value Option," for additional information. Excluding the fair value movement on fair value option liabilities attributable to our own credit spread, which is recorded in other comprehensive income (loss), fair value option assets and liabilities are recorded at fair value through net income.

(6) Investments that are measured at fair value using the net asset value per share practical expedient have not been classified in the fair value hierarchy.

(7) Consists of assets and liabilities associated with certain client share repurchase transactions.

Information on Level 3 assets and liabilities The following table summarizes additional information about changes in the fair value of Level 3 assets and liabilities during the three and six months ended June 30, 2023 and 2022. As a risk management practice, we may risk manage the Level 3 assets and liabilities, in whole or in part, using securities and derivative positions that are classified as Level 1 or Level 2 measurements within the fair value hierarchy. Since those Level 1 and Level 2 risk management positions are not included in the table below, the information provided does not reflect the effect of such risk management activities related to the Level 3 assets and liabilities.

		Total Realized / Unrealized Gains (Losses) Included in								Current Period Unrealized Gains (Losses) Still Held Included in	
	Apr. 1, 2023	Earnings	Other Comprehensive Income (Loss)	Purchases	Issuances	Settlements	Transfers Into Level 3	Transfers Out of Level 3	Jun. 30, 2023	Earnings	Other Comprehensive Income (Loss)
	(in millions)										
Assets:											
Derivatives, net:[1]											
Interest rate contracts	$ (4)	$ (1)	$ —	$ —	$ —	$ —	$ —	$ —	$ (5)	$ (1)	$ —
Foreign exchange contracts	—	—	—	—	—	—	—	—	—	—	—
Equity contracts	(84)	61	—	—	—	5	—	(7)	(25)	51	—
Credit contracts	2	—	—	—	—	—	—	—	2	—	—
Other contracts[2]	(24)	(7)	—	—	—	7	—	—	(24)	—	—
Asset-backed securities available-for-sale[3]	107	—	(2)	—	—	—	—	—	105	—	(2)
Loans held for sale[4]	50	—	—	2	—	(37)	—	(12)	3	—	—
Mortgage servicing rights[5]	21	—	—	—	—	—	—	—	21	—	—
Total assets	$ 68	$ 53	$ (2)	$ 2	$ —	$ (25)	$ —	$ (19)	$ 77	$ 50	$ (2)
Liabilities:											
Domestic deposits[4]	$ (270)	$ 5	$ (3)	$ —	$ (2)	$ 23	$ —	$ 6	$ (241)	$ 5	$ (3)
Long-term debt[4]	(2,395)	(94)	(19)	—	(185)	237	(35)	200	(2,291)	(55)	(19)
Total liabilities	$ (2,665)	$ (89)	$ (22)	$ —	$ (187)	$ 260	$ (35)	$ 206	$ (2,532)	$ (50)	$ (22)

	Jan. 1, 2023	Total Realized / Unrealized Gains (Losses) Included in Earnings	Total Realized / Unrealized Gains (Losses) Included in Other Comprehensive Income (Loss)	Purchases	Issuances	Settlements	Transfers Into Level 3	Transfers Out of Level 3	Jun. 30, 2023	Current Period Unrealized Gains (Losses) Still Held Included in Earnings	Current Period Unrealized Gains (Losses) Still Held Included in Other Comprehensive Income (Loss)
					(in millions)						
Assets:											
Derivatives, net:[1]											
Interest rate contracts	$ (5)	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ (5)	$ —	$ —
Foreign exchange contracts	—	—	—	—	—	—	—	—	—	—	—
Equity contracts	(226)	189	—	—	—	17	—	(5)	(25)	146	—
Credit contracts	2	—	—	—	—	—	—	—	2	—	—
Other contracts[2]	(33)	(9)	—	—	—	18	—	—	(24)	—	—
Asset-backed securities available-for-sale[3]	108	—	(1)	—	—	(2)	—	—	105	—	(1)
Loans held for sale[4]	49	—	—	3	—	(37)	—	(12)	3	—	—
Mortgage servicing rights[5]	22	(1)	—	—	—	—	—	—	21	(1)	—
Total assets	$ (83)	$ 179	$ (1)	$ 3	$ —	$ (4)	$ —	$ (17)	$ 77	$ 145	$ (1)
Liabilities:											
Domestic deposits[4]	$ (373)	$ (1)	$ 1	$ —	$ (2)	$ 103	$ —	$ 31	$ (241)	$ 3	$ 1
Long-term debt[4]	(2,639)	(260)	3	—	(374)	412	(36)	603	(2,291)	(159)	3
Total liabilities	$ (3,012)	$ (261)	$ 4	$ —	$ (376)	$ 515	$ (36)	$ 634	$ (2,532)	$ (156)	$ 4

	Apr. 1, 2022	Total Realized / Unrealized Gains (Losses) Included in		Purch-ases	Issu-ances	Settle-ments	Transfers Into Level 3	Transfers Out of Level 3	Jun. 30, 2022	Current Period Unrealized Gains (Losses) Still Held Included in	
		Earnings	Other Compre-hensive Income (Loss)							Earnings	Other Compre-hensive Income (Loss)
	(in millions)										
Assets:											
Derivatives, net:[1]											
Interest rate contracts	$ (1)	$ (1)	$ —	$ —	$ —	$ —	$ (2)	$ —	$ (4)	$ —	$ —
Foreign exchange contracts	(1)	1	—	—	—	—	—	—	—	—	—
Equity contracts	(1)	(221)	—	—	—	(53)	(7)	—	(282)	(255)	—
Credit contracts	(2)	1	—	—	—	—	—	—	(1)	1	—
Other contracts[2]	(24)	(30)	—	—	—	7	—	—	(47)	—	—
Asset-backed securities available-for-sale[3]	114	—	(1)	—	—	—	—	—	113	—	(1)
Mortgage servicing rights[5]	21	—	—	—	1	—	—	—	22	—	—
Total assets	$ 106	$ (250)	$ (1)	$ —	$ 1	$ (46)	$ (9)	$ —	$ (199)	$ (254)	$ (1)
Liabilities:											
Domestic deposits[4]	$ (492)	$ 24	$ 3	$ —	$ —	$ 46	$ (81)	$ —	$ (500)	$ 20	$ 3
Long-term debt[4]	(2,072)	259	11	—	(358)	98	(31)	—	(2,093)	252	11
Total liabilities	$ (2,564)	$ 283	$ 14	$ —	$ (358)	$ 144	$ (112)	$ —	$ (2,593)	$ 272	$ 14

		Total Realized / Unrealized Gains (Losses) Included in								Current Period Unrealized Gains (Losses) Still Held Included in	
	Jan. 1, 2022	Earnings	Other Comprehensive Income (Loss)	Purchases	Issuances	Settlements	Transfers Into Level 3	Transfers Out of Level 3	Jun. 30, 2022	Earnings	Other Comprehensive Income (Loss)
						(in millions)					
Assets:											
Derivatives, net:[1]											
Interest rate contracts	$ —	$ (1)	$ —	$ —	$ —	$ —	$ (3)	$ —	$ (4)	$ (1)	$ —
Foreign exchange contracts	(2)	2	—	—	—	—	—	—	—	—	—
Equity contracts	46	(341)	—	—	—	(52)	22	43	(282)	(339)	—
Credit contracts	(2)	1	—	—	—	—	—	—	(1)	1	—
Other contracts[2]	(33)	(31)	—	—	—	17	—	—	(47)	—	—
Asset-backed securities available-for-sale[3]	120	—	(4)	—	—	(3)	—	—	113	—	(4)
Mortgage servicing rights[5]	16	4	—	—	2	—	—	—	22	2	—
Total assets	$ 145	$ (366)	$ (4)	$ —	$ 2	$ (38)	$ 19	$ 43	$ (199)	$ (337)	$ (4)
Liabilities:											
Domestic deposits[4]	$ (535)	$ 45	$ 1	$ —	$ —	$ 116	$ (130)	$ 3	$ (500)	$ 38	$ 1
Long-term debt[4]	(1,853)	353	16	—	(658)	200	(237)	86	(2,093)	319	16
Total liabilities	$ (2,388)	$ 398	$ 17	$ —	$ (658)	$ 316	$ (367)	$ 89	$ (2,593)	$ 357	$ 17

(1) Level 3 net derivatives included derivative assets of $184 million and derivative liabilities of $236 million at June 30, 2023 and derivative assets of $96 million and derivative liabilities of $430 million at June 30, 2022. Gains (losses) on derivatives, net are predominantly included in trading revenue and gain (loss) on instruments designated at fair value and related derivatives in the consolidated statement of income.

(2) Consists of swap agreements entered into in conjunction with the sales of Visa Class B Shares. Gains (losses) on these swap agreements are included in other income (loss) in the consolidated statement of income.

(3) Realized gains (losses) on securities available-for-sale are included in other securities gains, net in the consolidated statement of income. Changes in the allowance for credit losses on securities available-for-sale are included in the provision for credit losses in the consolidated statement of income. Unrealized gains (losses) on securities available-for-sale are included in other comprehensive income (loss).

(4) Excluding unrealized gains (losses) on fair value option liabilities attributable to our own credit spread, which are recorded in other comprehensive income (loss), gains (losses) on fair value option assets and liabilities are included in gain (loss) on instruments designated at fair value and related derivatives in the consolidated statement of income.

(5) Gains (losses) on mortgage servicing rights are included in other income (loss) in the consolidated statement of income.

Significant Unobservable Inputs for Recurring Fair Value Measurements

The following table presents quantitative information about the unobservable inputs used to determine the recurring fair value measurement of assets and liabilities classified as Level 3 fair value measurements at June 30, 2023 and December 31, 2022:

June 30, 2023

Financial Instrument Type	Fair Value (in millions)	Valuation Technique(s)	Significant Unobservable Inputs	Range of Inputs	Weighted Average[(1)]
Interest rate derivative contracts	$ (5)	Market comparable adjusted for probability to fund and, where applicable, option pricing model	Probability to fund for rate lock commitments	**43% - 91%**	**81%**
			Interest rate yield curve	**8%**	**N/A**
Foreign exchange derivative contracts	$ —	Option pricing model	Cross-currency basis	**72bps**	**N/A**
Equity derivative contracts[(2)]	$ (25)	Option pricing model	Equity / Equity Index volatility	**6% - 95%**	**33%**
			Equity / Equity and Equity / Index correlation	**45% - 97%**	**83%**
			Equity forward price	**$40 - $6,053**	**$346**
Credit derivative contracts	$ 2	Option pricing model and, where applicable, discounted cash flows	Credit default swap spreads	**807bps - 1,346bps**	**1,239bps**
Other derivative contracts	$ (24)	Discounted cash flows	Conversion rate	**1.6 times**	**N/A**
			Expected duration	**0.5 years**	**N/A**
Asset-backed securities available-for-sale	$ 105	Discounted cash flows	Market assumptions related to yields for comparable instruments	**1% - 3%**	**2%**
Loans held for sale	$ 3	Market comparables and internal assumptions	Adjusted market price	**89% - 100%**	**95%**
Mortgage servicing rights	$ 21	Discounted cash flows	Constant prepayment rates	**6% - 15%**	**6%**
			Discount rate	**9% - 13%**	**9%**
			Estimated annualized costs to service	**$72 - $76 per account**	**$74 per account**
Domestic deposits (structured deposits)[(2)(3)]	$ (241)	Option adjusted discounted cash flows	Equity / Equity Index volatility	**8% - 27%**	**13%**
			Equity / Equity and Equity / Index correlation	**49% - 92%**	**65%**
Long-term debt (structured notes)[(2)(3)]	$ (2,291)	Option adjusted discounted cash flows	Equity / Equity Index volatility	**8% - 95%**	**18%**
			Equity / Equity and Equity / Index correlation	**45% - 97%**	**83%**
			Credit default swap spreads	**1,150bps**	**NA**

December 31, 2022

Financial Instrument Type	Fair Value (in millions)	Valuation Technique(s)	Significant Unobservable Inputs	Range of Inputs	Weighted Average[1]
Interest rate derivative contracts	$ (5)	Market comparable adjusted for probability to fund and, where applicable, option pricing model	Probability to fund for rate lock commitments	51% - 99%	84%
			Interest rate yield curve	9%	N/A
Foreign exchange derivative contracts	$ —	Option pricing model	Cross-currency basis	103bps	N/A
Equity derivative contracts[2]	$ (226)	Option pricing model	Equity / Equity Index volatility	8% - 101%	42%
			Equity / Equity and Equity / Index correlation	45% - 99%	85%
			Equity forward price	$39 - $5,271	$1,243
Credit derivative contracts	$ 2	Option pricing model and, where applicable, discounted cash flows	Credit default swap spreads	491bps - 902bps	885bps
Other derivative contracts	$ (33)	Discounted cash flows	Conversion rate	1.6 times	N/A
			Expected duration	1.0 year	N/A
Asset-backed securities available-for-sale	$ 108	Discounted cash flows	Market assumptions related to yields for comparable instruments	2% - 3%	2%
Loans held for sale	$ 49	Market comparables and internal assumptions	Adjusted market price	5% - 80%	42%
Mortgage servicing rights	$ 22	Discounted cash flows	Constant prepayment rates	6% - 14%	6%
			Discount rate	9% - 13%	9%
			Estimated annualized costs to service	$72 - $76 per account	$74 per account
Domestic deposits (structured deposits)[2][3]	$ (373)	Option adjusted discounted cash flows	Equity / Equity Index volatility	8% - 24%	19%
			Equity / Equity and Equity / Index correlation	49% - 88%	63%
Long-term debt (structured notes)[2][3]	$ (2,639)	Option adjusted discounted cash flows	Equity / Equity Index volatility	8% - 55%	29%
			Equity / Equity and Equity / Index correlation	45% - 99%	86%
			Credit default swap spreads	1,223bps	N/A

(1) For foreign exchange derivatives, equity derivatives, credit derivatives, structured deposits and structured notes, weighted averages are calculated based on the fair value of the instruments. For all remaining instrument types, weighted averages are calculated based on the notional value of the instruments.

(2) We are the client-facing entity and, except for structured notes and deposits with embedded credit derivative features, we enter into identical but opposite derivatives to transfer the resultant risks to our affiliates. With the exception of counterparty credit risks, we are market risk neutral in substantially all of the structured notes and deposits. The corresponding intra-group derivatives are presented as equity derivatives in the table.

(3) Structured deposits and structured notes contain embedded derivative features whose fair value measurements contain significant Level 3 inputs. See equity derivatives and credit derivatives below for a discussion of the uncertainty of Level 3 inputs related to structured deposits and structured notes.

N/A Not Applicable

Uncertainty of Level 3 Inputs to Fair Value Measurements

Interest rate derivatives - For mortgage rate lock commitments, the fair value measurement is affected by the probability of executing and funding the mortgage. An increase (decrease) in the likelihood of a mortgage being executed would have resulted in a lower (higher) fair value measurement of the interest rate derivative. For certain other interest rate derivatives, the interest rates for longer dated tenors were not observable. An increase (decrease) in the interest rate would have resulted in a higher (lower) fair value measurement of the derivative depending on if we receive or pay the floating rate.

Foreign exchange derivatives - For certain foreign exchange derivatives, the cross-currency basis for longer dated tenors were not observable. An increase (decrease) in the cross-currency basis would have resulted in a higher (lower) fair value measurement of the derivative depending on if we receive or pay the floating rate plus the basis spread.

Equity derivatives - The fair value measurement of a structured equity derivative is primarily affected by the implied volatility of the underlying equity price. The level of volatility is a function of the nature of the underlying risk, the level of strike price and the years to maturity of the option. Depending on the underlying risk and tenure, we determine the implied volatility based on observable input where information is available. However, substantially all of the implied volatilities are derived based on historical information and are not observable. A significant increase (decrease) in the implied volatility would have resulted in a higher (lower) fair value of a long position in the derivative contract. For a derivative referenced to a basket of equities, the fair value measurement is also affected by the correlation of the referenced equities. Correlation measures the relative change in

values among two or more variables (i.e., equity pair), which can be positively or negatively correlated. A majority of the correlations are not observable, but are derived based on historical data. A significant increase (decrease) in the correlation of the referenced variables would have resulted in a higher (lower) fair value of a long position in the derivative contract.

Credit derivatives - The fair value measurement of certain credit derivatives is primarily affected by the credit spreads of credit default swap contracts. A significant increase (decrease) in the credit spreads would have resulted in a lower (higher) fair value measurement of the credit derivative.

Other derivatives - The fair value of the swap agreements we entered into in conjunction with the sales of Visa Class B Shares is dependent upon the final resolution of the related litigation. Significant unobservable inputs used in the fair value measurement include estimated changes in the conversion rate of Visa Class B Shares into Visa Class A Shares and the expected timing of the final resolution. An increase (decrease) in the loss estimate or in the timing of the resolution of the related litigation would have resulted in a higher (lower) fair value measurement of the derivative.

Asset-backed securities available-for-sale - The fair value measurement of certain asset-backed securities is primarily affected by estimated yields which are determined based on current market yields of comparable instruments adjusted for market liquidity. An increase (decrease) in the yields would have resulted in a lower (higher) fair value measurement of the securities.

Loans held for sale - The fair value measurement of certain commercial loans held for sale is affected by estimated market prices which are unobservable. An increase (decrease) in the estimated prices would have resulted in a higher (lower) fair value measurement of the loans.

Mortgage servicing rights - The fair value measurement of mortgage servicing rights is primarily affected by the estimated prepayment rates of the mortgage loans and the discount rates. An increase (decrease) in either of these inputs would have resulted in a lower (higher) fair value measurement of the mortgage servicing rights.

Significant Transfers Into and Out of Level 3 Measurements During the three and six months ended June 30, 2023, we transferred $6 million and $31 million, respectively, of domestic deposits and $200 million and $603 million, respectively, of long-term debt, which we have elected to carry at fair value, from Level 3 to Level 2 as a result of the embedded derivative no longer being unobservable as the derivative option is closer to maturity and there is more observability in short term volatility. During the three and six months ended June 30, 2023, we transferred $35 million and $36 million, respectively, of long-term debt, which we elected to carry at fair value, from Level 2 to Level 3 as a result of a change in the observability of underlying inputs that resulted in the embedded derivative being unobservable.

During the six months ended June 30, 2022, we transferred $86 million of long-term debt, which we have elected to carry at fair value, from Level 3 to Level 2 as a result of the embedded derivative no longer being unobservable as the derivative option is closer to maturity and there is more observability in short term volatility. During the six months ended June 30, 2022, we also transferred $43 million of equity derivatives from Level 3 to Level 2 as the inputs used to value these contracts have become more observable. During the three and six months ended June 30, 2022, we transferred $81 million and $130 million, respectively, of domestic deposits and $31 million and $237 million, respectively, of long-term debt, which we elected to carry at fair value, from Level 2 to Level 3 as a result of a change in the observability of underlying inputs that resulted in the embedded derivative being unobservable. Additionally, during the six months ended June 30, 2022, we transferred $22 million of equity derivatives from Level 2 to Level 3 as the inputs used to value these contracts have become less observable.

Assets and Liabilities Recorded at Fair Value on a Non-recurring Basis Certain financial and non-financial assets are measured at fair value on a non-recurring basis and therefore, are not included in the tables above. These assets include (a) loans classified as held for sale reported at the lower of amortized cost or fair value, (b) impaired loans or assets that are written down to fair value based on the valuation of underlying collateral during the period and (c) lease ROU assets or leasehold improvement assets that were written down during the period. These instruments are not measured at fair value on an ongoing basis but are subject to fair value adjustment in certain circumstances (e.g., impairment). The following table presents the fair value hierarchy level within which the fair value of the financial and non-financial assets has been recorded at June 30, 2023 and December 31, 2022. The gains (losses) during the three and six months ended June 30, 2023 and 2022 are also included.

	Non-Recurring Fair Value Measurements at June 30, 2023				Total Gains (Losses) For the Three Months Ended June 30, 2023	Total Gains (Losses) For the Six Months Ended June 30, 2023
	Level 1	Level 2	Level 3	Total		
	(in millions)					
Consumer loans[1]	**$ —**	**$ 107**	**$ —**	**$ 107**	**$ —**	**$ (1)**
Commercial loans held for sale[2]	**—**	**581**	**—**	**581**	**(36)**	**(37)**
Commercial loans[3]	**—**	**—**	**150**	**150**	**(12)**	**(9)**
Leases[4]	**—**	**—**	**—**	**—**	**1**	**(14)**
Total assets at fair value on a non-recurring basis	**$ —**	**$ 688**	**$ 150**	**$ 838**	**$ (47)**	**$ (61)**

	Non-Recurring Fair Value Measurements at December 31, 2022				Total Gains (Losses) For the Three Months Ended June 30, 2022	Total Gains (Losses) For the Six Months Ended June 30, 2022
	Level 1	Level 2	Level 3	Total		
	(in millions)					
Consumer loans held for sale[5]	$ —	$ 1	$ —	$ 1	$ (7)	$ (8)
Consumer loans[1]	—	112	—	112	1	3
Commercial loans[3]	—	—	52	52	(5)	—
Leases[4]	—	—	—	—	4	3
Total assets at fair value on a non-recurring basis	$ —	$ 113	$ 52	$ 165	$ (7)	$ (2)

(1) Represents residential mortgage loans held for investment whose carrying amount was adjusted during the period based on the fair value of the underlying collateral.

(2) At June 30, 2023, the fair value of the loans held for sale was below cost.

(3) Certain commercial loans are individually assessed for impairment. We measure the credit impairment of a collateral-dependent loan based on the fair value of the collateral asset. The collateral often involves real estate properties that are illiquid due to market conditions. As a result, these loans are classified as a Level 3 fair value measurement within the fair value hierarchy.

(4) During the six months ended June 30, 2023, we wrote down the lease ROU assets and leasehold improvement assets associated with the exit of certain office space. During the three and six months ended June 30, 2022, we reversed lease ROU asset and leasehold improvement asset impairment charges associated with certain office space that we determined we would exit.

(5) At December 31, 2022, the fair value of the loans held for sale was below cost.

Significant Unobservable Inputs for Non-Recurring Fair Value Measurements

The following tables present quantitative information about non-recurring fair value measurements of assets and liabilities classified with Level 3 of the fair value hierarchy at June 30, 2023 and December 31, 2022:

At June 30, 2023

Financial Instrument Type	Fair Value (in millions)	Valuation Technique(s)	Significant Unobservable Inputs	Range of Inputs	Weighted Average[(1)]
Commercial loans	$ 150	Valuation of third party appraisal on underlying collateral	Loss severity rates	1% - 54%	28%

At December 31, 2022

Financial Instrument Type	Fair Value (in millions)	Valuation Technique(s)	Significant Unobservable Inputs	Range of Inputs	Weighted Average[(1)]
Commercial loans	$ 52	Valuation of third party appraisal on underlying collateral	Loss severity rates	11% - 47%	31%

(1) Weighted average is calculated based on the carrying value of the loans.

Valuation Techniques

Following is a description of valuation methodologies used for assets and liabilities recorded at fair value.

Consumer loans designated under FVO – We elected to apply FVO accounting to certain student loans. The fair value of these loans is based on observed market prices of instruments with similar characteristics.

Consumer loans held for sale – Consumer loans held for sale are recorded at the lower of amortized cost or fair value. The fair value of consumer loans held for sale is estimated using observed market prices of instruments with similar characteristics. Adjustments are made to reflect differences in collateral location, loan-to-value ratio, FICO scores, vintage year, default rates, the completeness of the loan documentation and other risk characteristics. Where observable market parameters are not available, fair value is estimated using the discounted cash flow method using assumptions consistent with those which would be used by market participants in valuing such loans, including estimates of prepayment rates, default rates, loss severities and market rates of return. We also may hold discussions on value directly with potential investors.

Commercial loans held for sale – Commercial loans held for sale (that are not designated under FVO as discussed below) are recorded at the lower of amortized cost or fair value. The fair value of commercial loans held for sale is estimated using observable market pricing obtained from independent sources, relevant broker quotes or observed market prices of instruments with similar characteristics. We also may hold discussions on value directly with potential investors or take into account underlying collateral values.

Commercial loans held for sale designated under FVO – We elected to apply FVO accounting to certain commercial loans held for sale. Where available, fair value is based on observable market pricing obtained from independent sources, relevant broker quotes or observed market prices of instruments with similar characteristics. Where observable market parameters are not available, fair value is determined based on contractual cash flows adjusted for estimates of prepayment rates, expected default rates and loss severity discounted at management's estimate of the expected rate of return required by market participants. We also consider loan-specific risk mitigating factors such as collateral arrangements in determining the fair value estimate. For certain commercial loans held for sale, the fair value measurement process uses significant unobservable inputs to adjust market prices which are specific to the characteristics of the loans.

Commercial loans individually assessed for impairment – Generally represents collateral-dependent commercial loans with fair value determined based on pricing quotes obtained from an independent third party appraisal.

Precious metals trading – Precious metals trading primarily includes physical inventory which is valued using spot prices.

Securities - Where available, debt and equity securities are valued based on quoted market prices. If a quoted market price for the identical security is not available, the security is valued based on quotes from similar securities, where possible. For certain securities, internally developed valuation models are used to determine fair values or validate quotes obtained from pricing services. The following summarizes the valuation methodology used for our major security classes:

- U.S. Treasury, U.S. Government agency issued or guaranteed and obligations of U.S. state and political subdivisions – As these securities transact in an active market, fair value measurements are based on quoted prices for the identical security or quoted prices for similar securities with adjustments as necessary made using observable inputs which are market corroborated.
- U.S. Government sponsored enterprises – For government sponsored mortgage-backed securities which transact in an active market, fair value measurements are based on quoted prices for the identical security or quoted prices for similar

securities with adjustments as necessary made using observable inputs which are market corroborated. For government sponsored mortgage-backed securities which do not transact in an active market, fair value is determined primarily based on pricing information obtained from pricing services and is verified by internal review processes.

- Asset-backed securities – Fair value is primarily determined based on pricing information obtained from independent pricing services adjusted for the characteristics and the performance of the underlying collateral.
- Foreign debt securities (government and corporate) - Government securities transact in an active market and therefore fair value measurements are based on quoted prices for the identical security or quoted prices for similar securities with adjustments as necessary made using observable inputs which are market corroborated. For non-callable corporate securities, a credit spread scale is created for each issuer. These spreads are then added to the equivalent maturity U.S. Treasury yield to determine current pricing. Credit spreads are obtained from the primary market, secondary trading levels and dealer quotes. For securities with early redemption features, an option adjusted spread model is incorporated to adjust the spreads determined above. Additionally, we survey the broker/dealer community to obtain relevant trade data including benchmark quotes and updated spreads.
- Equity securities – Fair value measurements are determined based on quoted prices for the identical security. Certain equity securities represent investments in private equity funds that help us comply with the Community Reinvestment Act. The fair value of these investments are estimated using the net asset value per share as calculated by the fund managers. Distributions will be received from the funds as the underlying assets are liquidated. While the funds do not allow us to redeem our investments, we are permitted to sell or transfer our investments subject to the approval of the fund manager. Unfunded commitments associated with these investments totaled $23 million and $25 million at June 30, 2023 and December 31, 2022, respectively.

The following tables provide additional information relating to our available-for-sale asset-backed securities at June 30, 2023:

Rating of Securities:[1]	Collateral Type:	Level 3
		(in millions)
AAA - A	Home equity - Alt A	$ 13
BBB - B	Other	92
		$ 105

(1) We utilize S&P as the primary source of credit ratings in the tables above. If S&P ratings are not available, ratings by Moody's and Fitch are used in that order.

Derivatives – Derivatives are recorded at fair value. Asset and liability positions in individual derivatives that are covered by legally enforceable master netting agreements, including receivables (payables) for cash collateral posted (received), are offset and presented net in accordance with accounting principles which allow the offsetting of amounts.

Derivatives traded on an exchange are valued using quoted prices. OTC derivatives, which comprise a majority of derivative contract positions, are valued using valuation techniques. The fair value for the majority of our derivative instruments are determined based on internally developed models that utilize independently corroborated market parameters, including interest rate yield curves, option volatilities, and currency rates. For complex or long-dated derivative products where market data is not available, fair value may be affected by the underlying assumptions about, among other things, the timing of cash flows, expected exposure, probability of default and recovery rates. The fair values of certain structured derivative products are sensitive to unobservable inputs such as correlations of the referenced variables and volatilities of embedded options. These estimates are susceptible to significant change in future periods as market conditions change.

We typically use the risk-free rate/overnight indexed swap curves as the base discounting curve for measuring the fair value of all derivatives, both collateralized and uncollateralized, and apply a FFVA to reflect the estimated present value of the future market funding cost or benefit associated with funding uncollateralized derivative exposure at an unsecured market funding rate. The FFVA is calculated by applying future market funding spreads to the expected future funding exposure of any uncollateralized component of the OTC derivative portfolio. The expected future funding exposure is calculated by a simulation methodology, where available, and is adjusted for events that may terminate the exposure, such as the default of HUSI or the counterparty.

Significant inputs related to derivative classes are broken down as follows:

- Credit Derivatives – Use credit default curves and recovery rates which are generally provided by broker quotes and various pricing services. Certain credit derivatives may also use correlation inputs in their model valuation.
- Interest Rate Derivatives – Swaps use interest rate curves based on currency that are actively quoted by brokers and other pricing services. Options will also use volatility inputs which are also quoted in the broker market.

- Foreign Exchange ("FX") Derivatives – FX transactions, to the extent possible, use spot and forward FX rates which are quoted in the broker market. Where applicable, we also use implied volatility of currency pairs as inputs.
- Equity Derivatives – Use listed equity security pricing and implied volatilities from equity traded options position.
- Precious Metal Derivatives – Use spot and forward metal rates which are quoted in the broker market.

As discussed earlier, we make fair value adjustments to model valuations in order to ensure that those values represent appropriate estimates of fair value. These adjustments, which are applied consistently over time, are generally required to reflect factors such as bid-ask spreads and counterparty credit risk that can affect prices in arms-length transactions with unrelated third parties. Such adjustments are based on management judgment and may not be observable.

We estimate the counterparty credit risk for financial assets and our own credit standing for financial liabilities (the "credit valuation adjustments") in determining the fair value measurement. For derivative instruments, we calculate the credit valuation adjustment by applying the probability of default of the counterparty to the expected exposure, and multiplying the result by the expected loss given default. We also take into consideration the risk mitigating factors including collateral agreements and master netting agreements in determining credit valuation adjustments. We estimate the implied probability of default based on the credit spread of the specific counterparty observed in the credit default swap market. Where credit default spread of the counterparty is not available, we use the credit default spread of a specific proxy (e.g., the credit default swap spread of the counterparty's parent) or a proxy based on credit default swaps referencing to credit names of similar credit standing.

Real estate owned - Fair value is determined based on third party appraisals obtained at the time we take title to the property and, if less than the carrying amount of the loan, the carrying amount of the loan is adjusted to the fair value. The carrying amount of the property is further reduced, if necessary, at least every 90 days to reflect observable local market data, including local area sales data.

Mortgage servicing rights - Mortgage servicing rights are recorded at fair value. The fair value for the mortgage servicing rights is determined based on a single rate path cash flow analysis approach which involves discounting servicing cash flows under static interest rate projections at risk-adjusted rates. The valuation model also incorporates our best estimates of the prepayment speed of the mortgage loans, current cost to service and discount rates which are unobservable.

Client share repurchase transactions designated under FVO - We elected to apply FVO accounting to certain client share repurchase transactions. The fair value of the assets and liabilities associated with these transactions is determined based on the value of the remaining shares to be delivered.

Structured notes and deposits designated under FVO – Structured notes and deposits are hybrid instruments containing embedded derivatives and are elected to be measured at fair value in their entirety under FVO accounting principles. The valuation of hybrid instruments is predominantly driven by the derivative features embedded within the instruments and our own credit risk. The valuation of embedded derivatives may include significant unobservable inputs such as correlation of the referenced credit names or volatility of the embedded option. Cash flows of the funded notes and deposits in their entirety, including the embedded derivatives, are discounted at the relevant interest rates for the duration of the instrument adjusted for our own credit spreads. The credit spreads so applied are determined with reference to our own debt issuance rates observed in primary and secondary markets, internal funding rates, and the structured note rates in recent executions.

Long-term debt designated under FVO – We elected to apply FVO accounting to certain of our own debt issuances for which fair value hedge accounting otherwise would have been applied. These own debt issuances elected under FVO are traded in secondary markets and, as such, the fair value is determined based on observed prices for the specific instrument. The observed market price of these instruments reflects the effect of our own credit spreads. The credit spreads applied to these instruments were derived from the spreads at the measurement date.

Additional Disclosures About the Fair Value of Financial Instruments that are Not Carried at Fair Value on the Consolidated Balance Sheet The fair value estimates set forth below are made solely to comply with disclosures required by generally accepted accounting principles in the United States and should be read in conjunction with the financial statements and notes included in this report.

The carrying amount of certain financial instruments recorded at cost on the consolidated balance sheet is considered to approximate fair value because they are short-term in nature, bear interest rates that approximate market rates, and generally have negligible credit risk. These items include cash and due from banks, interest bearing deposits with banks, customer acceptance assets and liabilities, federal funds sold and purchased, securities purchased and sold under resale and repurchase agreements, deposits with no stated maturity (e.g., demand, savings and certain money market deposits), short-term borrowings and dividends payable.

The following table summarizes the carrying value and estimated fair value of our financial instruments, excluding financial instruments that are carried at fair value on a recurring basis, at June 30, 2023 and December 31, 2022, and their classification within the fair value hierarchy:

June 30, 2023	**Carrying Value**	**Fair Value**	**Level 1**	**Level 2**	**Level 3**
			(in millions)		
Financial assets:					
Short-term financial assets, net of allowance for credit losses	**$ 30,339**	**$ 30,339**	**$ 831**	**$ 29,476**	**$ 32**
Federal funds sold and securities purchased under agreements to resell	**12,519**	**12,519**	**—**	**12,519**	**—**
Securities held-to-maturity, net of allowance for credit losses	**13,428**	**12,872**	**—**	**12,872**	**—**
Commercial loans, net of allowance for credit losses	**39,218**	**39,568**	**—**	**—**	**39,568**
Commercial loans held for sale	**622**	**622**	**—**	**622**	**—**
Consumer loans, net of allowance for credit losses	**18,105**	**16,042**	**—**	**—**	**16,042**
Consumer loans held for sale	**1**	**1**	**—**	**1**	**—**
Financial liabilities:					
Short-term financial liabilities	**$ 8,259**	**$ 8,259**	**$ —**	**$ 8,227**	**$ 32**
Deposits	**120,284**	**120,233**	**—**	**120,233**	**—**
Long-term debt	**10,465**	**11,024**	**—**	**11,024**	**—**

December 31, 2022	**Carrying Value**	**Fair Value**	**Level 1**	**Level 2**	**Level 3**
			(in millions)		
Financial assets:					
Short-term financial assets, net of allowance for credit losses	$ 18,802	$ 18,802	$ 1,004	$ 17,744	$ 54
Federal funds sold and securities purchased under agreements to resell	23,085	23,085	—	23,085	—
Securities held-to-maturity, net of allowance for credit losses	7,317	6,862	—	6,862	—
Commercial loans, net of allowance for credit losses	41,266	42,050	—	—	42,050
Commercial loans held for sale	112	112	—	112	—
Consumer loans, net of allowance for credit losses	17,510	15,984	—	—	15,984
Consumer loans held for sale	5	5	—	5	—
Financial liabilities:					
Short-term financial liabilities	$ 5,999	$ 5,999	$ —	$ 5,945	$ 54
Deposits	121,669	121,652	—	121,652	—
Long-term debt	9,213	9,769	—	9,769	—

Lending-related commitments - The fair value of loan commitments, revolving credit facilities and standby letters of credit are not included in the above table. The majority of the lending-related commitments are not carried at fair value on a recurring basis nor are they actively traded. These instruments generate fees, which approximate those currently charged to originate similar commitments, which are recognized over the term of the commitment period. Deferred fees on loan commitments, revolving credit facilities and standby letters of credit totaled $161 million and $158 million at June 30, 2023 and December 31, 2022, respectively.

20. Litigation and Regulatory Matters

The following supplements, and should be read together with, the disclosure in Note 30, "Litigation and Regulatory Matters," in our 2022 Form 10-K and in Note 20, "Litigation and Regulatory Matters," in our Form 10-Q for the three-month period ended March 31, 2023 (the "2023 First Quarter Form 10-Q"). Only those matters with significant updates and new matters since our disclosure in our 2022 Form 10-K and our 2023 First Quarter Form 10-Q are reported herein.

In addition to the matters described below and in our 2022 Form 10-K and our 2023 First Quarter Form 10-Q, in the ordinary course of business, we are routinely named as defendants in, or as parties to, various legal actions and proceedings relating to activities of our current and/or former operations. These legal actions and proceedings may include claims for substantial or indeterminate compensatory or punitive damages, or for injunctive relief. In the ordinary course of business, we also are subject to governmental and regulatory examinations, information-gathering requests, investigations and proceedings (both formal and informal), certain of which may result in adverse judgments, settlements, fines, penalties, injunctions or other relief. In connection with formal and informal inquiries by these regulators, we receive numerous requests, subpoenas and orders seeking documents, testimony and other information in connection with various aspects of our regulated activities.

Due to the inherent unpredictability of legal matters, including litigation, governmental and regulatory matters, particularly where the damages sought are substantial or indeterminate or when the proceedings or investigations are in the early stages, we cannot determine with any degree of certainty the timing or ultimate resolution of such matters or the eventual loss, fines, penalties or business impact, if any, that may result. We establish reserves for litigation, governmental and regulatory matters when those matters present loss contingencies that are both probable and can be reasonably estimated. Once established, reserves are adjusted from time to time, as appropriate, in light of additional information. The actual costs of resolving litigation and regulatory matters, however, may be substantially higher than the amounts reserved for those matters. Some of our exposure may be offset by applicable insurance coverage. We do not consider the possible availability of insurance coverage in determining the amounts of any accruals (although we record the amount of related insurance recoveries that are deemed probable up to the amount of the accrual).

For the legal matters disclosed below, including litigation and governmental and regulatory matters, as well as for the legal matters disclosed in Note 30, "Litigation and Regulatory Matters," in our 2022 Form 10-K and in Note 20, "Litigation and Regulatory Matters," in our 2023 First Quarter Form 10-Q, as to which a loss in excess of accrued liability is reasonably possible in future periods and for which there is sufficient currently available information on the basis of which management believes it can make a reliable estimate, we believe a reasonable estimate could be as much as $125 million for HUSI. The legal matters underlying this estimate of possible loss will change from time to time and actual results may differ significantly from this current estimate. As it concerns the disclosed investigations, based on the facts currently known for each of them, it is not practicable at this time for us to determine the terms on which these ongoing investigations will be resolved or the timing of a resolution. As matters progress, it is possible that any fines and/or penalties could be significant.

Given the substantial or indeterminate amounts sought in certain of these matters, and the inherent unpredictability of such matters, an adverse outcome in certain of these matters could have a material adverse effect on our consolidated financial statements in any particular quarterly or annual period.

Interest Rate Swap Investigation

In May 2023, HSBC Bank USA resolved an investigation by the U.S. Commodity Futures Trading Commission ("CFTC") regarding interest rate swap transactions related to bond issuances, among other issues. HSBC Bank USA paid a $45 million civil monetary penalty, an amount which was fully reserved in the third quarter of 2020. The CFTC's civil enforcement action filed in December 2019 against a now-former HSBC employee charging him with violating the Commodity Exchange Act's anti-fraud provisions in relation to a 2012 interest rate swap transaction remains ongoing.

Investigation Concerning Use of Unapproved Electronic Messaging Platforms

In May 2023, HSBC Bank USA and other HSBC entities resolved an investigation by the CFTC concerning compliance with records preservation requirements relating to the use of unapproved electronic messaging platforms for business communications. The HSBC entities paid a $30 million civil monetary penalty, an amount which was fully reserved in the fourth quarter of 2022.

Foreign Exchange ("FX") Matters

In *Nypl v. JPMorgan Chase, et al.*; (Case No. 1:15-CV-9300), the plaintiff has appealed the dismissal of the complaint.

Precious Metals Fix Matters

In re London Silver Fixing, Ltd. Antitrust Litigation (Silver Fix Litigation) In May 2023 the court granted HSBC's motion for judgment on the pleadings and dismissed the case. Plaintiffs have appealed.

Platinum and Palladium Fix Litigation In July 2023, the defendants filed a joint motion to dismiss the complaint.

Mortgage Securitization Trust Litigation In May 2023, Phoenix Light SF Limited withdrew its appeal and the court dismissed the case with prejudice. In the *Freedom Trust* case, HSBC Bank USA's motion seeking leave to appeal to the New York State Court of Appeals was denied. That action will now proceed.

Anti-Terrorism Act Cases

Charlotte Freeman, et al. v. HSBC Holdings plc, et al. In May 2023, plaintiffs filed a petition with the U.S. Supreme Court for review of the decision by the U.S. Court of Appeals for the Second Circuit affirming dismissal of the action.

Dana Bernhardt et al. v. HSBC Holdings plc, et al. In July 2023, plaintiffs filed a petition with the U.S. Supreme Court for review of the decision by the U.S. Court of Appeals for the D.C. Circuit affirming dismissal of the action.

First Citizens Litigation In May 2023, First-Citizens Bank & Trust Company ("First Citizens") brought a lawsuit against HSBC Bank USA, certain other HSBC entities, and seven HSBC Bank USA employees who had previously worked for Silicon Valley Bank ("SVB"). Among other claims, First Citizens, which purchased parts of SVB after its collapse in March 2023, alleges that the HSBC entities conspired with the individual defendants to solicit employees of First Citizens and that the individual defendants took confidential information belonging to SVB and/or First Citizens.

National Community Reinvestment Coalition Prompted by a complaint filed by the National Community Reinvestment Coalition, a non-profit organization, the U.S. Department of Housing and Urban Development ("HUD") has been investigating whether HSBC Bank USA violated the US Fair Lending Act by engaging in discriminatory lending practices in majority Black and Hispanic neighborhoods in six U.S. metropolitan areas from 2018 through 2021.

21. New Accounting Pronouncements

The following new accounting pronouncement was adopted during 2023:

Accounting Standards Update	Summary of Guidance	Financial Statement Impact
Troubled Debt Restructurings and Vintage Disclosures *Issued March 2022*	• Eliminates the accounting guidance for TDR Loans by creditors, while enhancing disclosure requirements for certain loan payment modifications by creditors made to borrowers experiencing financial difficulty. • Requires new disclosure of current-period gross charge-offs by year of origination for loans.	• The new guidance is being applied prospectively for new loan modifications beginning January 1, 2023 while the accounting for our remaining population of TDR Loans did not materially change. • See Note 6, "Loans," for the new disclosures required by this standard. • The adoption of this guidance did not have a material impact on our financial position or results of operations.

There have been no additional accounting pronouncements issued by the Financial Accounting Standards Board that are expected to have a material impact on our consolidated financial statements.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Forward-Looking Statements

Certain matters discussed throughout this Form 10-Q are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. In addition, we may make or approve certain statements in future filings with the United States Securities and Exchange Commission ("SEC"), in press releases, or oral or written presentations by representatives of HSBC USA Inc. ("HSBC USA" and, together with its subsidiaries, "HUSI") that are not statements of historical fact and may also constitute forward-looking statements. Words such as "may," "will," "should," "would," "could," "appears," "believe," "intends," "expects," "estimates," "targeted," "plans," "anticipates," "goal," and similar expressions are intended to identify forward-looking statements but should not be considered as the only means through which these statements may be made. These matters or statements will relate to our future operations, strategy, financial condition, economic forecast, results of operations, plans, objectives, performance or business developments and will involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from that which was expressed or implied by such forward-looking statements.

All forward-looking statements are, by their nature, subject to risks and uncertainties, many of which are beyond our control. Our actual future results may differ materially from those set forth in our forward-looking statements. While there is no assurance that any list of risks and uncertainties or risk factors is complete, below are certain factors which could cause actual results to differ materially from those in the forward-looking statements:

- our ability to effectively implement and deliver on our business strategies, and the effect implementation of our business strategy may have on our financial results, operations and relationships with our customers, regulators, employees and other stakeholders;
- uncertainty concerning the future market and economic conditions in the United States and abroad, including but not limited to, changes in interest rates, energy prices, inflation, supply chain issues, a decline in housing prices, the availability of credit and liquidity, unemployment levels, turmoil in the financial markets and related efforts of government agencies to stabilize the financial system, changes in consumer confidence and consumer spending and behavior, consumer perception as to the continuing availability of credit and price competition in the market segments we serve and the consequences of unexpected geopolitical events, such as trade disputes;
- compliance with the Chinese National Security Law and the Hong Kong Autonomy Act, which may impact, among other things, individuals or entities with which we are able to conduct business;
- changes in laws and regulatory requirements;
- the potential impact of any legal, regulatory or policy changes affecting financial institutions and the global economy as a result of the new administration;
- the ability to deliver on our regulatory priorities;
- capital and liquidity requirements under Basel guidance, the Federal Reserve Board's ("FRB") Comprehensive Capital Analysis and Review ("CCAR") program, and the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 ("Dodd-Frank Act" or "Dodd-Frank") stress testing ("DFAST"), including the U.S. FRB requirements for U.S. global systemically important banks ("G-SIBs") and U.S. intermediate holding companies ("IHCs") owned by non-U.S. G-SIBs to issue total loss-absorbing capacity ("TLAC") instruments;
- regulatory requirements in the U.S. and in non-U.S. jurisdictions to facilitate the future orderly resolution of large financial institutions;
- changes in central banks' policies with respect to the provision or removal of liquidity support to financial markets;
- the ability of HSBC Holdings plc ("HSBC" and, together with its subsidiaries, "HSBC Group") and HSBC Bank USA, National Association (together with its subsidiaries, "HSBC Bank USA") to fulfill the requirements imposed by a consent order or guidance from regulators generally;
- the use of us as a conduit for illegal activities without our knowledge by third parties;
- the ability to successfully manage our risks;
- the possibility of the inadequacy of our data management and policies and processes;
- the financial condition of our clients and counterparties and our ability to manage counterparty risk;
- concentrations of credit and market risk;
- increases in our allowance for credit losses and changes in our assessment of our loan portfolios;
- the ability to successfully implement changes to our operational practices as needed and/or required from time to time;

- damage to our reputation;
- the ability to attract or retain key employees, including foreign workers, and customers;
- the effects of competition in the markets where we operate including increased competition from non-bank financial services companies, including securities firms;
- the effects of operational risks that are inherent in banking operations, including fraudulent and other criminal activities, breakdowns in processes or procedures and systems failure or non-availability;
- disruption in our operations from the external environment arising from events such as natural disasters, outbreaks of contagious disease, acts of war, terrorist attacks, or essential utility outages;
- risks associated with Environmental, Social and Governance ("ESG") matters such as climate change and anti-trust and human rights issues;
- a failure in or a breach of our operation or security systems or infrastructure, or those of third party servicers or vendors, including as a result of cyberattacks;
- the ability of third party suppliers, outsourcing vendors, off-shored functions and our affiliates to provide adequate services;
- losses suffered due to the negligence, fraud or misconduct of our employees or the negligence, fraud or misconduct on the part of third parties;
- a failure in our internal controls;
- our ability to meet our funding requirements;
- adverse changes to our credit ratings;
- financial difficulties or credit downgrades of mortgage bond insurers;
- changes in Financial Accounting Standards Board and International Accounting Standards Board ("IASB") accounting standards and their interpretation;
- heightened regulatory and government enforcement scrutiny of financial institutions, including in connection with product governance and sales practices, account opening and closing procedures, customer and employee complaints and sales compensation structures related to such practices;
- possible negative impact of regulatory investigations and legal proceedings related to alleged foreign exchange manipulation;
- changes in the methodology for determining benchmark rates and the implementation of alternative benchmark rates, such as the Secured Overnight Financing Rate ("SOFR");
- heightened regulatory and government enforcement scrutiny of financial markets, with a particular focus on traded asset classes, including foreign exchange;
- the possibility of incorrect assumptions or estimates in our financial statements, including reserves related to litigation, deferred tax assets and the fair value of certain assets and liabilities;
- model limitations or failure;
- the possibility of incorrect interpretations, application of or changes in tax laws to which we and our clients are subject;
- unexpected and/or increased expenses relating to, among other things, litigation and regulatory matters, remediation efforts, penalties and fines; and
- the other risk factors and uncertainties described under Item 1A, "Risk Factors," in our Annual Report on Form 10-K for the year ended December 31, 2022 (the "2022 Form 10-K").

Forward-looking statements are based on our current views and assumptions and speak only as of the date they are made. We undertake no obligation to update any forward-looking statement to reflect subsequent circumstances or events. You should, however, consider any additional disclosures of a forward-looking nature that arise after the date hereof as may be discussed in any of our subsequent Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q or Current Reports on Form 8-K.

Executive Overview

HSBC USA is a wholly-owned subsidiary of HSBC North America Holdings Inc. ("HSBC North America"), which is an indirect wholly-owned subsidiary of HSBC. HUSI may also be referred to in Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") as "we," "us" or "our."

Economic Environment The U.S. economy grew during the first half of 2023 despite continued pressures from high inflation and rising interest rates, which are expected to lead to a slowdown of future economic growth. In addition, bank failures earlier in the year have raised concerns about potential weakness in the banking sector, which could lead to tighter credit conditions for households and businesses, further weighing on economic activity. U.S. Gross Domestic Product ("GDP") grew at an estimated annual rate of 2.4 percent in the second quarter of 2023, while the personal consumption expenditures price index of 3.0 percent in June 2023 remained above the FRB's target inflation rate. After increasing short-term interest rates by a total of 75 basis points during the first five months of 2023, the FRB decided to hold short-term interest rates steady in June while indicating that future rate increases are likely depending upon future economic conditions. In July 2023, the FRB decided to raise short-term interest rates by another 25 basis points.

The impacts of high inflation, rising interest rates and the expectation for slowing future economic growth, in addition to recent banking sector concerns, have created significant uncertainty about the future economic environment which will continue to impact our business in future periods. Concerns over domestic and global policy issues, trade policy in the U.S. and geopolitical events, as well as the implications of those events on the markets in general, further add to the global uncertainty. There is also a risk that interest rate increases to fight inflation could lead to a recession. Interest rate levels, inflation and economic growth, in combination with global economic conditions, fiscal and monetary policy and the level of regulatory and government scrutiny of financial institutions will continue to impact our results in 2023 and beyond.

Performance, Developments and Trends During the first half of 2023, three regional bank failures triggered turmoil throughout the banking industry as contagion fears spread. To date, we have not experienced any significant impact to our liquidity, deposits or funding capabilities as a result of this industry turmoil. In May 2023, the Federal Deposit Insurance Corporation ("FDIC") issued a proposed rule that would impose a special assessment on certain FDIC-insured banks, including HSBC Bank USA, to recover the loss to the Deposit Insurance Fund arising from the protection of uninsured depositors following a determination of systemic risk in connection with the failures of Silicon Valley Bank and Signature Bank. The special assessment would be based on an insured depository institution's estimated uninsured deposits reported as of December 31, 2022 and would be collected over eight quarterly assessment periods beginning with the first quarter of 2024. If finalized as proposed, the special assessment is expected to result in approximately $225 million of additional deposit insurance assessment fees for HUSI, which will be accrued once the rule becomes final, which may occur as early as the third quarter of 2023. Because the estimated loss to the Deposit Insurance Fund will be periodically adjusted as actual losses are incurred, the FDIC would retain the ability to cease collection early or extend the special assessment collection period, as needed.

During the second quarter of 2023, we transferred certain commercial real estate loans to held for sale with a carrying value of $507 million as part of an effort to reduce exposure to this sector. We recorded a lower of amortized cost or fair value adjustment of $34 million upon transferring these loans to held for sale. See Note 8, "Loans Held for Sale," in the accompanying consolidated financial statements for additional information.

During the second quarter of 2023, we paid a dividend on our common stock of $1.0 billion from retained earnings to HSBC North America.

The following tables set forth selected financial metrics of HUSI for the three and six months ended June 30, 2023 and 2022 and at June 30, 2023 and December 31, 2022:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
	(dollars are in millions)			
Net income	**$ 151**	$ 90	**$ 368**	$ 291
Rate of return on average:				
Total assets	**.4 %**	.2 %	**.4 %**	.3 %
Common equity	**4.6**	1.4	**5.9**	3.4
Tangible common equity[1]	**4.8**	1.5	**6.1**	3.5
Total equity	**4.8**	2.3	**5.9**	3.6
Net interest margin	**1.13**	1.32	**1.20**	1.21
Efficiency ratio	**73.4**	79.2	**70.2**	75.0
Commercial net charge-off ratio[2]	**—**	.01	**.02**	.08
Consumer net charge-off ratio[2]	**.02**	(.12)	**.06**	(.11)

(1) The following table provides a reconciliation of average common equity to average tangible common equity:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
	(in millions)			
Common equity	**$ 12,440**	$ 14,532	**$ 12,267**	$ 15,018
Less: Goodwill	**458**	458	**458**	458
Tangible common equity	**$ 11,982**	$ 14,074	**$ 11,809**	$ 14,560

(2) Excludes loans held for sale.

	June 30, 2023	December 31, 2022
Additional Select Ratios:		
Allowance as a percent of loans[1]	**1.04 %**	.98 %
Commercial allowance as a percent of loans[1]	**1.49**	1.32
Consumer allowance as a percent of loans[1]	**.07**	.19
Loans to deposits ratio[2]	**47.96**	48.00
Common equity Tier 1 capital to risk-weighted assets	**13.2**	13.5
Tier 1 capital to risk-weighted assets	**13.4**	13.8
Total capital to risk-weighted assets	**15.8**	16.1
Tier 1 leverage ratio	**8.1**	8.5
Total equity to total assets	**7.0**	7.4

(1) Excludes loans held for sale.

(2) Represents period end loans, net of allowance for loan losses, as a percentage of total deposits.

Net income was $151 million and $368 million during the three and six months ended June 30, 2023, respectively, compared with $90 million and $291 million during the three and six months ended June 30, 2022, respectively. Income before income tax was $199 million and $486 million during the three and six months ended June 30, 2023, respectively, compared with $113 million and $379 million during the three and six months ended June 30, 2022, respectively. The increase in income before income tax during the three months ended June 30, 2023 was due to higher other revenues driven by higher trading revenue as well as lower operating expenses and a lower provision for credit losses. These increases in the three-month period were partially offset by lower net interest income as interest expense on deposits and interest bearing liabilities grew faster than interest income on loans and interest bearing assets.

In the year-to-date period, the increase in income before income tax was due to lower operating expenses driven by the completion of our strategic plan to restructure our operations ("Restructuring Plan"), including the non-recurrence of $114 million of costs related to the delivery of our Restructuring Plan ("Costs to Achieve") recorded during the six months ended June 30, 2022 as discussed further below. Also contributing to the increase in the year-to-date period were higher other

revenues driven by higher trading revenue and a lower provision for credit losses. These increases in the year-to-date period were partially offset by lower net interest income for the reasons discussed above.

As previously disclosed, we completed our Restructuring Plan over the three-year period of 2020-2022. Costs to Achieve primarily consisted of lease impairment and other related costs, severance costs and allocated costs from HSBC Technology & Services (USA) Inc. ("HTSU"). Costs to Achieve also included allocated costs from other HSBC affiliates related to the HSBC Group's restructuring activities. See Note 2, "Strategic Initiatives," in the accompanying consolidated financial statements for a more detailed discussion of these costs.

See "Results of Operations" for a more detailed discussion of our operating trends. In addition, see "Balance Sheet Review" for further discussion on our asset and liability trends, "Liquidity and Capital Resources" for further discussion on funding and capital and "Credit Quality" for additional discussion on our credit trends.

London Interbank Offered Rate ("LIBOR") Transition Regulators and central banks in various national jurisdictions have been working to help transition from interbank offered rates to acceptable alternative rates, such as SOFR. As previously disclosed, the remaining overnight, one-month, three-month, six-month and twelve-month U.S. dollar ("USD") LIBOR tenors have either ceased to be provided by any administrator or become no longer representative immediately after June 30, 2023, although in March 2023, the United Kingdom ("U.K") Financial Conduct Authority announced that the more commonly used one-month, three-month and six-month USD LIBOR tenors will continue to be published until September 30, 2024, using an amended methodology (i.e., on an unrepresentative "synthetic" basis). These synthetic tenors are available only for use in certain legacy contracts, and are not for use in new business.

As of June 30, 2023, substantially all of our remaining USD LIBOR-based contracts, consisting primarily of contracts for loans, derivatives and debt, have been successfully transitioned onto replacement rates, are set to automatically transition at the first applicable reset subsequent to June 30, 2023 or included appropriate fallback provisions upon cessation.

Basis of Reporting

Our consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States ("U.S. GAAP").

Group Reporting Basis We report financial information to HSBC in accordance with HSBC Group accounting and reporting policies, which apply International Financial Reporting Standards ("IFRSs") as issued by the IASB. As a result, our segment results are prepared and presented using financial information prepared on the basis of HSBC Group's accounting and reporting policies ("Group Reporting Basis"). Because operating results on the Group Reporting Basis are used in managing our businesses and rewarding performance of employees, our management also separately monitors profit before tax under this basis of reporting. The following table reconciles our U.S. GAAP versus Group Reporting Basis profit before tax:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	**2022**	**2023**	**2022**
	(in millions)			
Profit before tax – U.S. GAAP basis	**$ 199**	$ 113	**$ 486**	$ 379
Adjustments:				
Other long-lived assets	**162**	12	**195**	23
Loans held for sale	**36**	11	**34**	6
Renewable energy tax credit investments	**5**	6	**9**	13
Expected credit losses	**4**	22	**(4)**	74
Other	**(5)**	(4)	**2**	(2)
Profit before tax – Group Reporting Basis	**$ 401**	$ 160	**$ 722**	$ 493

The significant differences between U.S. GAAP and the Group Reporting Basis as they impact our results are summarized in Note 25, "Business Segments," in our 2022 Form 10-K. There have been no significant changes since December 31, 2022 in the differences between U.S. GAAP and the Group Reporting Basis impacting our results. Differences in reported profit before tax in the table above that were individually significant for the periods presented are explained below.

During the three and six months ended June 30, 2023, other long-lived assets in the table above reflects a reversal of $149 million of impairment charges under the Group Reporting Basis related to capitalized software and leasehold improvements primarily associated with our Wealth and Personal Banking business segment which were previously written-off. In 2020, we recorded an impairment charge under the Group Reporting Basis related to the write-off of all the capitalized

software and a portion of the leasehold improvements primarily associated with our Wealth and Personal Banking business segment, while under U.S. GAAP no impairment charge was required. Subsequent to recognition of the impairment charge in 2020, expenditures for software development and newly completed leasehold improvements in our Wealth and Personal Banking business segment were capitalized and amortized over their useful lives under U.S. GAAP, but not under the Group Reporting Basis. Consequently, the carrying amounts of capitalized software and leasehold improvements were higher under U.S. GAAP than under the Group Reporting Basis and, as a result, corresponding amortization expense was higher under U.S. GAAP. During the second quarter of 2023, we determined that the cash generating unit was no longer impaired under the Group Reporting Basis and that its estimated fair value exceeded its carrying value, which resulted in the re-establishment of these assets at their recoverable amount net of amortization that would have been recorded had no impairment loss been recognized and excluding any assets that have since been sold. In addition, during the first half of 2023, we recorded $22 million of lease related impairment charges under U.S. GAAP associated with the exit of certain office space, while under the Group Reporting Basis, impairment was recognized when we committed to vacate the space in the fourth quarter of 2022.

During the three and six months ended June 30, 2022, amortization expense for long-lived assets was higher under U.S. GAAP due primarily to the impact of the impairment charge recorded under the Group Reporting Basis in 2020 as discussed above.

During the three and six months ended June 30, 2023, we transferred certain loans to held for sale which under U.S. GAAP requires the loans to be carried at the lower of amortized cost or fair value which resulted in lower of amortized cost or fair value adjustments on the loans. Under the Group Reporting Basis, loans held for sale continue to be accounted for and credit losses continue to be measured in accordance with IFRS 9, "Financial Instruments," with any gain or loss recorded at the time of sale.

During the three and six months ended June 30, 2022, expected credit losses were higher under U.S. GAAP than under the Group Reporting Basis. Under the Group Reporting Basis, a majority of our loans are considered to be in "stage 1" (which requires a 12-month expected credit losses estimate), while under U.S. GAAP such loans require a lifetime expected credit losses ("ECL") estimate. Primarily as a result of the different requirements, loss provisions driven by the weakening of economic conditions, including a worsening of economic forecasts in the three-month period, as well as higher provisions associated with loan growth and maturity extensions, were more pronounced under U.S. GAAP.

Balance Sheet Review

The following table provides balance sheet totals at June 30, 2023 and increases (decreases) since December 31, 2022:

		Increase (Decrease) From December 31, 2022	
	June 30, 2023	Amount	%
	(dollars are in millions)		
Period end assets:			
Short-term investments	**$ 42,826**	$ 993	2.4 %
Loans, net	**57,340**	(1,456)	(2.5)
Loans held for sale	**997**	643	*
Trading assets	**19,391**	(2,339)	(10.8)
Securities	**39,687**	5,025	14.5
All other assets	**6,687**	(593)	(8.1)
	$ 166,928	$ 2,273	1.4 %
Period end liabilities and equity:			
Total deposits	**$ 121,636**	$ (1,587)	(1.3)%
Trading liabilities	**2,699**	(104)	(3.7)
Short-term borrowings	**8,227**	2,282	38.4
Long-term debt	**19,671**	2,080	11.8
Interest, taxes and other liabilities	**3,038**	58	1.9
Total equity	**11,657**	(456)	(3.8)
	$ 166,928	$ 2,273	1.4 %

* Percentage change is greater than 100 percent.

Short-Term Investments Short-term investments include cash and due from banks, interest bearing deposits with banks and federal funds sold and securities purchased under agreements to resell. Balances may fluctuate from period to period depending upon our liquidity position at the time and our strategy for deploying liquidity. Short-term investments increased compared with December 31, 2022 due to an increase in overall liquidity as we raised funds in advance of their usage. The increase in funds was driven by lower trading asset positions, higher short-term borrowings and new issuances of long-term debt as discussed in detail below. These increases were partially offset by net purchases of securities and lower deposits.

Loans, Net The following table summarizes our loan balances at June 30, 2023 and increases (decreases) since December 31, 2022:

		Increase (Decrease) From December 31, 2022	
	June 30, 2023	Amount	%
	(dollars are in millions)		
Commercial loans:			
Real estate, including construction	**$ 7,185**	$ (778)	(9.8)%
Business and corporate banking	**16,169**	94	.6
Global banking[1]	**10,127**	(451)	(4.3)
Other commercial[2]	**6,330**	(871)	(12.1)
Total commercial	**39,811**	(2,006)	(4.8)
Consumer loans:			
Residential mortgages	**17,452**	614	3.6
Home equity mortgages	**364**	(6)	(1.6)
Credit cards	**197**	(16)	(7.5)
Other consumer	**121**	(21)	(14.8)
Total consumer	**18,134**	571	3.3
Total loans	**57,945**	(1,435)	(2.4)
Allowance for credit losses[3]	**605**	21	3.6
Loans, net	**$ 57,340**	$ (1,456)	(2.5)%

(1) Represents large multinational firms including globally focused U.S. corporate and financial institutions, U.S. dollar lending to multinational banking clients managed by HSBC on a global basis and complex large business clients supported by Global Banking and Markets relationship managers.

(2) Includes loans to HSBC affiliates which totaled $3,067 million and $3,557 million at June 30, 2023 and December 31, 2022, respectively.

(3) See "Credit Quality" in this MD&A for a discussion of trends in our allowance for credit losses on loans.

Commercial loans decreased compared with December 31, 2022 due to paydowns and maturities exceeding new business activity as we continued to apply a disciplined lending approach. Also contributing to the decrease were the transfer of certain commercial real estate loans to held for sale as discussed below as well as lower loans to affiliates. The decline in commercial non-affiliate loans was primarily in the real estate, software and consumer durables industries, partially offset by increases in the utilities and semiconductor industries.

Consumer loans increased compared with December 31, 2022 driven by growth in residential mortgage loans.

The following table presents loan-to-value ("LTV") ratios for our residential mortgage loan portfolio, excluding mortgage loans held for sale:

	LTV Ratios[1][2]			
	June 30, 2023		December 31, 2022	
	First Lien	Second Lien	First Lien	Second Lien
LTV < 80%	**97.2 %**	**97.1 %**	98.5 %	98.9 %
80% ≤ LTV < 90%	**2.8**	**2.9**	1.5	1.1
90% ≤ LTV < 100%	**—**	**—**	—	—
LTV ≥ 100%	**—**	**—**	—	—
Average LTV for portfolio	**50.5**	**45.8**	48.8	43.1

(1) LTVs for first liens are calculated using the loan balance as of the reporting date. LTVs for second liens are calculated using the loan balance as of the reporting date plus the senior lien amount at origination. Current estimated property values are derived from the property's appraised value at the time of

loan origination updated by the change in the Federal Housing Finance Agency's House Price Index ("HPI") at either a Core Based Statistical Area or state level. The estimated value of the homes could differ from actual fair values due to changes in condition of the underlying property, variations in housing price changes within metropolitan statistical areas and other factors. As a result, actual property values associated with loans that end in foreclosure may be significantly lower than the estimates used for purposes of this disclosure.

(2) Current estimated property values are calculated using the most current HPIs available and applied on an individual loan basis, which results in an approximate three month delay in the production of reportable statistics. Therefore, the information in the table above reflects current estimated property values using HPIs at March 31, 2023 and September 30, 2022, respectively.

Loans Held for Sale The following table summarizes loans held for sale at June 30, 2023 and increases (decreases) since December 31, 2022:

		Increase (Decrease) From December 31, 2022	
	June 30, 2023	**Amount**	**%**
		(dollars are in millions)	
Commercial loans:			
Real estate, including construction	**$ 507**	$ 507	*
Business and corporate banking	**11**	11	*
Global banking	**478**	129	37.0
Total commercial	**996**	647	*
Consumer loans:			
Residential mortgages	**1**	(4)	(80.0)
Total consumer	**1**	(4)	(80.0)
Total loans held for sale	**$ 997**	$ 643	*

* Percentage change is greater than 100 percent.

Commercial loans held for sale increased compared with December 31, 2022. During the second quarter of 2023, we transferred certain commercial real estate loans to held for sale with a carrying value of $507 million as part of an effort to reduce exposure to this sector.

Also included in commercial loans held for sale are certain other loans that we no longer intend to hold for investment and were transferred to held for sale which totaled $115 million and $112 million at June 30, 2023 and December 31, 2022, respectively.

Commercial loans held for sale also includes certain loans that we have elected to designate under the fair value option which consists of loans that we originate in connection with our participation in a number of syndicated credit facilities with the intent of selling them to unaffiliated third parties as well as loans that we purchase from the secondary market and hold as hedges against our exposure to certain total return swaps or intend to sell. The fair value of these loans totaled $374 million and $237 million at June 30, 2023 and December 31, 2022, respectively. Balances will fluctuate from period to period depending on the volume and level of activity.

Consumer loans held for sale decreased compared with December 31, 2022. Included in residential mortgage loans held for sale are agency-eligible conforming residential mortgage loans which are originated and held for sale to third parties, currently on a servicing retained basis. Balances will fluctuate from period to period depending on the volume and level of activity. Gains and losses from the sale of these residential mortgage loans are reflected as a component of other income (loss) in the accompanying consolidated statement of income.

Excluding the loans designated under the fair value option discussed above, loans held for sale are recorded at the lower of amortized cost or fair value, with adjustments to fair value being recorded as a valuation allowance through other revenues. The valuation allowance on commercial loans held for sale was $37 million and nil at June 30, 2023 and December 31, 2022, respectively. The valuation allowance on consumer loans held for sale was nil at both June 30, 2023 and December 31, 2022.

Trading Assets and Liabilities The following table summarizes trading assets and liabilities at June 30, 2023 and increases (decreases) since December 31, 2022:

	June 30, 2023	Increase (Decrease) From December 31, 2022 Amount	%
	(dollars are in millions)		
Trading assets:			
Securities[1]	**$ 15,465**	$ (820)	(5.0)%
Precious metals	**2,605**	(1,226)	(32.0)
Derivatives, net	**1,321**	(293)	(18.2)
	$ 19,391	$ (2,339)	(10.8)%
Trading liabilities:			
Securities sold, not yet purchased	**$ 1,267**	$ 430	51.4 %
Derivatives, net	**1,432**	(534)	(27.2)
	$ 2,699	$ (104)	(3.7)%

(1) See Note 4, "Trading Assets and Liabilities," in the accompanying consolidated financial statements for a breakout of trading securities by category.

Trading securities balances were lower compared with December 31, 2022 due to a decrease in foreign sovereign positions, partially offset by increases in equity and U.S. Treasury positions. Trading security positions are primarily held as economic hedges of interest rate, credit and equity derivative products issued to clients of domestic and emerging markets. Balances of securities sold, not yet purchased were higher compared with December 31, 2022 due to an increase in short U.S. Treasury positions related to economic hedges of trading security positions held for Community Reinvestment Act purposes.

Precious metals trading assets were lower compared with December 31, 2022 due primarily to declines in our own gold and silver inventory positions. Precious metal positions may not represent our net underlying exposure as we may use derivatives contracts to reduce our risk associated with these positions, the fair value of which would appear in derivatives in the table above.

Derivative asset and liability balances both declined compared with December 31, 2022 mainly from market movements which resulted in lower valuations of foreign exchange and interest rate derivatives. Market movements on equity derivatives were mixed, resulting in lower derivative asset valuations, but higher derivative liability valuations.

Securities Securities include securities available-for-sale and securities held-to-maturity, net. Securities balances were higher compared with December 31, 2022 driven by purchases of U.S. Government agency mortgage-backed and U.S. Treasury securities held-to-maturity, partially offset by sales, paydowns and maturities of securities available-for-sale as part of our continuing strategy to maximize returns while balancing the securities portfolio for risk management purposes.

All Other Assets All other assets include, among other items, properties and equipment, net, and goodwill. All other assets were lower compared with December 31, 2022 due primarily to a decline in cash collateral posted and lower assets associated with client share repurchase transactions.

Deposits The following table summarizes deposit balances by major depositor categories at June 30, 2023 and increases (decreases) since December 31, 2022:

	June 30, 2023	Increase (Decrease) From December 31, 2022 Amount	%
	(dollars are in millions)		
Individuals, partnerships and corporations	**$ 107,038**	$ (1,132)	(1.0)%
Domestic and foreign banks	**11,158**	(1,198)	(9.7)
U.S. government and states and political subdivisions	**143**	(17)	(10.6)
Foreign governments and official institutions	**3,297**	760	30.0
Total deposits	**$ 121,636**	$ (1,587)	(1.3)%

Total deposits decreased compared with December 31, 2022 due primarily to the continued attrition of retail savings and demand deposits as well as lower deposits from a few large private banking clients. These decreases were partially offset by increased time deposits.

Short-Term Borrowings Short-term borrowings were higher compared with December 31, 2022 reflecting increases in federal funds purchased and commercial paper outstanding.

Long-Term Debt Long-term debt increased compared with December 31, 2022 due to debt issuances and fair value movements on fair value option debt, partially offset by debt retirements. Debt issuances during the three and six months ended June 30, 2023 totaled $875 million and $2,912 million, respectively, of which $4 million and $7 million, respectively, was issued by HSBC Bank USA.

Incremental issuances from our shelf registration statement with the SEC totaled $2,905 million of senior debt during the six months ended June 30, 2023, which included $1,250 million of senior notes that were issued by HSBC USA in March as well as $1,655 million of structured notes. Total long-term debt outstanding under this shelf was $10,984 million and $9,597 million at June 30, 2023 and December 31, 2022, respectively.

Incremental issuances from the HSBC Bank USA Global Bank Note Program totaled $7 million during the six months ended June 30, 2023. Total debt outstanding under this program was $1,935 million and $1,932 million at June 30, 2023 and December 31, 2022, respectively.

Borrowings from the Federal Home Loan Bank ("FHLB") totaled $1,000 million at both June 30, 2023 and December 31, 2022.

Interest, Taxes and Other Liabilities Interest, taxes and other liabilities were flat compared with December 31, 2022 as higher outstanding settlement balances related to security purchases and higher tax liabilities were largely offset by lower liabilities associated with client share repurchase transactions.

Total Equity Total equity decreased compared with December 31, 2022 due primarily to a dividend paid on our common stock of $1.0 billion from retained earnings to HSBC North America during the second quarter of 2023. See Note 16, "Retained Earnings and Regulatory Capital Requirements," in the accompanying consolidated financial statements for additional details.

Results of Operations

Net Interest Income Net interest income is the total interest income on earning assets less the total interest expense on deposits and borrowed funds. An analysis of consolidated average balances and interest rates is presented in this MD&A under the caption "Consolidated Average Balances and Interest Rates."

The significant components of net interest margin are summarized in the following table:

Three Months Ended June 30,	2023	2023 Compared with 2022 Increase (Decrease) Volume	Rate	2022
		(dollars are in millions)		
Interest income:				
Short-term investments	**$ 416**	$ (21)	$ 327	$ 110
Trading securities	**60**	2	3	55
Securities	**368**	10	189	169
Commercial loans	**706**	(16)	413	309
Consumer loans	**155**	6	21	128
Other	**18**	(4)	10	12
Total interest income	**1,723**	(23)	963	783
Interest expense:				
Deposits	**869**	(2)	736	135
Short-term borrowings	**120**	1	98	21
Long-term debt	**290**	28	173	89
Tax liabilities and other	**10**	2	2	6
Total interest expense	**1,289**	29	1,009	251
Net interest income	**$ 434**	$ (52)	$ (46)	$ 532
Yield on total interest earning assets	**4.47 %**			1.94 %
Cost of total interest bearing liabilities	**4.33**			.87
Interest rate spread	**.14**			1.07
Benefit from net non-interest paying funds[1]	**.99**			.25
Net interest margin on average earning assets	**1.13 %**			1.32 %

Six Months Ended June 30,	2023	2023 Compared with 2022 Increase (Decrease) Volume	Rate	2022
		(dollars are in millions)		
Interest income:				
Short-term investments	**$ 826**	$ (31)	$ 720	$ 137
Trading securities	**109**	(12)	3	118
Securities	**691**	(11)	392	310
Commercial loans	**1,363**	(6)	822	547
Consumer loans	**301**	(3)	38	266
Other	**37**	(4)	24	17
Total interest income	**3,327**	(67)	1,999	1,395
Interest expense:				
Deposits	**1,625**	(9)	1,441	193
Short-term borrowings	**220**	—	194	26
Long-term debt	**546**	34	355	157
Tax liabilities and other	**19**	1	8	10
Total interest expense	**2,410**	26	1,998	386
Net interest income	**$ 917**	$ (93)	$ 1	$ 1,009
Yield on total interest earning assets	**4.35 %**			1.68 %
Cost of total interest bearing liabilities	**4.11**			.65
Interest rate spread	**.24**			1.03
Benefit from net non-interest paying funds[1]	**.96**			.18
Net interest margin on average earning assets	**1.20 %**			1.21 %

[1] Represents the benefit associated with interest earning assets in excess of interest bearing liabilities. Increased percentages reflect growth in this excess or a higher cost of interest bearing liabilities, while decreased percentages reflect a reduction in this excess or a lower cost of interest bearing liabilities.

Net interest income decreased during the three and six months ended June 30, 2023 due to higher interest expense from interest bearing liabilities driven by higher rates paid and higher long-term debt average balances, partially offset by higher interest income from loans, short-term investments and securities driven by higher yields. Also contributing to the decrease in the year-to-date period was the unfavorable impact of lower average interest bearing asset balances.

Short-term investments Interest income increased during the three and six months ended June 30, 2023 due to higher yields reflecting the impact of higher market rates, partially offset by lower average balances.

Trading securities Interest income increased modestly during the three months ended June 30, 2023 due primarily to higher yields reflecting the impact of higher market rates. In the year-to-date period, interest income decreased as the impact of higher yields was more than offset by lower average balances driven by a decline in equity positions, partially offset by an increase in foreign sovereign positions. Interest income associated with trading securities was partially offset within trading revenue by the performance of the associated derivatives as discussed further below.

Securities Interest income was higher during the three and six months ended June 30, 2023 due primarily to higher yields reflecting the impact of higher market rates. While average balances were higher and contributed to the increase in the three-month period, they were lower and partially offset the increase in the year-to-date period. In the three-month period, higher average balances were due primarily to an increase in U.S. Government agency mortgage-backed securities, partially offset by declines in U.S. Government sponsored mortgage-backed and foreign sovereign securities. In the year-to-date period, the increase in U.S. Government agency mortgage-backed securities was more than offset by declines in U.S. Government sponsored mortgage-backed and foreign sovereign securities.

Commercial loans Interest income increased during the three and six months ended June 30, 2023 due to higher yields reflecting the impact of higher market rates on variable rate loans and newly originated loans, partially offset by lower average balances.

Consumer loans Interest income was higher during the three and six months ended June 30, 2023 due primarily to higher yields on residential mortgage loans reflecting the impact of higher market rates on variable rate loans and newly originated loans.

Other Higher interest income during the three and six months ended June 30, 2023 was due to higher yields reflecting the impact of higher market rates on cash collateral posted and Federal Reserve Bank stock, partially offset by lower average balances.

Deposits Interest expense increased during the three and six months ended June 30, 2023 due to higher rates paid reflecting the impact of higher market rates and, to a lesser extent, a shift in mix to higher cost time deposits.

Short-term borrowings Higher interest expense during the three and six months ended June 30, 2023 was due to higher rates paid reflecting the impact of higher market rates.

Long-term debt Interest expense increased during the three and six months ended June 30, 2023 due primarily to higher rates paid reflecting the impact of higher market rates on variable rate borrowings and newly issued debt. Also contributing to the increase, to a lesser extent, were higher average balances.

Tax liabilities and other Interest expense increased during the three and six months ended June 30, 2023 due primarily to higher rates paid on securities sold, not yet repurchased reflecting the impact of higher market rates.

Provision for Credit Losses The following table summarizes the components of the provision for credit losses:

			Increase (Decrease)	
Three Months Ended June 30,	**2023**	**2022**	**Amount**	**%**
		(dollars are in millions)		
Loans:				
Commercial loans:				
Real estate, including construction	**$ (26)**	$ 40	$ (66)	*
Business and corporate banking	**31**	22	9	40.9
Global banking	**19**	(2)	21	*
Other commercial	**—**	(1)	1	100.0
Total commercial loans	**24**	59	(35)	(59.3)
Consumer loans:				
Residential mortgages	**(12)**	(1)	(11)	*
Home equity mortgages	**4**	1	3	*
Credit cards	**1**	5	(4)	(80.0)
Other consumer	**1**	(1)	2	*
Total consumer loans	**(6)**	4	(10)	*
Total loans	**18**	63	(45)	(71.4)
Securities held-to-maturity	**—**	(1)	1	100.0
Securities available-for-sale	**—**	2	(2)	(100.0)
Off-balance sheet credit exposures	**18**	5	13	*
Total provision for credit losses	**$ 36**	$ 69	$ (33)	(47.8)%

Six Months Ended June 30,	2023	2022	Increase (Decrease) Amount	%
		(dollars are in millions)		
Loans:				
Commercial loans:				
Real estate, including construction	**$ (54)**	$ 89	$ (143)	*
Business and corporate banking	**69**	(18)	87	*
Global banking	**31**	27	4	14.8
Other commercial	**—**	(3)	3	100.0
Total commercial loans	**46**	95	(49)	(51.6)
Consumer loans:				
Residential mortgages	**(22)**	(5)	(17)	*
Home equity mortgages	**5**	1	4	*
Credit cards	**1**	4	(3)	(75.0)
Other consumer	**—**	(1)	1	100.0
Total consumer loans	**(16)**	(1)	(15)	*
Total loans	**30**	94	(64)	(68.1)
Securities held-to-maturity	**—**	(1)	1	100.0
Securities available-for-sale	**—**	1	(1)	(100.0)
Off-balance sheet credit exposures	**26**	(14)	40	*
Total provision for credit losses	**$ 56**	$ 80	$ (24)	(30.0)%

* Percentage change is greater than 100 percent.

Our provision for credit losses decreased $33 million and $24 million during the three and six months ended June 30, 2023, respectively, due to a lower provision for credit losses on both our commercial and consumer loan portfolios, partially offset by a higher provision for credit losses on off-balance sheet credit exposures.

The provision for credit losses on our commercial loan portfolio decreased $35 million and $49 million during the three and six months ended June 30, 2023, respectively. The loss provisions in the current year periods were driven by downgrades reflecting weakness in the financial condition of certain clients and, in the year-to-date period, an increase in credit reserves for risk factors associated with large loan exposures. The loss provisions in the current year periods were partially offset by improved economic forecasts and declines in credit reserves for risk factors associated with higher risk industry exposures, including commercial real estate. In the prior year periods, the loss provisions were driven by the weakening of economic conditions which resulted in increases in credit reserves for risk factors associated with large loan and higher risk industry exposures, supply chain disruptions and energy price uncertainty, as well as weakness in the financial condition of certain clients and, in the three-month period, a worsening of economic forecasts. Also contributing to the loss provisions in the prior year periods were higher provisions associated with loan growth and maturity extensions.

The provision for credit losses on our consumer loan portfolio decreased $10 million during the three months ended June 30, 2023 reflecting a release in credit loss reserves compared with a loss provision in the prior year period. The release in credit reserves in the current year period was due primarily to a decline in credit reserves for risk factors associated with a change in New York State foreclosure law. In the prior year period, the loss provision was driven by the weakening of economic conditions which resulted in a worsening of economic forecasts. In the year-to-date period, the provision for credit losses on our consumer loan portfolio decreased $15 million reflecting a higher release in credit loss reserves. The release in credit reserves in the current year period was driven by improved housing price forecasts, partially offset by an increase in credit reserves for risk factors associated with a change in New York State foreclosure law. In the prior year period, the release in credit reserves was driven by the impact of net recoveries which was largely offset by an increase in credit reserves for risk factors associated with economic uncertainty.

The provision for credit losses on off-balance sheet credit exposures increased $13 million during the three months ended June 30, 2023. The loss provision in the current year period resulted from downgrades reflecting weakness in the financial condition of certain clients, while the loss provision in the prior year period resulted from the weakening of economic conditions. In the year-to-date period, the provision for credit losses on off-balance sheet credit exposures increased $40 million reflecting a loss provision compared with a release in credit loss reserves in the prior year period. The loss provision in the current year period

resulted from downgrades reflecting weakness in the financial condition of certain clients and an increase in credit reserves for risk factors associated with large loan exposures, while the release in credit reserves in the prior year period resulted from improvements in the credit condition of certain clients.

See "Credit Quality" in this MD&A for additional discussion on the allowance for credit losses associated with our various loan portfolios.

Other Revenues The following table summarizes the components of other revenues:

Three Months Ended June 30,	2023	2022	Increase (Decrease) Amount	%
	(dollars are in millions)			
Credit card fees, net	**$ 12**	$ 12	$ —	—
Trust and investment management fees	**32**	34	(2)	(5.9)
Other fees and commissions	**157**	160	(3)	(1.9)
Trading revenue	**228**	61	167	*
Other securities gains, net	**—**	9	(9)	(100.0)
Servicing and other fees from HSBC affiliates	**77**	87	(10)	(11.5)
Gain (loss) on instruments designated at fair value and related derivatives	**2**	19	(17)	(89.5)
Other income (loss):				
Valuation of loans held for sale	**(37)**	(9)	(28)	*
Residential mortgage banking revenue (expense)	**—**	(2)	2	100.0
Insurance	**1**	1	—	—
Miscellaneous income (loss)	**(24)**	(29)	5	17.2
Total other income (loss)	**(60)**	(39)	(21)	(53.8)
Total other revenues	**$ 448**	$ 343	$ 105	30.6 %

Six Months Ended June 30,	2023	2022	Increase (Decrease) Amount	%
	(dollars are in millions)			
Credit card fees, net	**$ 23**	$ 27	$ (4)	(14.8)%
Trust and investment management fees	**63**	60	3	5.0
Other fees and commissions	**305**	338	(33)	(9.8)
Trading revenue	**453**	133	320	*
Other securities gains, net	**3**	29	(26)	(89.7)
Servicing and other fees from HSBC affiliates	**151**	188	(37)	(19.7)
Gain (loss) on instruments designated at fair value and related derivatives	**(20)**	25	(45)	*
Gain on sale of branch disposal group, net	**—**	111	(111)	(100.0)
Other income (loss):				
Valuation of loans held for sale	**(37)**	(6)	(31)	*
Residential mortgage banking revenue	**1**	4	(3)	(75.0)
Insurance	**2**	2	—	—
Miscellaneous income (loss)	**(43)**	(82)	39	47.6
Total other income (loss)	**(77)**	(82)	5	6.1
Total other revenues	**$ 901**	$ 829	$ 72	8.7 %

* Percentage change is greater than 100 percent.

Credit card fees, net Credit card fees, net were flat during the three months ended June 30, 2023. In the year-to-date period, credit card fees, net decreased due primarily to higher cost estimates associated with our credit card rewards program.

Trust and investment management fees Trust and investment management fees decreased during the three months ended June 30, 2023 due to lower fees from private banking funds reflecting lower average assets under management. In the year-to-date

period, trust and investment management fees increased as lower fees from private banking funds were more than offset by higher fees from liquidity funds driven by lower fee waivers reflecting the impact of higher market interest rates.

Other fees and commissions Other fees and commissions decreased during the three and six months ended June 30, 2023 due primarily to the non-recurrence of loan servicing fees recorded in the prior year periods reflecting the temporary servicing agreement we entered into associated with the sale of a portfolio of mass market retail credit cards during the fourth quarter of 2021 and, in the year-to-date period, lower fees from loan syndication reflecting lower business activity compared with the prior year periods. See Note 13, "Fee Income from Contracts with Customers," in the accompanying consolidated financial statements for additional information including a summary of the components of other fees and commissions.

Trading revenue Trading revenue is generated by participation in the foreign exchange, precious metals, rates, credit and equities markets. The following table presents trading revenue by business activity. Not included in the table below is the impact of net interest income associated with trading securities which is an integral part of trading activities' overall performance. Certain derivatives, such as total return swaps, are economically hedged by holding the underlying interest bearing referenced assets. Net interest income related to trading activities is recorded in net interest income in the consolidated statement of income. Trading revenue related to the mortgage banking business is included as a component of other income (loss).

			Increase (Decrease)	
Three Months Ended June 30,	**2023**	**2022**	**Amount**	**%**
		(dollars are in millions)		
Business Activities:				
Foreign Exchange	**$ 53**	$ 42	$ 11	26.2 %
Metals	**50**	20	30	*
Debt Markets	**—**	—	—	—
Securities Financing	**92**	(18)	110	*
Markets Treasury	**27**	15	12	80.0
Legacy structured credit products	**—**	—	—	—
Other trading[(1)]	**6**	2	4	*
Total trading revenue	**$ 228**	$ 61	$ 167	*

			Increase (Decrease)	
Six Months Ended June 30,	**2023**	**2022**	**Amount**	**%**
		(dollars are in millions)		
Business Activities:				
Foreign Exchange	**$ 155**	$ 103	$ 52	50.5 %
Metals	**107**	44	63	*
Debt Markets	**1**	(3)	4	*
Securities Financing	**163**	(53)	216	*
Markets Treasury	**25**	41	(16)	(39.0)
Legacy structured credit products	**—**	1	(1)	(100.0)
Other trading[(1)]	**2**	—	2	*
Total trading revenue	**$ 453**	$ 133	$ 320	*

* Percentage change is greater than 100 percent.

(1) Includes trading revenue related to Global Banking and Equities.

Trading revenue increased during the three and six months ended June 30, 2023 due primarily to higher revenue in Securities Financing, Metals and Foreign Exchange as the unfavorable impacts of lower client volumes and lower balance sheet deployment were more than offset by the impact of higher market rates which impacts fair value. While revenue in Markets Treasury driven by the performance of economic hedge positions used to manage interest rate risk was higher and contributed to the increase in the three-month period, it was lower and partially offset the increase in the year-to-date period.

Other securities gains, net We maintain securities portfolios as part of our balance sheet diversification and risk management strategies. During the three and six months ended June 30, 2023 we sold nil and $681 million, respectively, of primarily U.S. Treasury securities compared with $686 million and $1,002 million during the prior year periods as part of a continuing strategy to maximize returns while balancing the securities portfolio for risk management purposes. Other securities gains, net

decreased during the three and six months ended June 30, 2023 driven by lower gains from the sale of U.S. Treasury securities. The gross realized gains and losses from sales of securities, which are included as a component of other securities gains, net above, are summarized in Note 5, "Securities," in the accompanying consolidated financial statements.

Servicing and other fees from HSBC affiliates Servicing and other fees from HSBC affiliates decreased during the three and six months ended June 30, 2023 due primarily to lower performance fees associated with trading activity booked on the balance sheet of HSBC Bank plc and, in the year-to-date period, lower cost reimbursements associated with shared services performed on behalf of other HSBC affiliates.

Gain (loss) on instruments designated at fair value and related derivatives We have elected to apply fair value option accounting to certain commercial loans held for sale, certain student loans, certain of our own fixed-rate debt issuances, all of our hybrid instruments issued, including structured notes and deposits, and certain client share repurchase transactions. We also use derivatives to economically hedge the interest rate and other risks associated with certain financial assets and liabilities for which fair value option accounting has been elected. Gain (loss) on instruments designated at fair value and related derivatives decreased during the three and six months ended June 30, 2023 attributable primarily to unfavorable movements related to the economic hedging of interest rate risk and other risks within our hybrid instruments, partially offset by favorable fair value adjustments on commercial loans held for sale driven by losses recorded in the prior year periods on certain loans which were impacted by the weakening of economic conditions. See Note 11, "Fair Value Option," in the accompanying consolidated financial statements for additional information including a breakout of these amounts by individual component.

Gain on sale of branch disposal group, net During the first quarter of 2022, we completed the sale of the branch disposal group associated with the exit of our mass market retail banking business to third parties and recognized a gain on sale of $111 million, net of transaction costs. See Note 3, "Sale of Certain Branch Assets and Liabilities," in the accompanying consolidated financial statements for additional information.

Other income (loss) Other income (loss) was lower during the three months ended June 30, 2023 due primarily to higher valuation losses on loans held for sale driven by a $34 million lower of amortized cost or fair value adjustment recorded upon transferring certain commercial real estate loans to held for sale during the second quarter of 2023 as well as a valuation loss associated with credit default swap protection which largely reflects the hedging of a few client relationships compared with a valuation gain in the prior year period. These decreases were partially offset by lower losses on the swap agreements entered into in conjunction with previous sales of Visa Class B shares. During the second quarter of 2023, we recorded a loss of $6 million related to a change in the Visa Class B share conversion rate compared with a loss of $31 million during the second quarter of 2022 primarily related to extending the expected timing of the final resolution of the related litigation.

In the year-to-date period, other income (loss) was higher as higher valuation losses on loans held for sale as discussed above and a valuation loss associated with credit default swap protection compared with a valuation gain in the prior year period were more than offset by higher income associated with bank owned life insurance, lower losses on the swap agreements entered into in conjunction with previous sales of Visa Class B shares as discussed above and lower losses on loan sales. During the first quarter of 2022, we recorded a loss of $35 million on the sale of a portfolio of consumer mortgage loans. The loss on sale was increased by $10 million during the second quarter of 2023 reflecting a repricing reserve adjustment.

Operating Expenses The following table summarizes the components of operating expenses:

Three Months Ended June 30,	2023	2022	Increase (Decrease) Amount	%
		(dollars are in millions)		
Salaries and employee benefits	**$ 138**	$ 138	$ —	— %
Support services from HSBC affiliates:				
Fees paid to HTSU	**245**	244	1	.4
Fees paid to HSBC Markets (USA) Inc. ("HMUS")	**55**	46	9	19.6
Fees paid to other HSBC affiliates	**125**	129	(4)	(3.1)
Total support services from HSBC affiliates	**425**	419	6	1.4
Occupancy expense, net	**10**	13	(3)	(23.1)
Other expenses:				
Equipment and software	**29**	26	3	11.5
Marketing	**6**	7	(1)	(14.3)
Outside services	**11**	19	(8)	(42.1)
Professional fees	**11**	53	(42)	(79.2)
FDIC assessment fees	**16**	12	4	33.3
Miscellaneous	**1**	6	(5)	(83.3)
Total other expenses	**74**	123	(49)	(39.8)
Total operating expenses	**$ 647**	$ 693	$ (46)	(6.6)%
Personnel - average number	**1,989**	2,517		
Efficiency ratio	**73.4 %**	79.2 %		

Six Months Ended June 30,	2023	2022	Increase (Decrease) Amount	%
		(dollars are in millions)		
Salaries and employee benefits	**$ 259**	$ 292	$ (33)	(11.3)%
Support services from HSBC affiliates:				
Fees paid to HTSU	**465**	504	(39)	(7.7)
Fees paid to HMUS	**108**	83	25	30.1
Fees paid to other HSBC affiliates	**236**	250	(14)	(5.6)
Total support services from HSBC affiliates	**809**	837	(28)	(3.3)
Occupancy expense, net	**40**	30	10	33.3
Other expenses:				
Equipment and software	**56**	50	6	12.0
Marketing	**9**	14	(5)	(35.7)
Outside services	**23**	35	(12)	(34.3)
Professional fees	**23**	74	(51)	(68.9)
FDIC assessment fees	**38**	27	11	40.7
Miscellaneous	**19**	20	(1)	(5.0)
Total other expenses	**168**	220	(52)	(23.6)
Total operating expenses	**$1,276**	$ 1,379	$ (103)	(7.5)%
Personnel - average number	**2,022**	2,763		
Efficiency ratio	**70.2 %**	75.0 %		

Salaries and employee benefits Salaries and employee benefits expense was flat during the three months ended June 30, 2023 as lower salaries expense was offset by higher incentive compensation expense. In the year-to-date period, salaries and employee benefits expense decreased due primarily to lower salaries expense driven by staff reductions related to the completion of our Restructuring Plan, including the sale of the branch disposal group during the first quarter of 2022.

Support services from HSBC affiliates Servicing and other fees from HSBC affiliates increased modestly during the three months ended June 30, 2023 and decreased in the year-to-date period as the non-recurrence of allocated Costs to Achieve as discussed below was more than offset in the three-month period and partially offset in the year-to-date period by higher cost allocations from our support service functions, primarily associated with global resourcing and other global support activities, as well as higher cost allocations from HMUS associated with Global Banking activities reflecting the impact of a higher utilization percentage. During the three and six months ended June 30, 2022, we recorded $55 million and $95 million, respectively, of allocated Costs to Achieve from HTSU and other HSBC affiliates, primarily support service project costs and severance costs. A summary of the services received from various HSBC affiliates is included in Note 14, "Related Party Transactions," in the accompanying consolidated financial statements.

Occupancy expense, net Occupancy expense, net was lower during the three months ended June 30, 2023 due primarily to lower operating lease costs driven by the completion of our Restructuring Plan. In the year-to-date period, occupancy expense, net was higher as lower operating lease costs were more than offset by $22 million of lease impairment and other related costs recorded during the first half of 2023 related to the exit of certain office space.

Other expenses Other expenses decreased during the three and six months ended June 30, 2023 due primarily to lower professional fees driven by lower attorney's fees and, to a lesser extent, lower outside services expense. These increases were partially offset by higher deposit insurance assessment fees.

Efficiency ratio Our efficiency ratio improved during the three and six months ended June 30, 2023 due to higher other revenues driven by higher trading revenue as well as lower operating expenses, partially offset by lower net interest income.

Income tax expense The following table summarizes our effective tax rate based on the provision for income taxes attributable to pretax income:

Three Months Ended June 30,	**2023**	**2022**
	(dollars are in millions)	
Income before income tax	**$ 199**	$ 113
Income tax expense	**48**	23
Effective tax rate	**24.1 %**	20.4 %

Six Months Ended June 30,	**2023**	**2022**
	(dollars are in millions)	
Income before income tax	**$ 486**	$ 379
Income tax expense	**118**	88
Effective tax rate	**24.3 %**	23.2 %

During the three and six months ended June 30, 2023, income tax expense increased driven by higher pre-tax income, while the effective tax rate increased resulting primarily from higher expected investment tax credits in the prior year periods.

Management evaluated the need for a valuation allowance against deferred tax assets at June 30, 2023 and December 31, 2022 and it was determined that a valuation allowance was not required.

Segment Results – Group Reporting Basis

We have distinct businesses, which are aligned with HSBC's global business strategy: Wealth and Personal Banking ("WPB"), Commercial Banking ("CMB"), and Global Banking and Markets ("GBM"). These businesses and a Corporate Center ("CC") serve as our reportable segments with the exception of GBM. Our GBM business is comprised of three distinct operating segments: Global Banking ("GB"), Markets and Securities Services ("MSS"), and Global Banking and Markets Other ("GBM Other"), which are separately reported. See Item 1, "Business," in our 2022 Form 10-K for a description of our segments, including a discussion of the main business activities of the segments and a summary of their products and services. There have been no changes in the basis of our segmentation as compared with the presentation in our 2022 Form 10-K.

Net interest income of each segment represents the difference between actual interest earned on assets and interest incurred on liabilities of the segment, adjusted for a funding charge or credit that includes both interest rate and liquidity components. Segments are charged a cost to fund assets (e.g., customer loans) and receive a funding credit for funds provided (e.g., customer deposits) based on equivalent market rates that incorporate both repricing (interest rate risk) and tenor (liquidity) characteristics. The objective of these charges/credits is to transfer interest rate risk to one centralized unit in Markets Treasury. Markets Treasury income statement and balance sheet results are allocated to each of the global businesses based upon tangible equity levels and levels of any surplus liabilities.

Certain other revenue and operating expense amounts are also apportioned among the business segments based upon the benefits derived from this activity or the relationship of this activity to other segment activity. These inter-segment transactions have not been eliminated, and we generally account for them as if they were with third parties.

We report financial information to our parent, HSBC, in accordance with HSBC Group accounting and reporting policies, which apply IFRSs as issued by the IASB. As a result, our segment results are prepared and presented using financial information prepared on the Group Reporting Basis as operating results are monitored and reviewed, trends are evaluated and decisions about allocating resources, such as employees, are primarily made on this basis. We continue, however, to monitor capital adequacy and report to regulatory agencies on a U.S. GAAP basis.

During the second quarter of 2023, we implemented a change to our internal management reporting to report net funding charges associated with MSS trading activities within other operating income to better align with the trading revenue generated by such activities. Historically, these funding charges were reported within net interest income (expense). There was no impact to consolidated net interest income (expense) or other operating income as these net funding charges are reversed back into net interest income (expense) in the CC. As a result, we have aligned our segment reporting for MSS and CC to reflect this change for all periods presented. The impact of this change on reported segment net interest income (expense) and other operating income for the three and six months ended June 30, 2022 was not material.

There have been no other changes in the measurement of segment profit as compared with the presentation in our 2022 Form 10-K.

The significant differences between U.S. GAAP and the Group Reporting Basis as they impact our results are summarized in Note 25, "Business Segments," in our 2022 Form 10-K. There have been no significant changes since December 31, 2022 in the differences between U.S. GAAP and the Group Reporting Basis impacting our results.

Wealth and Personal Banking The following table summarizes the Group Reporting Basis results for our WPB segment:

Three Months Ended June 30,	2023	2022	Increase (Decrease) Amount	%
	(dollars are in millions)			
Net interest income	**$ 194**	$ 185	$ 9	4.9 %
Other operating income	**52**	32	20	62.5
Total operating income[1]	**246**	217	29	13.4
Expected credit losses	**(8)**	(6)	(2)	(33.3)
Net operating income	**254**	223	31	13.9
Operating expenses	**51**	197	(146)	(74.1)
Profit before tax	**$ 203**	$ 26	$ 177	*

Six Months Ended June 30,	2023	2022	Increase (Decrease) Amount	%
	(dollars are in millions)			
Net interest income	**$ 407**	$ 354	$ 53	15.0 %
Other operating income	**104**	195	(91)	(46.7)
Total operating income[1]	**511**	549	(38)	(6.9)
Expected credit losses	**2**	(2)	4	*
Net operating income	**509**	551	(42)	(7.6)
Operating expenses	**226**	439	(213)	(48.5)
Profit before tax	**$ 283**	$ 112	$ 171	*

* Percentage change is greater than 100 percent.

(1) The following table summarizes the impact of key activities on the total operating income of our WPB segment:

Three Months Ended June 30,	2023	2022	Increase (Decrease) Amount	%
	(dollars are in millions)			
Retail banking current accounts, savings and deposits	**$ 127**	$ 100	$ 27	27.0 %
Retail banking mortgages, credit cards and other personal lending	**30**	51	(21)	(41.2)
Wealth and asset management products	**25**	23	2	8.7
Private banking	**46**	57	(11)	(19.3)
Retail business banking and other[2]	**18**	(14)	32	*
Total operating income	**$ 246**	$ 217	$ 29	13.4 %

Six Months Ended June 30,	2023	2022	Increase (Decrease) Amount	%
	(dollars are in millions)			
Retail banking current accounts, savings and deposits	**$ 253**	$ 184	$ 69	37.5 %
Retail banking mortgages, credit cards and other personal lending	**65**	115	(50)	(43.5)
Wealth and asset management products	**46**	41	5	12.2
Private banking	**102**	104	(2)	(1.9)
Retail business banking and other[2]	**45**	105	(60)	(57.1)
Total operating income	**$ 511**	$ 549	$ (38)	(6.9)%

(2) Includes cost reimbursements associated with activities performed on behalf of other HSBC affiliates and allocated Markets Treasury revenue. During the six months ended June 30, 2022, retail business banking and other also reflects a gain of $148 million on the sale of the branch disposal group associated with the exit of our mass market retail banking business as well as a loss on the sale of a portfolio of consumer mortgage loans as discussed below.

Our WPB segment reported a higher profit before tax during the three months ended June 30, 2023 due primarily to lower operating expenses driven by a reversal of $142 million of impairment charges recorded during the second quarter of 2023 related to capitalized software and leasehold improvements which were previously written-off. During the second quarter of 2023, we determined that the cash generating unit was no longer impaired and that its estimated fair value exceeded its carrying value, which resulted in the re-establishment of these assets at their recoverable amount net of amortization that would have

been recorded had no impairment loss been recognized and excluding any assets that have since been sold. Also contributing to the higher profit before tax during the three-month period were higher other operating income and higher net interest income. In the year-to-date period, our WPB segment reported a higher profit before tax due primarily to lower operating expenses driven by the reversal of impairment charges as discussed above and, to a lesser extent, higher net interest income. These increases in the year-to-date period were partially offset by lower other operating income driven by the non-recurrence of a gain of $148 million recorded during the first quarter of 2022 on the sale of the branch disposal group associated with the exit of our mass market retail banking business.

Net interest income increased during the three and six months ended June 30, 2023 due primarily to the favorable impact of higher market rates.

Excluding the gain on sale of the branch disposal group as discussed above, other operating income increased during the three and six months ended June 30, 2023. The increase in the three-month period was due primarily to lower losses on the swap agreements entered into in conjunction with previous sales of Visa Class B shares. During the second quarter of 2023, we recorded a loss of $6 million related to a change in the Visa Class B share conversion rate compared with a loss of $31 million during the second quarter of 2022 primarily related to extending the expected timing of the final resolution of the related litigation. In the year-to-date period, the increase was due to lower losses on the swap agreements entered into in conjunction with previous sales of Visa Class B shares as discussed above and lower losses on loan sales. During the first quarter of 2022, we recorded a loss of $55 million on the sale of a portfolio of consumer mortgage loans. The loss on sale was increased by $10 million during the second quarter of 2023 reflecting a repricing reserve adjustment. Also contributing to the increase in the year-to-date period were higher investment management fees driven by lower liquidity fee waivers reflecting the impact of higher market interest rates.

Expected credit losses decreased during the three months ended June 30, 2023 reflecting a higher release in credit loss reserves. The release in credit reserves in the current year period was due primarily to a lower loss estimate for risk factors associated with a change in New York State foreclosure law. In the prior year period, the release in credit reserves was driven by improvements in the credit quality of the portfolio, partially offset by the weakening of economic conditions which resulted in a worsening of economic forecasts. In the year-to-date period, expected credit losses increased reflecting a loss provision compared with a release in credit loss reserves in the prior year period. The loss provision in the current year period was due primarily to a higher loss estimate for risk factors associated with a change in New York State foreclosure law, partially offset by improved housing price forecasts. In the prior year period, the release in credit reserves was driven by improvements in the credit quality of the portfolio, partially offset by a higher loss estimate for risk factors associated with economic uncertainty.

Excluding the reversal of impairment charges as discussed above, operating expenses were relatively flat during the three months ended June 30, 2023 and remained lower in the year-do-date period. The decrease in the year-to-date period was driven by the completion of our Restructuring Plan, including the sale of the branch disposal group during the first quarter of 2022, which resulted in declines in staff costs, operating lease costs, marketing expense and cost allocations from our technology and support service functions. Also contributing to the decrease were lower deposit insurance assessment fees.

Client Assets The following table provides information regarding private banking client assets during the six months ended June 30, 2023 and 2022:

Six Months Ended June 30,	2023	2022
	(in millions)	
Client assets at beginning of period	**$ 49,549**	$ 66,181
Net new money (outflows)	**(2,694)**	(2,459)
Value change	**10,210**	(8,349)
Client assets at end of period	**$ 57,065**	$ 55,373

Commercial Banking The following table summarizes the Group Reporting Basis results for our CMB segment:

Three Months Ended June 30,	2023	2022	Increase (Decrease) Amount	%
	(dollars are in millions)			
Net interest income	**$ 288**	$ 220	$ 68	30.9 %
Other operating income	**79**	73	6	8.2
Total operating income[1]	**367**	293	74	25.3
Expected credit losses	**14**	54	(40)	(74.1)
Net operating income	**353**	239	114	47.7
Operating expenses	**159**	143	16	11.2
Profit before tax	**$ 194**	$ 96	$ 98	*

Six Months Ended June 30,	2023	2022	Increase (Decrease) Amount	%
	(dollars are in millions)			
Net interest income	**$ 573**	$ 405	$ 168	41.5 %
Other operating income	**151**	156	(5)	(3.2)
Total operating income[1]	**724**	561	163	29.1
Expected credit losses	**30**	27	3	11.1
Net operating income	**694**	534	160	30.0
Operating expenses	**309**	290	19	6.6
Profit before tax	**$ 385**	$ 244	$ 141	57.8 %

* Percentage change is greater than 100 percent.

(1) The following table summarizes the impact of key activities on the total operating income of our CMB segment:

Three Months Ended June 30,	2023	2022	Increase (Decrease) Amount	%
	(dollars are in millions)			
Lending and Transaction Management	**$ 113**	$ 111	$ 2	1.8 %
Global Payments Solutions ("GPS")	**179**	125	54	43.2
Global Trade and Receivables Finance ("GTRF")	**18**	20	(2)	(10.0)
Investment banking products and other[2]	**57**	37	20	54.1
Total operating income	**$ 367**	$ 293	$ 74	25.3 %

Six Months Ended June 30,	2023	2022	Increase (Decrease) Amount	%
	(dollars are in millions)			
Lending and Transaction Management	**$ 222**	$ 219	$ 3	1.4 %
GPS	**352**	222	130	58.6
GTRF	**36**	39	(3)	(7.7)
Investment banking products and other[2]	**114**	81	33	40.7
Total operating income	**$ 724**	$ 561	$ 163	29.1 %

(2) Includes allocated Markets Treasury revenue.

Our CMB segment reported a higher profit before tax during the three and six months ended June 30, 2023 due primarily to higher net interest income and, in the three-month period, lower expected credit losses. These increases were partially offset by higher operating expenses.

Net interest income increased during the three and six months ended June 30, 2023 due to higher deposit spreads reflecting the impact of higher market rates and higher earnings on capital.

Other operating income increased during the three months ended June 30, 2023 due to higher fees from account services and guarantees. In the year-to-date period, other operating income decreased due to lower fees from loan syndication.

Expected credit losses decreased during the three months ended June 30, 2023 and increased modestly in the year-to-date period. The loss provisions in the current year periods were driven by downgrades reflecting weakness in the financial

condition of certain clients. The loss provision in the current year three-month period was partially offset by a lower loss estimate for risk factors associated with higher risk industry exposures. In the prior year periods, the loss provisions were driven by the weakening of economic conditions which resulted in weakness in the financial condition of certain clients and higher loss estimates for risk factors associated with service industry loan exposures. Also contributing to the loss provisions in the prior year periods were higher provisions associated with loan growth.

Operating expenses increased during the three and six months ended June 30, 2023 due primarily to higher cost allocations from our technology and support service functions as well as higher incentive compensation expense.

Global Banking and Markets Our GBM business is comprised of three reportable operating segments:

Global Banking The following table summarizes the Group Reporting Basis results for our GB segment:

			Increase (Decrease)	
Three Months Ended June 30,	**2023**	**2022**	**Amount**	**%**
	(dollars are in millions)			
Net interest income	**$ 123**	$ 106	$ 17	16.0 %
Other operating income	**92**	130	(38)	(29.2)
Total operating income[(1)]	**215**	236	(21)	(8.9)
Expected credit losses	**27**	(3)	30	*
Net operating income	**188**	239	(51)	(21.3)
Operating expenses	**141**	115	26	22.6
Profit before tax	**$ 47**	$ 124	$ (77)	(62.1)%

			Increase (Decrease)	
Six Months Ended June 30,	**2023**	**2022**	**Amount**	**%**
	(dollars are in millions)			
Net interest income	**$ 262**	$ 184	$ 78	42.4 %
Other operating income	**146**	254	(108)	(42.5)
Total operating income[(1)]	**408**	438	(30)	(6.8)
Expected credit losses	**30**	(5)	35	*
Net operating income	**378**	443	(65)	(14.7)
Operating expenses	**276**	232	44	19.0
Profit before tax	**$ 102**	$ 211	$ (109)	(51.7)%

* Percentage change is greater than 100 percent.

(1) The following table summarizes the impact of key activities on the total operating income of our GB segment. For purposes of the discussion below the table, total operating income is referred to as revenue.

Three Months Ended June 30,	2023	2022	Increase (Decrease) Amount	%
	(dollars are in millions)			
GPS	**$ 115**	$ 119	$ (4)	(3.4)%
Capital Markets	**62**	29	33	*
Credit and Lending	**23**	15	8	53.3
GTRF	**14**	13	1	7.7
GB Other[2]	**1**	60	(59)	(98.3)
Total operating income	**$ 215**	$ 236	$ (21)	(8.9)%

Six Months Ended June 30,	2023	2022	Increase (Decrease) Amount	%
	(dollars are in millions)			
GPS	**$ 238**	$ 209	$ 29	13.9 %
Capital Markets	**122**	94	28	29.8
Credit and Lending	**43**	36	7	19.4
GTRF	**27**	25	2	8.0
GB Other[2]	**(22)**	74	(96)	*
Total operating income	**$ 408**	$ 438	$ (30)	(6.8)%

(2) Includes net interest income on capital held in the business and not assigned to products as well as revenue associated with credit default swap protection, certain credit-linked structured notes and loan sales.

Our GB segment reported a lower profit before tax during the three and six months ended June 30, 2023 due to lower other operating income, higher operating expenses and higher expected credit losses, partially offset by higher net interest income.

Revenue decreased during the three and six months ended June 30, 2023 due primarily to lower revenue in GB Other, partially offset by higher revenue in Capital Markets and Credit and Lending and, in the year-to-date period, GPS. Lower revenue in GB Other was driven by unfavorable fair value adjustments on certain credit-linked structured notes and valuation losses associated with credit default swap protection which largely reflects the hedging of a few client relationships compared with valuation gains in the prior year periods. Higher Capital Markets revenue was driven by higher net interest income in issuer services reflecting the impact of higher market rates as well as favorable fair value adjustments on certain loans held for sale driven by losses recorded in the prior year periods on certain loans which were impacted by the weakening of economic conditions. Higher Capital Markets revenue in the year-to-date period was partially offset by lower fees from loan syndication. The higher revenue in Credit and Lending was driven by higher commitment fees and, in the year-to-date period, higher revenue in GPS was due primarily to increased net interest income reflecting the impact of higher market rates.

Expected credit losses increased during the three and six months ended June 30, 2023 reflecting loss provisions compared with releases in credit loss reserves in the prior year periods. The loss provisions in the current year periods were driven by downgrades reflecting weakness in the financial condition of certain clients. In the prior year periods, the releases in credit reserves were driven by improvements in the credit condition of certain clients and lower loss estimates for risk factors associated with oil and gas industry loan exposures.

Operating expenses increased during the three and six months ended June 30, 2023 due primarily to higher cost allocations from HMUS reflecting the impact of a higher utilization percentage and higher cost allocations from our technology and support service functions.

Markets and Securities Services The following table summarizes the Group Reporting Basis results for our MSS segment:

Three Months Ended June 30,	2023	2022	Increase (Decrease) Amount	Increase (Decrease) %
		(in millions)		
Net interest income	**$ 15**	$ 8	$ 7	87.5 %
Other operating income	**50**	92	(42)	(45.7)
Total operating income[1]	**65**	100	(35)	(35.0)
Expected credit losses	**—**	—	—	—
Net operating income	**65**	100	(35)	(35.0)
Operating expenses	**71**	80	(9)	(11.3)
Profit (loss) before tax	**$ (6)**	$ 20	$ (26)	*

Six Months Ended June 30,	2023	2022	Increase (Decrease) Amount	Increase (Decrease) %
		(dollars are in millions)		
Net interest income	**$ 28**	$ 17	$ 11	64.7 %
Other operating income	**146**	241	(95)	(39.4)
Total operating income[1]	**174**	258	(84)	(32.6)
Expected credit losses	**—**	—	—	—
Net operating income	**174**	258	(84)	(32.6)
Operating expenses	**140**	149	(9)	(6.0)
Profit before tax	**$ 34**	$ 109	$ (75)	(68.8)%

* Percentage change is greater than 100 percent.

(1) The following table summarizes the impact of key activities on the total operating income of our MSS segment. For purposes of the discussion below the table, total operating income is referred to as revenue.

Three Months Ended June 30,	2023	2022	Increase (Decrease) Amount	Increase (Decrease) %
		(dollars are in millions)		
Foreign Exchange and Metals	**$ 41**	$ 65	$ (24)	(36.9)%
Debt Markets	**8**	—	8	*
Securities Financing	**5**	12	(7)	(58.3)
Equities	**5**	16	(11)	(68.8)
Securities Services	**8**	6	2	33.3
MSS Other	**(1)**	1	(2)	*
Credit and funding valuation adjustments	**(1)**	—	(1)	*
Total MSS	**$ 65**	$ 100	$ (35)	(35.0)%

Six Months Ended June 30,	2023	2022	Increase (Decrease) Amount	Increase (Decrease) %
		(dollars are in millions)		
Foreign Exchange and Metals	**$ 124**	$ 156	$ (32)	(20.5)%
Debt Markets	**13**	2	11	*
Securities Financing	**10**	32	(22)	(68.8)
Equities	**7**	43	(36)	(83.7)
Securities Services	**17**	14	3	21.4
MSS Other	**(1)**	—	(1)	*
Credit and funding valuation adjustments	**4**	11	(7)	(63.6)
Total MSS	**$ 174**	$ 258	$ (84)	(32.6)%

Our MSS segment reported a loss before tax during the three months ended June 30, 2023 compared with a profit before tax during the prior year period due to lower other operating income, partially offset by lower operating expenses and higher net interest income. In the year-to-date period, our MSS segment reported a lower profit before tax due to lower other operating income, partially offset by higher net interest income and lower operating expenses.

Revenue decreased during the three and six months ended June 30, 2023 due to lower revenue in Foreign Exchange and Metals, Equities, Securities Financing and, in the year-to-date period, Credit and funding valuation adjustments. Lower revenue in Foreign Exchange was due to lower client volumes as market volatility subsided in the second quarter of 2023, while lower revenue in Metals and Securities Financing reflected lower balance sheet deployment driven by spread compression. Lower Equities revenue was driven by lower performance fees associated with trading activity booked on the balance sheet of HSBC Bank plc. In the year-to-date period, Credit and funding valuation adjustments were unfavorable attributable primarily to lower gains from credit valuation adjustments on derivative assets. These decreases were partially offset by higher revenue in Debt Markets due to higher earnings on capital.

Operating expenses decreased during the three and six months ended June 30, 2023 due primarily to lower cost allocations from our technology and support service functions.

Global Banking and Markets Other The following table summarizes the Group Reporting Basis results for our GBM Other segment. For purposes of the discussion below the table, total operating income is referred to as revenue.

			Increase (Decrease)	
Three Months Ended June 30,	**2023**	**2022**	**Amount**	**%**
		(in millions)		
Net interest income (expense)	**$ (12)**	$ 1	$ (13)	*
Other operating income	**25**	26	(1)	(3.8)
Total operating income	**13**	27	(14)	(51.9)
Expected credit losses	**—**	1	(1)	(100.0)
Net operating income	**13**	26	(13)	(50.0)
Operating expenses	**14**	21	(7)	(33.3)
Profit (loss) before tax	**$ (1)**	$ 5	$ (6)	*

			Increase (Decrease)	
Six Months Ended June 30,	**2023**	**2022**	**Amount**	**%**
		(in millions)		
Net interest income (expense)	**$ (12)**	$ (1)	$ (11)	*
Other operating income	**46**	50	(4)	(8.0)
Total operating income	**34**	49	(15)	(30.6)
Expected credit losses	**—**	1	(1)	(100.0)
Net operating income	**34**	48	(14)	(29.2)
Operating expenses	**32**	45	(13)	(28.9)
Profit before tax	**$ 2**	$ 3	$ (1)	(33.3)%

* Percentage change is greater than 100 percent.

Our GBM Other segment reported a loss before tax during the three months ended June 30, 2023 compared with a profit before tax during the prior year period due to lower revenue driven by lower allocated Market Treasury revenue, higher corporate funding charges and lower cost reimbursements, partially offset by lower operating expenses driven by lower cost allocations from our technology and support service functions. In the year-to-date period, our GBM Other segment reported profit before tax was relatively flat as lower revenue was largely offset by lower operating expenses for the reasons discussed above.

Corporate Center The following table summarizes the Group Reporting Basis results for our CC segment:

Three Months Ended June 30,	2023	2022	Increase (Decrease) Amount	%
	(dollars are in millions)			
Net interest expense	**$ (106)**	$ (20)	$ (86)	*
Other operating income	**106**	24	82	*
Total operating income	**—**	4	(4)	(100.0)
Expected credit losses	**—**	—	—	—
Net operating income	**—**	4	(4)	(100.0)
Operating expenses	**36**	115	(79)	(68.7)
Loss before tax	**$ (36)**	$ (111)	$ 75	67.6 %

Six Months Ended June 30,	2023	2022	Increase (Decrease) Amount	%
	(dollars are in millions)			
Net interest expense	**$ (213)**	$ (14)	$ (199)	*
Other operating income	**197**	9	188	*
Total operating income (expense)	**(16)**	(5)	(11)	*
Expected credit losses	**—**	—	—	—
Net operating income (expense)	**(16)**	(5)	(11)	*
Operating expenses	**68**	181	(113)	(62.4)
Loss before tax	**$ (84)**	$ (186)	$ 102	54.8 %

* Percentage change is greater than 100 percent.

Our CC segment reported a lower loss before tax during the three and six months ended June 30, 2023 due to higher other operating income and lower operating expenses, partially offset by higher net interest expense.

Net interest expense increased during the three and six months ended June 30, 2023 driven by a higher cost of funds reflecting the impact of higher market rates.

Other operating income increased during the three and six months ended June 30, 2023 due primarily to higher net funding credits associated with MSS trading activities which increased by $80 million and $168 million, respectively. Also contributing to the increase were favorable fair value adjustments on certain investments held for Community Reinvestment Act purposes. These increases were partially offset by unfavorable movements related to the economic hedging of interest rate risk within our own debt.

Operating expenses decreased during the three and six months ended June 30, 2023 due primarily to the non-recurrence of allocated Costs to Achieve from HTSU and other HSBC affiliates, primarily support service project costs and severance costs, recorded during the prior year periods. Also contributing to the decrease were lower professional fees driven by lower attorney's fees.

Reconciliation of Segment Results As previously discussed, segment results are reported on a Group Reporting Basis. See Note 15, "Business Segments," in the accompanying consolidated financial statements for a reconciliation of our Group Reporting Basis segment results to U.S. GAAP consolidated totals.

Credit Quality

In the normal course of business, we enter into a variety of transactions that involve both on and off-balance sheet credit risk. Principal among these activities is lending to various commercial, institutional, governmental and individual customers. We participate in lending activity throughout the United States and, on a limited basis, internationally.

Allowance for Credit Losses / Liability for Off-Balance Sheet Credit Exposures Our accounting policies and methodologies related to the allowance for credit losses and liability for off-balance sheet credit exposures are presented under the caption "Critical Accounting Estimates" in MD&A and in Note 2, "Summary of Significant Accounting Policies and New Accounting Pronouncements," in our 2022 Form 10-K. Our approach toward credit risk management is summarized under the caption "Risk Management" in MD&A in our 2022 Form 10-K. There have been no significant revisions to our policies or methodologies during the first half of 2023.

The following table summarizes our allowance for credit losses and the liability for off-balance sheet credit exposures:

	June 30, 2023	March 31, 2023	December 31, 2022
		(in millions)	
Allowance for credit losses:			
Loans:			
Commercial loans	**$ 593**	$ 569	$ 551
Consumer loans	**12**	19	33
Total loans	**605**	588	584
Securities held-to-maturity	**—**	—	—
Other financial assets measured at amortized cost[1]	**—**	—	—
Securities available-for-sale	**—**	—	—
Total allowance for credit losses	**$ 605**	$ 588	$ 584
Liability for off-balance sheet credit exposures	**$ 143**	$ 125	$ 117

(1) Primarily includes accrued interest receivables and customer acceptances.

The total allowance for credit losses at June 30, 2023 increased $17 million or 3 percent as compared with March 31, 2023 and increased $21 million or 4 percent as compared with December 31, 2022 due to a higher loss estimate on our commercial loan portfolio, partially offset by a lower loss estimate on our consumer loan portfolio.

Our commercial allowance for credit losses at June 30, 2023 increased $24 million or 4 percent as compared with March 31, 2023 and increased $42 million or 8 percent as compared with December 31, 2022 driven by downgrades reflecting weakness in the financial condition of certain clients and, as compared with December 31, 2022, an increase in credit reserves for risk factors associated with large loan exposures. These increases were partially offset by improved economic forecasts and declines in credit reserves for risk factors associated with higher risk industry exposures, including commercial real estate.

Our consumer allowance for credit losses at June 30, 2023 decreased $7 million or 37 percent as compared with March 31, 2023 due primarily to a decline in credit reserves for risk factors associated with a change in New York State foreclosure law. As compared with December 31, 2022 our consumer allowance for credit losses decreased $21 million or 64 percent driven by improved housing price forecasts, partially offset by an increase in credit reserves for risk factors associated with a change in New York State foreclosure law.

The liability for off-balance sheet credit exposures at June 30, 2023 increased $18 million or 14 percent as compared with March 31, 2023 and increased $26 million or 22 percent as compared with December 31, 2022 resulting from downgrades reflecting weakness in the financial condition of certain clients and, as compared with December 31, 2022, an increase in credit reserves for risk factors associated with large loan exposures.

Analysis of the Allowance for Credit Losses on Loans

The following table presents the allowance for credit losses on loans by major loan categories:

	June 30, 2023 Amount	June 30, 2023 % of Loans to Total Loans	March 31, 2023 Amount	March 31, 2023 % of Loans to Total Loans	December 31, 2022 Amount	December 31, 2022 % of Loans to Total Loans
	(dollars are in millions)					
Commercial:						
Real estate, including construction	**$ 146**	**12.4 %**	$ 172	13.3 %	$ 200	13.4 %
Business and corporate banking	**295**	**27.9**	264	27.7	230	27.1
Global banking	**151**	**17.5**	132	17.8	120	17.8
Other commercial	**1**	**10.9**	1	11.5	1	12.1
Total commercial	**593**	**68.7**	569	70.3	551	70.4
Consumer:						
Residential mortgages	**(13)**	**30.1**	(2)	28.6	11	28.4
Home equity mortgages	**7**	**.6**	3	.6	2	.6
Credit cards	**15**	**.3**	15	.3	16	.4
Other consumer	**3**	**.3**	3	.2	4	.2
Total consumer	**12**	**31.3**	19	29.7	33	29.6
Total	**$ 605**	**100.0 %**	$ 588	100.0 %	$ 584	100.0 %

The following table sets forth key ratios for the allowance for credit losses on loans:

	June 30, 2023	March 31, 2023	December 31, 2022
Ratio of Allowance for credit losses to:			
Loans:[1]			
Commercial:			
Non-affiliates	**1.61 %**	1.48 %	1.44 %
Affiliates	**—**	—	—
Total commercial	**1.49**	1.36	1.32
Consumer:			
Residential mortgages	**(.07)**	(.01)	.07
Home equity mortgages	**1.92**	.83	.54
Credit cards	**7.61**	7.58	7.51
Other consumer	**2.48**	2.29	2.82
Total consumer	**.07**	.11	.19
Total loans	**1.04**	.99	.98
Nonperforming loans:[1][2]			
Commercial	**192 %**	219 %	255 %
Consumer	**6**	8	15
Total nonperforming loans	**115**	119	133

(1) Ratios exclude loans held for sale as these loans are carried at the lower of amortized cost or fair value.

(2) Represents our commercial and consumer allowance for credit losses, as appropriate, divided by the corresponding outstanding balance of total nonperforming loans held for investment. Nonperforming loans include accruing loans contractually past due 90 days or more.

See Note 7, "Allowance for Credit Losses," in the accompanying consolidated financial statements for a rollforward of credit losses by loan categories for the three and six months ended June 30, 2023 and 2022.

The allowance for credit losses on loans as a percentage of total loans held for investment at June 30, 2023 increased as compared with both March 31, 2023 and December 31, 2022 due to the increase in our allowance for credit losses as discussed above and a decrease in total loans held for investment.

The allowance for credit losses on loans as a percentage of nonperforming loans held for investment at June 30, 2023 decreased as compared with both March 31, 2023 and December 31, 2022 as an increase in nonperforming loans as discussed further below in our commercial loan portfolio outpaced the increase in our allowance for credit losses for the reasons discussed above.

Delinquency The following table summarizes dollars of two-months-and-over contractual delinquency and two-months-and-over contractual delinquency as a percentage of total loans, excluding loans held for sale ("delinquency ratio").

	June 30, 2023		March 31, 2023		December 31, 2022	
	Delinquent Loans	Delinquency Ratio	Delinquent Loans	Delinquency Ratio	Delinquent Loans	Delinquency Ratio
	(dollars are in millions)					
Commercial	**$ 335**	**.84 %**	$ 102	.24 %	$ 126	.30 %
Consumer:						
Residential mortgages[1][2]	**122**	**.70**	138	.81	141	.84
Home equity mortgages[1][2]	**3**	**.82**	8	2.21	3	.81
Credit cards	**4**	**2.03**	4	2.02	3	1.41
Other consumer	**2**	**1.65**	2	1.53	3	2.11
Total consumer	**131**	**.72**	152	.86	150	.85
Total	**$ 466**	**.80**	$ 254	.43	$ 276	.46

(1) At June 30, 2023, March 31, 2023 and December 31, 2022, consumer mortgage loan delinquency includes $57 million, $63 million and $60 million, respectively, of loans that are carried at the lower of amortized cost or fair value of the collateral less costs to sell.

(2) The following table reflects dollars of contractual delinquency and delinquency ratios for interest-only loans and adjustable rate mortgage ("ARM") loans:

	June 30, 2023		March 31, 2023		December 31, 2022	
	Delinquent Loans	Delinquency Ratio	Delinquent Loan	Delinquency Ratio	Delinquent Loans	Delinquency Ratio
	(dollars are in millions)					
Interest-only loans	**$ 9**	**.22 %**	$ 16	.39 %	$ 9	.22 %
ARM loans	**69**	**.54**	88	.70	85	.67

Our two-months-and-over contractual delinquency ratio increased 37 basis points and 34 basis points compared with March 31, 2023 and December 31, 2022, respectively, due primarily to higher dollars of delinquency in our commercial loan portfolio, partially offset by lower dollars of delinquency in our consumer loan portfolio.

Our commercial loan two-months-and-over contractual delinquency ratio increased 60 basis points and 54 basis points compared with March 31, 2023 and December 31, 2022, respectively, due primarily to higher dollars of delinquency driven by a few commercial real estate loans and a global banking loan which became 60 days past due. These increases were partially offset by collections, including as compared with December 31, 2022, the collections of a few large private banking loans in the first quarter.

Our consumer loan two-months-and-over contractual delinquency ratio decreased 14 basis points and 13 basis points compared with March 31, 2023 and December 31, 2022, respectively, due primarily to lower dollars of delinquency in residential mortgages reflecting collections. Also contributing to the decrease in the ratio were higher outstanding loan balances.

Net Charge-offs of Loans The following table summarizes net charge-off (recovery) dollars as well as net charge-off (recovery) of loans for the period as a percentage of average loans, excluding loans held for sale ("net charge-off ratio"):

	Three Months Ended June 30,						Six Months Ended June 30,					
	2023			2022			2023			2022		
	Net Charge-off Dollars	Average Loans	Net Charge-off Ratio	Net Charge-off Dollars	Average Loans	Net Charge-off Ratio	Net Charge-off Dollars	Average Loans	Net Charge-off Ratio	Net Charge-off Dollars	Average Loans	Net Charge-off Ratio
	(dollars are in millions)											
Commercial:												
Real estate, including construction	**$ —**	**$ 7,668**	**— %**	$ —	$ 8,404	— %	**$ —**	**$ 7,832**	**— %**	$ —	$ 8,290	— %
Business and corporate banking	**—**	**16,470**	**—**	1	15,942	.03	**4**	**16,487**	**.05**	7	15,336	.09
Global banking	**—**	**10,226**	**—**	—	12,148	—	**—**	**10,276**	**—**	9	11,664	.15
Other commercial	**—**	**6,950**	**—**	—	7,145	—	**—**	**7,103**	**—**	—	6,987	—
Total commercial	**—**	**41,314**	**—**	1	43,639	.01	**4**	**41,698**	**.02**	16	42,277	.08
Consumer:												
Residential mortgages	**(1)**	**17,169**	**(.02)**	(2)	15,787	(.05)	**2**	**17,028**	**.02**	(3)	15,690	(.04)
Home equity mortgages	**—**	**366**	**—**	—	308	—	**—**	**366**	**—**	(1)	315	(.64)
Credit cards	**1**	**196**	**2.04**	(2)	197	(4.06)	**2**	**197**	**2.03**	(4)	182	(4.39)
Other consumer	**1**	**117**	**3.42**	(1)	48	(8.33)	**1**	**127**	**1.57**	(1)	55	(3.63)
Total consumer	**1**	**17,848**	**.02**	(5)	16,340	(.12)	**5**	**17,718**	**.06**	(9)	16,242	(.11)
Total	**$ 1**	**$59,162**	**.01**	$ (4)	$59,979	(.03)	**$ 9**	**$59,416**	**.03**	$ 7	$58,519	.02

Our net charge-off ratio increased 4 basis points during the three months ended June 30, 2023 due to a higher level of net charge-offs in our consumer loan portfolio reflecting a modest level of net charge-offs in the current year period compared with a modest level of net recoveries in the prior year period.

In the year-to-date period, our net charge-off ratio increased 1 basis point as a higher level of net charge-offs in our consumer loan portfolio due in part to the impact of certain legacy mass market credit cards and other consumer loans which were transferred from held for sale back to held for investment in the fourth quarter of 2022 was largely offset by a lower level of net charge-offs in our commercial loan portfolio driven by the deterioration of a global banking loan in the prior year period.

Nonperforming Loans The following table summarizes nonperforming loans, including nonaccrual loans and accruing loans contractually 90 days or more past due, as well as nonperforming loans as a percentage of total loans, excluding loans held for sale ("nonperforming ratio"):

	June 30, 2023		March 31, 2023		December 31, 2022	
	Nonperforming Loans[1]	Nonperforming Ratio	Nonperforming Loans[1]	Nonperforming Ratio	Nonperforming Loans[1]	Nonperforming Ratio
	(dollars are in millions)					
Commercial	**$ 309**	**.78 %**	$ 260	.62 %	$ 216	.52 %
Consumer:						
Residential mortgages[2][3][4]	**204**	**1.17**	219	1.29	213	1.26
Home equity mortgages[2][3]	**11**	**3.02**	11	3.04	7	1.89
Credit cards	**3**	**1.52**	3	1.52	2	.94
Other consumer	**—**	**—**	—	—	1	.70
Total consumer	**218**	**1.20**	233	1.32	223	1.27
Total	**$ 527**	**.91**	$ 493	.83	$ 439	.74
Other real estate owned[5]	**$ 2**		$ 2		$ 2	

(1) See Note 6, "Loans," in the accompanying consolidated financial statements for a breakout of nonaccrual loans and accruing loans contractually 90 days or more past due. At June 30, 2023, March 31, 2023 and December 31, 2022, total nonperforming loans include $4 million of accruing loans contractually 90 days or more past due.

(2) At June 30, 2023, March 31, 2023 and December 31, 2022, nonperforming consumer mortgage loans include $120 million, $123 million and $109 million, respectively, of loans that are carried at the lower of amortized cost or fair value of the collateral less cost to sell.

(3) Nonperforming consumer mortgage loans held for investment include all loans which are 90 or more days contractually delinquent as well as loans discharged under Chapter 7 bankruptcy and not re-affirmed and second lien loans where the first lien loan that we own or service is 90 or more days contractually delinquent.

(4) Nonperforming consumer mortgage loans for all periods does not include guaranteed loans purchased from the Government National Mortgage Association. Repayment of these loans is predominantly insured by the Federal Housing Administration and as such, these loans have different risk characteristics from the rest of our customer loan portfolio.

(5) Includes $1 million or less of commercial other real estate owned at June 30, 2023, March 31, 2023 and December 31, 2022.

Our nonperforming loans ratio increased 8 basis points and 17 basis points compared with March 31, 2023 and December 31, 2022, respectively, due primarily to higher nonperforming loans in our commercial loan portfolio, partially offset by lower nonperforming loans in our consumer loan portfolio.

Our commercial nonperforming loans ratio increased 16 basis points and 26 basis points compared with March 31, 2023 and December 31, 2022, respectively, due primarily to higher nonperforming loans driven by downgrades, including the downgrade of a corporate banking loan in the second quarter and, as compared with December 31, 2022, the downgrade of a commercial real estate loan in the first quarter. These increases were partially offset by paydowns and loan sales.

Our consumer nonperforming loans ratio decreased 12 basis points and 7 basis points compared with March 31, 2023 and December 31, 2022, respectively, due to lower nonperforming loans in residential mortgages reflecting collections and customers returning to accrual status. Also contributing to the decrease in the ratio were higher outstanding loan balances.

Our policies and practices for problem loan management and placing loans on nonaccrual status are summarized in Note 2, "Summary of Significant Accounting Policies and New Accounting Pronouncements," in our 2022 Form 10-K.

Concentration of Credit Risk A concentration of credit risk is defined as a significant credit exposure with an individual or group engaged in similar activities or affected similarly by economic conditions. We enter into a variety of transactions in the normal course of business that involve both on and off-balance sheet credit risk. Principal among these activities is lending to various commercial, institutional, governmental and individual customers. We manage the varying degrees of credit risk associated with on and off-balance sheet transactions through specific credit policies and procedures which provide for a strict approval, monitoring and reporting process. It is our policy to require collateral when it is deemed appropriate. Varying degrees and types of collateral are secured depending upon management's credit evaluation.

Commercial Credit Exposure Our commercial credit exposure is diversified across a broad range of industries. Commercial loans outstanding, excluding loans held for sale, and unused commercial commitments by industry are presented in the table below:

	June 30, 2023		December 31, 2022	
	Commercial Utilized	Unused Commercial Commitments	Commercial Utilized	Unused Commercial Commitments
	(in millions)			
Diversified financials	**$ 8,303**	**$ 9,890**	$ 8,415	$ 11,779
Real estate	**5,601**	**1,637**	6,198	1,909
Commercial and professional services	**3,207**	**6,247**	3,002	5,677
Consumer services	**2,710**	**3,318**	2,783	3,251
Retailing	**2,178**	**5,019**	2,285	5,779
Capital goods	**2,017**	**7,141**	2,167	6,076
Consumer durables and apparel	**1,705**	**3,454**	1,937	2,975
Technology hardware and equipment	**1,394**	**5,755**	1,265	6,530
Utilities	**1,199**	**1,227**	842	991
Software and services	**1,196**	**4,546**	1,726	4,356
Chemicals	**1,182**	**4,617**	1,367	4,109
Health care equipment and services	**1,098**	**2,678**	1,182	2,624
Energy	**786**	**5,038**	988	4,464
Banks	**770**	**453**	702	590
Food, beverage and tobacco	**686**	**2,408**	668	2,351
Food and staples retailing	**580**	**1,435**	628	1,457
Metals and mining	**578**	**520**	629	462
Semiconductors and semiconductor equipment	**510**	**3,271**	238	3,531
Pharmaceuticals, biotechnology and life science	**362**	**4,405**	398	5,313
Media and entertainment	**325**	**731**	315	693
Total commercial credit exposure in top 20 industries[1]	**36,387**	**73,790**	37,735	74,917
All other industries	**357**	**8,115**	525	7,969
Total commercial credit exposure[2]	**$ 36,744**	**$ 81,905**	$ 38,260	$ 82,886

(1) Based on utilization at June 30, 2023.

(2) Excludes commercial credit exposures with affiliates.

Geographic Concentrations The following table reflects regional exposure at June 30, 2023 and December 31, 2022 for our real estate secured loan portfolios, excluding loans held for sale:

	Commercial Real Estate, including Construction Loans	Residential Mortgages and Home Equity Mortgages
June 30, 2023		
New York State	**26.0 %**	**31.1 %**
California	**11.9**	**44.2**
North Central United States	**12.2**	**1.0**
North Eastern United States, excluding New York State	**5.1**	**7.9**
Southern United States	**37.4**	**10.2**
Western United States, excluding California	**7.4**	**5.6**
Total	**100.0 %**	**100.0 %**
December 31, 2022		
New York State	23.6 %	31.6 %
California	17.3	43.9
North Central United States	11.2	1.0
North Eastern United States, excluding New York State	4.4	7.8
Southern United States	36.3	10.1
Western United States, excluding California	7.2	5.6
Total	100.0 %	100.0 %

Residential Mortgage Loans Our consumer loan portfolio includes the following types of loans:

- Interest-only loans – A loan which allows a customer to pay the interest-only portion of the monthly payment for a period of time which results in lower payments during the initial loan period.
- ARM loans – A loan which allows us to adjust pricing on the loan in line with market movements.

The following table summarizes the balances of interest-only and ARM loans in our loan portfolios, excluding mortgages held for sale, at June 30, 2023 and December 31, 2022. Each category is not mutually exclusive and loans may appear in more than one category below.

	June 30, 2023	December 31, 2022
	(in millions)	
Interest-only residential mortgage and home equity mortgage loans	**$ 4,215**	$ 4,063
ARM loans[1]	**12,712**	12,663

[1] During the remainder of 2023 and during 2024, approximately $176 million and $445 million, respectively, of the ARM loans will experience their first interest rate reset.

The following table summarizes the concentrations of first and second liens within the outstanding residential mortgage and home equity mortgage portfolios, excluding mortgages held for sale, at June 30, 2023 and December 31, 2022:

	June 30, 2023	December 31, 2022
	(in millions)	
Closed end:		
First lien	**$ 17,452**	$ 16,838
Second lien	**15**	16
Revolving[1]	**349**	354
Total	**$ 17,816**	$ 17,208

[1] A majority of revolving are second lien mortgages.

Credit Risks Associated with Derivative Contracts Credit risk associated with derivatives is measured as the net replacement cost of derivative contracts in a receivable position in the event the counterparties of such contracts fail to perform under the terms of those contracts. In managing derivative credit risk, both the current exposure, which is the replacement cost of contracts on the measurement date, as well as an estimate of the potential change in value of contracts over their remaining lives are considered. Counterparties to our derivative activities include financial institutions, central clearing parties, foreign and domestic government agencies, corporations, funds (mutual funds, hedge funds, etc.), insurance companies and private clients as well as other HSBC entities. These counterparties are subject to regular credit review by the credit risk management department. To minimize credit risk, we may enter into legally enforceable master netting agreements which reduce risk by permitting the closeout and netting of transactions with the same counterparty upon occurrence of certain events. In addition, we reduce credit risk by obtaining collateral from counterparties. The determination of the need for and the levels of collateral will differ based on an assessment of the credit risk of the counterparty and/or regulatory requirements.

The total risk in a derivative contract is a function of a number of variables, such as:

- volatility of interest rates, currencies, equity or corporate reference entity used as the basis for determining contract payments;
- current market events or trends;
- country risk;
- maturity and liquidity of contracts;
- creditworthiness of the counterparties in the transaction;
- the existence of a master netting agreement among the counterparties; and
- existence and value of collateral received from counterparties to secure exposures.

The table below presents total credit risk exposure calculated using the general risk-based capital rules of the Basel III Standardized Approach which includes the net positive mark-to-market of the derivative contracts plus any adjusted potential future exposure as measured in reference to the notional amount. The regulatory capital rules recognize that bilateral netting agreements reduce credit risk and, therefore, allow for reductions of risk-weighted assets when netting requirements have been met and collateral exists. As a result, risk-weighted amounts for regulatory capital purposes are a portion of the original gross exposures. Furthermore, many contracts contain provisions that allow us to close out the transaction if the counterparty fails to post required collateral. In addition, many contracts give us the right to break the transactions earlier than the final maturity date. As a result, these contracts have potential future exposures that are often much smaller than the future exposures derived from the regulatory capital rules.

	June 30, 2023	December 31, 2022
	(in millions)	
Risk associated with derivative contracts:		
Total credit risk exposure	**$ 11,289**	$ 12,437
Less: collateral held against exposure	**3,241**	3,488
Net credit risk exposure	**$ 8,048**	$ 8,949

Liquidity and Capital Resources

Effective liquidity management is defined as ensuring we can meet customer loan requests, customer deposit maturities/ withdrawals and other cash commitments efficiently under both normal operating conditions and under unpredictable circumstances of industry or market stress. To achieve this objective, we have guidelines that require sufficient liquidity to cover potential funding requirements in both the short- and long-term and to avoid over-dependence on volatile, less reliable funding markets. Guidelines are set for the consolidated balance sheet of HSBC USA to ensure that it is a source of strength for our regulated, deposit-taking banking subsidiary, as well as to address the more limited sources of liquidity available to it as a holding company. Similar guidelines are set for HSBC Bank USA to ensure that it can meet its liquidity needs in various stress scenarios. Cash flow analysis, including stress testing scenarios, forms the basis for liquidity management and contingency funding plans. See "Risk Management" in this MD&A for further discussion of our approach towards liquidity and funding risk management, including information regarding the key measures employed to define, monitor and control our liquidity and funding risk.

During the first half of 2023, three regional bank failures triggered turmoil throughout the banking industry as contagion fears spread. To date, we have not experienced any significant impact to our liquidity, deposits or funding capabilities as a result of this industry turmoil.

Interest Bearing Deposits with Banks totaled $29,476 million and $17,744 million at June 30, 2023 and December 31, 2022, respectively, of which $29,278 million and $17,633 million, respectively, were held with the Federal Reserve Bank. Balances may fluctuate from period to period depending upon our liquidity position at the time and our strategy for deploying liquidity. Surplus interest bearing deposits with the Federal Reserve Bank may be deployed into securities purchased under agreements to resell or other investments depending on market conditions and the opportunity to maximize returns.

Federal Funds Sold and Securities Purchased under Agreements to Resell totaled $12,519 million and $23,085 million at June 30, 2023 and December 31, 2022, respectively. Balances may fluctuate from period to period depending upon our liquidity position at the time and our strategy for deploying liquidity.

Trading Assets includes securities totaling $15,465 million and $16,285 million at June 30, 2023 and December 31, 2022, respectively. See "Balance Sheet Review" in this MD&A for further analysis and discussion on trends.

Securities includes securities available-for-sale and securities held-to-maturity totaling $39,687 million and $34,662 million at June 30, 2023 and December 31, 2022, respectively. See "Balance Sheet Review" in this MD&A for further analysis and discussion on trends.

Short-Term Borrowings totaled $8,227 million and $5,945 million at June 30, 2023 and December 31, 2022, respectively. See "Balance Sheet Review" in this MD&A for further analysis and discussion on short-term borrowing trends.

Deposits totaled $121,636 million and $123,223 million at June 30, 2023 and December 31, 2022, respectively. See "Balance Sheet Review" in this MD&A for further analysis and discussion on deposit trends.

Long-Term Debt increased to $19,671 million at June 30, 2023 from $17,591 million at December 31, 2022. The following table presents the maturities of long-term debt at June 30, 2023:

	(in millions)
2023	$ 1,461
2024	5,036
2025	6,112
2026	918
2027	1,139
Thereafter	5,005
Total	$ 19,671

The following table summarizes issuances and retirements of long-term debt during the six months ended June 30, 2023 and 2022:

Six Months Ended June 30,	2023	2022
	(in millions)	
Long-term debt issued	**$ 2,912**	$ 2,845
Long-term debt repaid	**(1,537)**	(1,884)
Net long-term debt issued	**$ 1,375**	$ 961

See "Balance Sheet Review" in this MD&A for further analysis and discussion on long-term debt trends, including additional information on debt issued and repaid during the six months ended June 30, 2023.

Under our shelf registration statement on file with the SEC, we may issue certain securities including debt securities and preferred stock. We satisfy the eligibility requirements for designation as a "well-known seasoned issuer," which allows us to file a registration statement that does not have a limit on issuance capacity. The ability to issue under the registration statement is limited by the authority granted by the Board of Directors. At June 30, 2023, we were authorized to issue up to $15,000 million, of which $4,016 million was available. HSBC Bank USA has a $40,000 million Global Bank Note Program that provides for the issuance of subordinated and senior notes, of which $11,969 million was available at June 30, 2023.

As a member of the FHLB and the Federal Reserve Bank of New York, we have secured borrowing facilities which are collateralized by loans and investment securities. At June 30, 2023, long-term debt included $1,000 million of borrowings from the FHLB facility. Based upon the amounts pledged as collateral under these facilities, we have additional borrowing capacity of up to $13,559 million.

Preferred Equity See Note 19, "Preferred Stock," in our 2022 Form 10-K for information regarding all outstanding preferred share issues.

Common Equity During the second quarter of 2023, HSBC USA received a common stock dividend of $1.0 billion from its subsidiary, HSBC Bank USA, and paid a dividend on its common stock of $1.0 billion from retained earnings to its parent, HSBC North America.

Capital Ratios In managing capital, we develop targets for common equity Tier 1 capital to risk-weighted assets, Tier 1 capital to risk-weighted assets, total capital to risk-weighted assets and Tier 1 capital to adjusted quarterly average assets (i.e., the "Tier 1 leverage ratio"). Capital targets are reviewed at least semi-annually to ensure they reflect our business mix and risk profile, as well as real-time conditions and circumstances. The following table summarizes HSBC USA's Basel III capital ratios calculated as of June 30, 2023 and December 31, 2022:

	June 30, 2023	December 31, 2022
Common equity Tier 1 capital to risk-weighted assets	**13.2 %**	13.5 %
Tier 1 capital to risk-weighted assets	**13.4**	13.8
Total capital to risk-weighted assets	**15.8**	16.1
Tier 1 leverage ratio[1]	**8.1**	8.5

(1) Adjusted quarterly average assets, the Tier 1 leverage ratio denominator, reflects quarterly average assets adjusted for amounts permitted to be deducted from Tier 1 capital.

We manage capital in accordance with HSBC Group policy. The HSBC North America Internal Capital Adequacy Assessment Process ("ICAAP") works in conjunction with the HSBC Group's ICAAP. The HSBC North America ICAAP applies to HSBC Bank USA and evaluates regulatory capital adequacy and capital adequacy under various stress scenarios. Our approach is to meet our capital needs for these stress scenarios locally through activities which reduce risk. To the extent that local alternatives are insufficient, as a wholly-owned subsidiary of HSBC, we would seek support from our ultimate parent. Regulatory capital requirements are based on the amount of capital required to be held, plus applicable capital buffers, as defined by regulations, and the amount of risk-weighted assets and leverage exposure, also calculated based on regulatory definitions.

We are subject to regulatory capital rules issued by U.S. banking regulators including Basel III (the "Basel III rule"). The Basel III rule establishes minimum capital ratios and overall capital adequacy standards for banks and bank holding companies ("BHCs"). HSBC North America, HSBC USA and HSBC Bank USA each calculate their risk-based capital requirements for credit risk under the Standardized Approach in the Basel III rule. In 2019, the FRB and the other federal banking agencies jointly finalized rules to implement the Economic Growth, Regulatory Relief and Consumer Protection Act that tailor the application of the enhanced prudential standards for large BHC and foreign banking organizations (the "Tailoring Rules"). The Tailoring Rules assign each BHC and IHC with $50 billion or more in total U.S. assets into one of five classifications (Categories I through IV, and 'other firms') based on its size and four risk-based indicators. Under the Tailoring Rules, HSBC North America and HSBC Bank USA are subject to Category IV standards. For additional discussion of the Basel III rule requirements, including required minimum capital ratios, as well as further discussion of the Tailoring Rules and Category IV standards see Part I, "Regulation and Competition - Regulatory Capital and Liquidity Requirements," in our 2022 Form 10-K. We continue to review the composition of our capital structure.

Regulatory Developments On July 27, 2023, U.S. banking regulators proposed changes to the regulatory capital rules applicable to U.S. banks, BHCs and IHCs with total consolidated assets of $100 billion or more. These changes are intended to be broadly consistent with revisions to Basel III finalized by the Basel Committee on Banking Supervision in 2017. The U.S. proposal would end the use of internal models for credit risk, credit valuation adjustments, and operational risk, create an expanded risk-based credit capital approach in addition to retaining a modified version of the current standardized approach, and make changes to the modeling requirements for market risk. These proposals are subject to a public comment period through at least November 30, 2023, and would not be effective until July 1, 2025. Certain aspects of the proposal would be subject to a three-year phase-in period. We are analyzing the proposed changes, including the timing of implementation, to determine the potential effects on capital requirements. Based on the foregoing, we expect an increase in the capital requirements of HSBC North America, HSBC USA and HSBC Bank USA during the phase-in period and thereafter.

Capital Planning and Stress Testing The FRB requires certain U.S. top-tier BHCs and IHCs, including HSBC North America, to comply with the FRB's capital plan rule and CCAR program, as well as the supervisory stress tests conducted by the FRB. The stress tests are forward looking exercises to assess the impact of hypothetical macroeconomic baseline and severely adverse scenarios provided by the FRB on the financial condition and capital adequacy of a CCAR firm over a nine quarter planning horizon. As a Category IV firm, HSBC North America is subject to supervisory stress testing on a biennial basis, although it may opt-in to such testing in an "off year" in order to recalibrate its stress capital buffer based on its most recent supervisory stress test. The FRB continues to supervise Category IV firms on an ongoing basis, including evaluation of the capital adequacy and capital planning processes during off-cycle years. For further discussion of capital planning and stress testing, including

detail regarding the FRB's supervisory assessment as part of the CCAR process, see Part I, "Regulation and Competition - Regulatory Capital and Liquidity Requirements," in our 2022 Form 10-K.

HSBC North America submitted its 2023 CCAR capital plan in April 2023. As discussed above, HSBC North America is subject to supervisory stress testing on a biennial basis and, therefore, did not participate in the FRB's 2023 supervisory stress test. Capital planning and stress testing for HSBC North America may impact our future capital and liquidity.

While BHC regulatory capital compliance is generally performed at the HSBC North America level, and also separately for HSBC Bank USA, as a BHC we are required to meet minimum capital requirements imposed by the FRB. We present our capital ratios, together with HSBC Bank USA's in Note 16, "Retained Earnings and Regulatory Capital Requirements," in the accompanying consolidated financial statements.

2023 Funding Strategy Our current estimate for funding needs and sources for 2023 are summarized in the following table:

	Actual January 1 through June 30, 2023	Estimated July 1 through December 31, 2023	Estimated Full Year 2023
		(in billions)	
Increase (decrease) in funding needs:			
Net change in loans	$ (1)	$ 4	$ 3
Net change in short-term investments and securities	6	(2)	4
Net change in trading and other assets	(3)	1	(2)
Total funding needs	$ 2	$ 3	$ 5
Increase (decrease) in funding sources:			
Net change in deposits	$ (2)	$ 5	$ 3
Net change in trading and other short-term liabilities	2	—	2
Net change in long-term debt	2	(2)	—
Total funding sources	$ 2	$ 3	$ 5

The above table reflects a long-term funding strategy. Daily balances fluctuate as we accommodate customer needs, while ensuring that we have liquidity in place to support the balance sheet maturity funding profile. Should market conditions deteriorate, we have contingency plans to generate additional liquidity through the sales of assets or financing transactions. We remain confident in our ability to access the market for long-term debt funding needs in the current market environment. We continue to seek well-priced and stable customer deposits. We also continue to sell new agency-eligible conforming residential mortgage loans to third parties.

HSBC Bank USA is subject to significant restrictions imposed by federal law on extensions of credit to, and certain other 'covered transactions' with HSBC USA and other affiliates. For further discussion, see Part I, "Regulation and Competition - Affiliate Transaction Restrictions," in our 2022 Form 10-K.

See "Risk Management" in this MD&A for further discussion relating to our liquidity contingency plans and our approach to liquidity and funding risk management.

Off-Balance Sheet Arrangements As part of our normal operations, we enter into credit derivatives and various off-balance sheet arrangements with affiliates and third parties. These arrangements arise principally in connection with our lending and client intermediation activities and involve primarily commitments to extend credit and, in certain cases, guarantees.

Commitments to extend credit include arrangements whereby we are contractually obligated to extend credit in the form of loans, participations in loans or similar transactions. At June 30, 2023 and December 31, 2022, we had commitments to extend credit totaling $89.2 billion and $88.8 billion, respectively, comprised primarily of commercial commitments and, to a lesser extent, consumer commitments. Commercial commitments comprise primarily those related to secured and unsecured loans and lines of credit. Consumer commitments comprise unused MasterCard/Visa credit card lines, where we have the right to change terms or conditions upon notification to the customer, and commitments to extend credit secured by residential properties, where we have the right to change terms or conditions, for cause, upon notification to the customer. For a summary of guarantees, including standby letters of credit and certain credit derivative transactions, as well as the contractual amounts outstanding at June 30, 2023 and December 31, 2022, see Note 18, "Guarantee Arrangements, Pledged Asset and Repurchase Agreements," in the accompanying consolidated financial statements.

The contractual amounts of these financial instruments represent our maximum possible credit exposure in the event that a counterparty draws down the full commitment amount or we are required to fulfill our maximum obligation under a guarantee.

Many of these commitments and guarantees expire unused or without default. As a result, we believe that the contractual amount is not representative of the actual future credit exposure or funding requirements.

Our off-balance sheet arrangements also include transactions with unconsolidated variable interest entities ("VIEs"). See Note 17, "Variable Interest Entities," in the accompanying consolidated financial statements for a summary of these unconsolidated VIEs.

Fair Value

Fair Value Hierarchy Fair value measurement accounting principles establish a fair value hierarchy structure that prioritizes the inputs to determine the fair value of an asset or liability (the "Fair Value Framework"). The Fair Value Framework distinguishes between inputs that are based on observed market data and unobservable inputs that reflect market participants' assumptions. It emphasizes the use of valuation methodologies that maximize observable market inputs. For financial instruments carried at fair value, the best evidence of fair value is a quoted price in an actively traded market (Level 1). Where the market for a financial instrument is not active, valuation techniques are used. The majority of our valuation techniques use market inputs that are either observable or indirectly derived from and corroborated by observable market data for substantially the full term of the financial instrument (Level 2). Because Level 1 and Level 2 instruments are determined by observable inputs, less judgment is applied in determining their fair values. In the absence of observable market inputs, the financial instrument is valued based on valuation techniques that feature one or more significant unobservable inputs (Level 3). The determination of the level of fair value hierarchy within which the fair value measurement of an asset or a liability is classified often requires judgment and may change over time as market conditions evolve. We consider the following factors in developing the fair value hierarchy:

- whether the asset or liability is transacted in an active market with a quoted market price;
- the level of bid-ask spreads;
- a lack of pricing transparency due to, among other things, complexity of the product and market liquidity;
- whether only a few transactions are observed over a significant period of time;
- whether the pricing quotations differ substantially among independent pricing services;
- whether inputs to the valuation techniques can be derived from or corroborated with market data; and
- whether significant adjustments are made to the observed pricing information or model output to determine the fair value.

Level 1 inputs are unadjusted quoted prices in active markets that the reporting entity has the ability to access for identical assets or liabilities. A financial instrument is classified as a Level 1 measurement if it is listed on an exchange or is an instrument actively traded in the over-the-counter ("OTC") market where transactions occur with sufficient frequency and volume. We regard financial instruments such as debt securities, equity securities and derivative contracts listed on the primary exchanges of a country to be actively traded. Non-exchange-traded instruments classified as Level 1 assets include securities issued by the U.S. Treasury, to-be-announced securities, non-callable securities issued by U.S. Government sponsored enterprises and certain foreign government-backed debt.

Level 2 inputs are those that are observable either directly or indirectly but do not qualify as Level 1 inputs. We classify mortgage pass-through securities, agency and certain non-agency mortgage collateralized obligations, non-exchange-traded derivative contracts, asset-backed securities, obligations of U.S. states and political subdivisions, corporate debt securities, certain foreign government-backed debt, preferred securities, securities purchased and sold under resale and repurchase agreements, precious metals, certain loans held for sale, certain student loans, residential mortgage loans whose carrying amount was reduced based on the fair value of the underlying collateral, real estate owned and certain client share repurchase transactions as Level 2 measurements. Where possible, at least two quotations from independent sources are obtained based on transactions involving comparable assets and liabilities to validate the fair value of these instruments. We have established a process to understand the methodologies and inputs used by the third party pricing services to ensure that pricing information meets the fair value objective and, where appropriate, this pricing data is back-tested to market trade executions. Where significant differences arise among the independent pricing quotes and the internally determined fair value, we investigate and reconcile the differences. If the investigation results in a significant adjustment to the fair value, the instrument will be classified as Level 3 within the fair value hierarchy. In general, we have observed that there is a correlation between the credit standing and the market liquidity of a non-derivative instrument.

Level 2 derivative instruments are generally valued based on discounted future cash flows or an option pricing model adjusted for counterparty credit risk and market liquidity. The fair value of certain derivative products is determined using valuation techniques based on inputs derived from observable indices traded in the OTC market. Appropriate control processes and

procedures have been applied to ensure that the derived inputs are applied to value only those instruments that share similar risks to the relevant benchmark indices and therefore demonstrate a similar response to market factors.

Level 3 inputs are unobservable estimates that management expects market participants would use to determine the fair value of the asset or liability. That is, Level 3 inputs incorporate market participants' assumptions about risk and the risk premium required by market participants in order to bear that risk. We develop Level 3 inputs based on the best information available in the circumstances. At June 30, 2023 and December 31, 2022, our Level 3 measurements included the following: certain structured deposits and structured notes for which the embedded derivatives have significant unobservable inputs (e.g., volatility or default correlations), certain asset-backed securities, individually assessed commercial loans, mortgage servicing rights, derivatives with certain inputs which are unobservable, certain credit default swaps, certain loans held for sale and swap agreements entered into in conjunction with the sales of Visa Class B Shares for which the fair value is dependent upon the final resolution of the related litigation. See Note 19, "Fair Value Measurements," in the accompanying consolidated financial statements for additional information on Level 3 inputs.

Level 3 Measurements The following table provides information about Level 3 assets/liabilities in relation to total assets/ liabilities measured at fair value at June 30, 2023 and December 31, 2022:

	June 30, 2023	December 31, 2022
	(dollars are in millions)	
Level 3 assets[(1)(2)]	**$ 463**	$ 322
Total assets measured at fair value[(1)(3)]	**64,412**	68,441
Level 3 liabilities[(1)]	**2,768**	3,365
Total liabilities measured at fair value[(1)]	**29,138**	30,414
Level 3 assets as a percent of total assets measured at fair value	**0.7 %**	0.5 %
Level 3 liabilities as a percent of total liabilities measured at fair value	**9.5 %**	11.1 %

(1) Presented without netting which allows the offsetting of amounts relating to certain contracts if certain conditions are met.

(2) Includes $313 million of recurring Level 3 assets and $150 million of non-recurring Level 3 assets at June 30, 2023. Includes $270 million of recurring Level 3 assets and $52 million of non-recurring Level 3 assets at December 31, 2022.

(3) Includes $63,574 million of assets measured on a recurring basis and $838 million of assets measured on a non-recurring basis at June 30, 2023. Includes $68,276 million of assets measured on a recurring basis and $165 million of assets measured on a non-recurring basis at December 31, 2022.

Significant Changes in Fair Value for Level 3 Assets and Liabilities See Note 19, "Fair Value Measurements," in the accompanying consolidated financial statements for information on additions to and transfers into (out of) Level 3 measurements during the three and six months ended June 30, 2023 and 2022 as well as for further details including the classification hierarchy associated with assets and liabilities measured at fair value.

Effect of Changes in Significant Unobservable Inputs The fair value of certain financial instruments is measured using valuation techniques that incorporate pricing assumptions not supported by, derived from or corroborated by observable market data. The resultant fair value measurements are dependent on unobservable input parameters which can be selected from a range of estimates and may be interdependent. Changes in one or more of the significant unobservable input parameters may change the fair value measurements of these financial instruments. For the purpose of preparing the financial statements, the final valuation inputs selected are based on management's best judgment that reflect the assumptions market participants would use in pricing similar assets or liabilities.

The unobservable input parameters selected are subject to the internal valuation control processes and procedures. When we perform a test of all the significant input parameters to the extreme values within the range at the same time, it could result in an increase of the overall fair value measurement of approximately $32 million or a decrease of the overall fair value measurement of approximately $67 million at June 30, 2023. The effect of changes in significant unobservable input parameters are primarily driven by the uncertainty in determining the fair value of certain credit-linked structured notes and swap agreements entered into in conjunction with the sales of Visa Class B Shares.

Risk Management

Overview The primary role of risk management is to protect our customers, business, colleagues and the communities that we serve, while ensuring we are able to support our strategy and provide sustainable growth.

We aim to use a comprehensive risk management approach across the organization and across all risk types underpinned by our culture and values. This is outlined in our risk management framework, including the key principles and practices that we employ in managing material risks, both financial and non-financial. This framework fosters continuous monitoring, promotes

risk awareness, and encourages sound operational and strategic decision-making and escalation processes. It also supports a consistent approach to identifying, assessing, managing, and reporting the risks we accept and incur in our activities, with clear accountabilities.

Our Board of Directors has the ultimate responsibility for the effective oversight of risk management and approves our risk appetite. It is advised on risk matters by the Risk Committee of the Board of Directors, notably risk appetite and its alignment with our strategy, risk governance and internal controls, as well as high-level risk related matters. We use a defined executive risk governance structure to help ensure there is appropriate oversight and accountability embedded throughout our business for the effective management of risk.

Our *material risks* The principal risks associated with our operations include the following:

- *Credit risk* is the risk of financial loss if a customer or counterparty fails to meet an obligation under a contract;
- *Treasury risk* is the risk of having insufficient capital, liquidity or funding resources to meet financial obligations and satisfy regulatory requirements, including the risk of an adverse impact on earnings due to changes in market interest rates, together with pension risk;
- *Market risk* is the risk of an adverse financial impact on trading activities arising from changes in market parameters such as interest rates, foreign exchange rates, asset prices, volatilities, correlations and credit spreads;
- *Climate risk* relates to the financial and non-financial impacts that may arise as a result of climate change and the move to a greener economy;
- *Resilience risk* is the risk that we are unable to provide critical services to our customers, affiliates and counterparties as a result of sustained and significant operational disruption;
- *Regulatory compliance risk* is the risk associated with breaching our duty to clients and other counterparties, inappropriate market conduct and breaching related financial services regulatory standards;
- *Financial crime risk* is the risk of knowingly or unknowingly helping parties to commit or to further potentially illegal activity, including money laundering, fraud, bribery and corruption, tax evasion, sanctions breaches, and terrorist and proliferation financing;
- *Strategic risk* is the risk that the business will fail to identify, execute and react appropriately to opportunities and/or threats arising from changes in the market, some of which may emerge over a number of years such as changing economic and political circumstances, customer requirements, demographic trends, regulatory developments or competitor action; and
- *Model risk* is the risk of inappropriate or incorrect business decisions arising from the use of models that have been inadequately designed, implemented or used, or from models that do not perform in line with expectations and predictions.

In the course of our regular risk management activities, we use models to help quantify the risk we are taking. We believe that the assumptions used in these models are reasonable within the parameters for which the models have been built and calibrated to operate, but events may unfold differently than what is assumed in the models. Adjustments to model outputs to reflect consideration of management judgment are used with stringent governance in place to ensure appropriate results. Where models do not require adjustments, enhanced model monitoring confirms models are performing as intended.

See "Risk Management" in MD&A in our 2022 Form 10-K for a more complete discussion of the objectives of our risk management system as well as our risk management policies and practices. There have been no material changes to our approach to risk management since December 31, 2022.

Credit Risk Management Credit risk is managed through a robust risk identification and control framework which outlines clear and consistent policies, principles and guidance for risk managers. Credit risk is monitored using various internal risk management measures and within limits approved by individuals within a framework of delegated authorities. Our credit risk management procedures are designed for all stages of economic and financial cycles, including challenging periods of market volatility and economic uncertainty. During the first half of 2023, the future economic environment remained uncertain amidst high inflation, rising interest rates and the expectation for slowing future economic growth. We continue to monitor the performance of our material commercial loans as conditions evolve and take necessary credit actions where warranted. See "Risk Management" in MD&A in our 2022 Form 10-K for a more complete discussion of our approach to credit risk.

Treasury Risk Management We continuously monitor our capital ratios and the impact of market events on our liquidity positions and will continue to adapt our frameworks as necessary to reflect market events and the evolving regulatory landscape and view as to best practices. See "Risk Management" in MD&A in our 2022 Form 10-K for a more complete discussion of our approach to treasury risk.

Capital risk See "Liquidity and Capital Resources" in this MD&A for a discussion of our approach to capital risk management, including our capital ratios and regulatory capital requirements.

Liquidity and funding risk As part of our approach towards liquidity and funding risk management, we employ the measures discussed below to define, monitor and control our liquidity and funding risk in accordance with HSBC policy.

HSBC North America and HSBC Bank USA are subject to the U.S. liquidity coverage ratio ("LCR") rule, which is designed to be a short-term liquidity measure to ensure banks have sufficient High Quality Liquid Assets ("HQLA") to cover net stressed cash outflows over the next 30 days, and are required to report their LCR to U.S. regulators on a daily basis. During the six months ended June 30, 2023, HSBC Bank USA's LCR remained above 100 percent. Under the Tailoring Rules, a 70 percent LCR requirement applies to Category IV firms with weighted short-term wholesale funding that equals or exceeds $50 billion and their depository institution subsidiaries. As a result, a LCR of 100 percent or higher reflects an unencumbered HQLA balance that is equal to or exceeds 70 percent of a Category IV firm's liquidity needs for a 30 calendar day liquidity stress scenario. HQLA consists of cash or assets that can be converted into cash at little or no loss of value in private markets.

HSBC North America and HSBC Bank USA are also subject to the U.S. net stable funding ratio ("NSFR") rule, which is a longer term liquidity measure with a 12-month time horizon to ensure a sustainable maturity structure of assets and liabilities. At both June 30, 2023 and December 31, 2022, HSBC Bank USA's NSFR exceeded 100 percent. Under the Tailoring Rules, a 70 percent NSFR requirement applies to Category IV firms with weighted short-term wholesale funding that equals or exceeds $50 billion and their depository institution subsidiaries. As a result, a NSFR of 100 percent or more reflects an available stable funding balance from liabilities and capital over the next 12 months that is equal to or exceeds 70 percent of a Category IV firm's required amount of funding for assets and off-balance sheet exposures. In addition, under the U.K. Prudential Regulatory Authority ("PRA") based NSFR rule, HSBC USA's NSFR exceeded 100 percent at both June 30, 2023 and December 31, 2022. Under the U.K. PRA NSFR rule, a NSFR of 100 percent or more reflects an available stable funding balance from liabilities and capital over the next 12 months that is equal to or exceeds the required amount of funding for assets and off-balance sheet exposures.

As a Category IV firm, HSBC North America remains subject to liquidity stress testing and related liquidity buffer and liquidity risk management requirements. HSBC North America and HSBC Bank USA have liquidity profiles to support compliance with these rules and may need to make changes to their liquidity profiles to support compliance with any future rules.

Our liquidity and funding risk management approach includes deposits, supplemented by wholesale borrowing to fund our balance sheet, and using security sales or secured borrowings for liquidity stress situations in our liquidity contingency plans. In addition, regulations require banks to retain a portfolio of HQLA. As such, we are maintaining a large portfolio of high quality sovereign and sovereign guaranteed securities.

Our ability to regularly attract wholesale funds at a competitive cost is enhanced by strong ratings from the major credit rating agencies. The following table reflects the short and long-term credit ratings of HSBC USA and HSBC Bank USA at June 30, 2023:

	Moody's	S&P	Fitch
HSBC USA:			
Short-term borrowings	**P-1**	**A-2**	**F1+**
Long-term/senior debt	**A1**	**A-**	**A+**
HSBC Bank USA:			
Short-term borrowings	**P-1**	**A-1**	**F1+**
Long-term/senior debt	**Aa3**	**A+**	**AA-**

Rating agencies continue to evaluate economic and geopolitical trends, regulatory developments, future profitability, risk management practices and legal matters, all of which could lead to adverse ratings actions.

Although we closely monitor and strive to manage factors influencing our credit ratings, there is no assurance that our credit ratings will not change in the future. At June 30, 2023, none of the ratings on the debt of HSBC USA or HSBC Bank USA from any of the rating agencies were under review for potential downgrade. In July 2023, Moody's placed on review for downgrade the long-term debt ratings of HSBC USA reflecting the decrease in loss absorbing capacity debt outstanding at HSBC North America.

See "Liquidity and Capital Resources" in this MD&A for further discussion of our liquidity position, including additional information regarding our outstanding borrowings, the remaining availability of our debt issuance programs and our funding strategy.

Interest rate risk Various techniques are utilized to quantify and monitor risks associated with the repricing characteristics of our assets, liabilities and derivative contracts. See "Risk Management" in MD&A in our 2022 Form 10-K for a more complete discussion of our approach to interest rate risk.

Economic value of equity ("EVE") EVE represents the present value of the banking book cash flows that could be provided to our equity holder under a managed run-off scenario. An EVE sensitivity represents the change in EVE due to a defined movement in interest rates. We manage to an immediate parallel upward shock of 200 basis points and an immediate parallel downward shock of 200 basis points to the market implied interest rates. At both June 30, 2023 and December 31, 2022, our EVE remained within risk limits for the up 200 and down 200 basis point interest rate shock scenarios.

Net interest income simulation modeling techniques We utilize simulation modeling to monitor a number of interest rate scenarios for their impact on projected net interest income. These techniques simulate the impact on projected net interest income under various scenarios, such as rate shock scenarios which assume immediate market rate movements by 100 basis points, as well as scenarios in which rates gradually rise or fall by 100 basis points over a twelve month period. In the gradual scenarios, 25 percent of the interest rate movement occurs at the beginning of each quarter. The following table reflects the impact on our projected net interest income of the scenarios utilized by these modeling techniques:

	June 30, 2023		December 31, 2022	
	Amount	**%**	**Amount**	**%**
	(dollars are in millions)			
Estimated increase (decrease) in projected net interest income (reflects projected rate movements on July 1, 2023 and January 1, 2023, respectively):				
Resulting from a gradual 100 basis point increase in the yield curve	**$ 5**	**— %**	$ 34	1 %
Resulting from a gradual 100 basis point decrease in the yield curve	**(26)**	**(1)**	(43)	(2)
Other significant scenarios monitored (reflects projected rate movements on July 1, 2023 and January 1, 2023, respectively):				
Resulting from an immediate 100 basis point increase in the yield curve	**22**	**1**	66	2
Resulting from an immediate 100 basis point decrease in the yield curve	**(18)**	**(1)**	(60)	(2)

The projections do not take into consideration possible complicating factors such as the effect of changes in interest rates on the credit quality, size and composition of the balance sheet. Therefore, although this provides a reasonable estimate of interest rate sensitivity, actual results will differ from these estimates, possibly by significant amounts.

Non-trading value at risk ("VaR") Non-trading VaR predominantly relates to Markets Treasury and represents the potential negative changes in the investment portfolio market value (which includes available-for-sale and held-to-maturity assets) and associated hedges. Our investment portfolio holdings comprise mainly U.S. Treasury, U.S. Government agency mortgage-backed and U.S. Government sponsored mortgage-backed securities. Our non-trading VaR exposure is driven by interest rates and agency spread volatility. Refer to "Market Risk Management" below for further discussion regarding VaR and the management of market risk in our non-trading portfolios.

The following table summarizes our non-trading VaR for the six months ended June 30, 2023 and at December 31, 2022:

	Credit Spread	Interest Rate	Portfolio Diversification[1]	Total[2]
	(in millions)			
At June 30, 2023	**$ 81**	**$ 60**	**$ (49)**	**$ 92**
Six Months Ended June 30, 2023				
Average	**62**	**61**	**(41)**	**82**
Maximum	**81**	**79**		**101**
Minimum	**51**	**50**		**61**
At December 31, 2022	$ 51	$ 65	$ (34)	$ 82

(1) Refer to the Trading VaR table in "Market Risk Management" below for additional information.

Non-trading VaR also includes the interest rate risk of non-trading financial assets and liabilities held by the global businesses and transfer priced into Markets Treasury which has the mandate to centrally manage and hedge it.

Market Risk Management Exposure to market risk is separated into two portfolios:

- Trading portfolios comprise positions arising from market-making and warehousing of client-derived positions.
- Non-trading portfolios comprise positions that primarily arise from the interest rate management of our retail and commercial banking assets and liabilities and financial investments classified as available-for-sale and held-to-maturity.

We apply similar risk management policies and measurement techniques to both trading and non-trading portfolios. Our objective is to manage and control market risk exposures to optimize return on risk while maintaining a market profile

consistent with our established risk appetite. See "Risk Management" in MD&A in our 2022 Form 10-K for a more complete discussion of our approach to market risk.

Value at risk ("VaR") VaR is a technique for estimating potential losses on risk positions as a result of movements in market rates and prices over a specified time horizon and to a given level of confidence. The use of VaR is integrated into market risk management and calculated for all trading positions regardless of how we capitalize them. In addition, we calculate VaR for non-trading portfolios to have a complete picture of risk. VaR measures are calculated to a 99 percent confidence level and use a one-day holding period.

Trading VaR Trading VaR is generated principally from trading activities within the MSS segment of GBM. These include positions in foreign exchange, precious metals (i.e., gold, silver, platinum) and credit default swaps.

The following graph summarizes daily VaR for our trading portfolios at a 99 percent confidence level (in millions):

The following table summarizes our trading VaR for the six months ended June 30, 2023 and at December 31, 2022:

	Credit Spread	Foreign Exchange and Commodity	Interest Rate	Portfolio Diversification[(1)]	Total[(2)]
			(in millions)		
At June 30, 2023	**$ 1**	**$ 1**	**$ 7**	**$ (1)**	**$ 8**
Six Months Ended June 30, 2023					
Average	**—**	**3**	**5**	**(3)**	**5**
Maximum	**1**	**7**	**8**		**8**
Minimum	**—**	**1**	**3**		**3**
At December 31, 2022	$ —	$ 4	$ 6	$ (2)	$ 8

(1) Portfolio diversification is the market risk dispersion effect of holding a portfolio containing different risk types. It represents the reduction in unsystematic market risk that occurs when combining a number of different risk types, for example, foreign exchange, interest rate and credit spread, together in one portfolio. It is measured as the difference between the sum of the VaR by individual risk type and the combined total VaR. A negative number represents the benefit of portfolio diversification. As the maximum and minimum occur on different days for different risk types, it is not meaningful to calculate a portfolio diversification benefit for these measures.

(2) The total VaR is non-additive across risk types due to diversification effects. For presentation purposes, portfolio diversification of the VaR for trading portfolios includes VaR-based risk-not-in-VaR.

Refer to "Treasury Risk Management" above for disclosure of our non-trading VaR.

Back-testing We routinely validate the accuracy of our VaR models by back-testing them against hypothetical profit and loss that excludes non-modeled items such as fees, commissions and revenues of intra-day transactions from the actual reported profit and loss. We would expect, under stable market conditions, to experience two or three losses in excess of VaR at the 99 percent confidence level over a one-year period. However, in periods of unstable market conditions, we could see an increase in the number of back-testing exceptions.

During the six months ended June 30, 2023, we experienced no loss back-testing exceptions.

CONSOLIDATED AVERAGE BALANCES AND INTEREST RATES

The following table summarizes the quarter-to-date and year-to-date average daily balances of the principal components of assets, liabilities and equity together with their respective interest amounts and rates earned or paid. Net interest margin is calculated by dividing net interest income by the average interest earning assets from which interest income is earned. Loan interest for the three and six months ended June 30, 2023 included fees of $6 million and $13 million, respectively, compared with fees of $9 million and $22 million during the three and six months ended June 30, 2022, respectively.

Three Months Ended June 30,	2023			2022		
	Average Balance	Interest	Rate	Average Balance	Interest	Rate
	(dollars are in millions)					
Assets:						
Interest bearing deposits with banks	**$ 32,325**	**$ 271**	**3.36 %**	$ 45,655	$ 97	.85 %
Federal funds sold and securities purchased under resale agreements	**8,268**	**145**	**7.03**	2,997	13	1.74
Trading securities	**13,443**	**60**	**1.79**	13,006	55	1.70
Securities	**39,025**	**368**	**3.78**	36,918	169	1.84
Loans:						
Commercial	**41,897**	**706**	**6.76**	44,028	309	2.82
Consumer:						
Residential mortgages	**17,171**	**143**	**3.34**	16,378	118	2.89
Home equity mortgages	**366**	**6**	**6.58**	354	3	3.40
Credit cards	**196**	**4**	**8.19**	213	4	7.53
Other consumer	**117**	**2**	**6.86**	153	3	7.86
Total consumer	**17,850**	**155**	**3.48**	17,098	128	3.00
Total loans	**59,747**	**861**	**5.78**	61,126	437	2.87
Other	**1,771**	**18**	**4.08**	2,414	12	1.99
Total interest earning assets	**$ 154,579**	**$ 1,723**	**4.47 %**	$ 162,116	$ 783	1.94 %
Allowance for credit losses	**(599)**			(467)		
Cash and due from banks	**921**			961		
Other assets	**11,243**			11,055		
Total assets	**$ 166,144**			$ 173,665		
Liabilities and Equity:						
Domestic deposits:						
Savings deposits	**$ 48,234**	**$ 312**	**2.59 %**	$ 56,278	$ 40	.29 %
Time deposits	**16,804**	**241**	**5.75**	9,653	45	1.87
Other interest bearing deposits	**20,814**	**265**	**5.11**	20,787	45	.87
Foreign deposits	**5,869**	**51**	**3.49**	6,387	5	.31
Total interest bearing deposits	**91,721**	**869**	**3.80**	93,105	135	.58
Short-term borrowings:						
Securities sold under repurchase agreements	**456**	**44**	**38.70**	1,910	8	1.68
Commercial paper	**5,343**	**70**	**5.25**	4,242	12	1.13
Other short-term borrowings	**907**	**6**	**2.65**	294	1	1.36
Total short-term borrowings	**6,706**	**120**	**7.18**	6,446	21	1.31
Long-term debt	**19,697**	**290**	**5.91**	15,684	89	2.28
Total interest bearing debt	**118,124**	**1,279**	**4.34**	115,235	245	.85
Tax liabilities and other	**1,232**	**10**	**3.26**	953	6	2.53
Total interest bearing liabilities	**$ 119,356**	**$ 1,289**	**4.33 %**	$ 116,188	$ 251	.87 %
Net interest income/Interest rate spread		**$ 434**	**.14 %**		$ 532	1.07 %
Noninterest bearing deposits	**28,111**			36,164		
Other liabilities	**5,972**			5,516		
Total equity	**12,705**			15,797		
Total liabilities and equity	**$ 166,144**			$ 173,665		
Net interest margin on average earning assets			**1.13 %**			1.32 %

Six Months Ended June 30,	2023			2022		
	Average Balance	Interest	Rate	Average Balance	Interest	Rate
	(dollars are in millions)					
Assets:						
Interest bearing deposits with banks	**$ 33,319**	**$ 540**	**3.27 %**	$ 49,026	$ 122	.50 %
Federal funds sold and securities purchased under resale agreements	**8,794**	**286**	**6.56**	2,882	15	1.05
Trading securities	**13,099**	**109**	**1.68**	14,526	118	1.64
Securities	**37,100**	**691**	**3.76**	38,429	310	1.63
Loans:						
Commercial	**42,194**	**1,363**	**6.51**	42,658	547	2.59
Consumer:						
Residential mortgages	**17,031**	**277**	**3.28**	17,053	244	2.89
Home equity mortgages	**366**	**12**	**6.61**	428	6	2.83
Credit cards	**197**	**8**	**8.19**	250	10	8.07
Other consumer	**127**	**4**	**6.35**	182	6	6.65
Total consumer	**17,721**	**301**	**3.43**	17,913	266	2.99
Total loans	**59,915**	**1,664**	**5.60**	60,571	813	2.71
Other	**1,869**	**37**	**3.99**	2,314	17	1.48
Total interest earning assets	**$ 154,096**	**$ 3,327**	**4.35 %**	$ 167,748	$ 1,395	1.68 %
Allowance for credit losses	**(593)**			(458)		
Cash and due from banks	**932**			956		
Other assets	**11,761**			10,489		
Total assets	**$ 166,196**			$ 178,735		
Liabilities and Equity:						
Domestic deposits:						
Savings deposits	**$ 48,767**	**$ 574**	**2.37 %**	$ 58,475	$ 61	.21 %
Time deposits	**16,496**	**456**	**5.57**	9,165	64	1.41
Other interest bearing deposits	**20,613**	**498**	**4.87**	20,310	60	.60
Foreign deposits	**5,975**	**97**	**3.27**	6,187	6	.20
Deposits held for sale	**—**	**—**	**—**	1,958	2	.21
Total interest bearing deposits	**91,851**	**1,625**	**3.57**	96,095	193	.41
Short-term borrowings:						
Securities sold under repurchase agreements	**440**	**82**	**37.58**	2,242	9	.81
Commercial paper	**5,323**	**131**	**4.96**	3,978	16	.81
Other short-term borrowings	**650**	**7**	**2.17**	274	1	.74
Total short-term borrowings	**6,413**	**220**	**6.92**	6,494	26	.81
Long-term debt	**19,003**	**546**	**5.79**	16,065	157	1.97
Total interest bearing debt	**117,267**	**2,391**	**4.11**	118,654	376	.64
Tax liabilities and other	**1,082**	**19**	**3.54**	1,005	10	2.01
Total interest bearing liabilities	**$ 118,349**	**$ 2,410**	**4.11 %**	$ 119,659	$ 386	.65 %
Net interest income/Interest rate spread		**$ 917**	**.24 %**		$ 1,009	1.03 %
Noninterest bearing deposits	**29,177**			37,978		
Other liabilities	**6,138**			4,815		
Total equity	**12,532**			16,283		
Total liabilities and equity	**$ 166,196**			$ 178,735		
Net interest margin on average earning assets			**1.20 %**			1.21 %

Item 3. Quantitative and Qualitative Disclosures about Market Risk

Information required by this Item is included within Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations in the Risk Management section under the captions "Treasury Risk Management - Interest Rate Risk" and "Market Risk Management."

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures We maintain a system of disclosure controls and procedures designed to ensure that information required to be disclosed by HSBC USA in the reports we file or submit under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), is recorded, processed, summarized and reported on a timely basis. Our Board of Directors, operating through its Audit Committee, which is composed entirely of independent non-executive directors, provides oversight to our financial reporting process.

We conducted an evaluation, with the participation of the Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO"), of the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act) as of the end of the period covered by this report. Based upon that evaluation, the CEO and CFO concluded that our disclosure controls and procedures were effective as of the end of the period covered by this report so as to alert them in a timely fashion to material information required to be disclosed in reports we file under the Exchange Act.

Changes in Internal Control over Financial Reporting There has been no change in our internal control over financial reporting that occurred during the quarter ended June 30, 2023 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II

Item 1. Legal Proceedings

See Note 20, "Litigation and Regulatory Matters," in the accompanying consolidated financial statements for our legal proceedings disclosure, which is incorporated herein by reference.

Item 5. Other Information

Disclosures pursuant to Section 13(r) of the Securities Exchange Act Section 13(r) of the Securities Exchange Act requires each issuer registered with the SEC to disclose in its annual or quarterly reports whether it or any of its affiliates have knowingly engaged in specified activities or transactions with persons or entities targeted by U.S. sanctions programs relating to Iran, terrorism, or the proliferation of weapons of mass destruction, even if those activities are not prohibited by U.S. law and are conducted outside the U.S. by non-U.S. affiliates in compliance with local laws and regulations.

To comply with this requirement, HSBC has requested relevant information from its affiliates globally. During the period covered by this Form 10-Q, HUSI did not engage in activities or transactions requiring disclosure pursuant to Section 13(r) other than those activities related to frozen accounts and transactions permitted under relevant U.S. sanctions programs described under "Frozen Accounts and Transactions" below. The following activities conducted by our affiliates are disclosed in response to Section 13(r):

Legacy contractual obligations related to guarantees Between 1996 and 2007, the HSBC Group provided guarantees to a number of its non-Iranian customers in Europe and the Middle East for various business activities in Iran. In a number of cases, the HSBC Group issued counter indemnities involving Iranian banks as the Iranian beneficiaries of the guarantees required that they be backed directly by Iranian banks. The Iranian banks to which the HSBC Group provided counter indemnities included Bank Tejarat, Bank Melli, and the Bank of Industry and Mine.

There was no measurable gross revenue in the second quarter of 2023 under those guarantees and counter indemnities. The HSBC Group does not allocate direct costs to fees and commissions and, therefore, has not disclosed a separate net profit measure. The HSBC Group is seeking to cancel all relevant guarantees and counter indemnities, and does not currently intend to provide any new guarantees or counter indemnities involving Iran. No guarantees were cancelled in the second quarter of 2023, and approximately 14 remain outstanding.

Other relationships with Iranian banks Activity related to U.S.-sanctioned Iranian banks not covered elsewhere in this disclosure includes the following:

The HSBC Group acts as the trustee and administrator for a pension scheme involving eight employees of a U.S.-sanctioned Iranian bank in Asia. Under the rules of this scheme, the HSBC Group accepts contributions from the Iranian bank each month and allocates the funds into the pension accounts of the Iranian bank's employees. The HSBC Group runs and operates this pension scheme in accordance with applicable laws and regulations. Estimated gross revenue, which includes fees and/or commissions, generated by this pension scheme during the second quarter of 2023, was approximately $564.

For the Iranian bank related-activity discussed above, the HSBC Group does not allocate direct costs to fees and commissions and, therefore, has not disclosed a separate net profit measure.

The HSBC Group has been holding a safe custody box for the Central Bank of Iran. For a number of years, the box has not been accessed by the Central Bank of Iran, and no fees have been charged to the Central Bank of Iran.

The HSBC Group currently intends to continue to wind down the above activities, to the extent legally permissible, and not enter into any new such activity.

Other activity The HSBC Group has one non-Iranian insurance company customer in the Middle East that, during the second quarter of 2023, made local currency domestic payments for the reimbursement of medical treatment to a hospital located outside Iran that is owned by the Government of Iran. The HSBC Group processed these payments from its customer to the hospital.

The HSBC Group has one corporate customer in the Middle East that received one low-value local currency domestic check from an insurance company that is owned by the Government of Iran in the second quarter of 2023. The HSBC Group processed the check from the insurance company to its customer.

The HSBC Group has individual customers in Europe that, during the second quarter of 2023, made small local currency domestic payments to an Iranian embassy. The HSBC Group processed these payments from its customers to the Iranian embassy.

The HSBC Group has corporate customers in Europe that, during the second quarter of 2023, made local currency domestic payments to, or received such payments from, an Iranian embassy. These customers are engaged in activities that require consular services provided by the embassy or provide goods and services that support the conduct of the official business of the embassy. The HSBC Group processed these payments to and from the Iranian embassy for HSBC Group customers.

For these activities, there was no measurable gross revenue or net profit to the HSBC Group during the second quarter of 2023.

Frozen accounts and transactions The HSBC Group and HSBC Bank USA (a subsidiary of HUSI) maintain several accounts that are frozen as a result of relevant sanctions programs, and safekeeping boxes and other similar custodial relationships, for which no activity, except as licensed or otherwise authorized, took place during the second quarter of 2023. There was no measurable gross revenue or net profit to the HSBC Group during the second quarter of 2023 relating to these frozen accounts.

Item 6. Exhibits

3(i)	Articles of Incorporation and amendments and supplements thereto (incorporated by reference to Exhibit 3(a) to HSBC USA Inc.'s Annual Report on Form 10-K for the year ended December 31, 1999, Exhibit 3 to HSBC USA Inc.'s Quarterly Report on Form 10-Q for the quarter ended September 30, 2000, Exhibit 3.2 to HSBC USA Inc.'s Current Report on Form 8-K filed April 4, 2005, Exhibit 3.3 to HSBC USA Inc.'s Current Report on Form 8-K filed April 4, 2005, Exhibit 3.2 to HSBC USA Inc.'s Current Report on Form 8-K filed October 14, 2005, Exhibit 3.2 to HSBC USA Inc.'s Current Report on Form 8-K filed May 22, 2006 and Exhibit 3.2 to HSBC USA Inc.'s Current Report on Form 8-K filed on May 31, 2016).
3(ii)	Bylaws of HSBC USA Inc., as Amended and Restated effective July 20, 2022 (incorporated by reference to Exhibit 3.2 to HSBC USA Inc.'s Current Report on Form 8-K filed July 21, 2022).
31	Certification of Chief Executive Officer and Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32	Certification of Chief Executive Officer and Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	The instance document does not appear in the interactive data file because its XBRL tags are embedded within the Inline XBRL document(1)
101.SCH	Inline XBRL Taxonomy Extension Schema Document(1)
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document(1)
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document(1)
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document(1)
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document(1)
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

(1) Pursuant to Rule 405 of Regulation S-T, includes the following financial information included in our Quarterly Report on Form 10-Q for the quarter ended June 30, 2023, formatted in Inline eXtensible Business Reporting Language ("Inline XBRL"): (i) the Consolidated Statement of Income for the three and six months ended June 30, 2023 and 2022, (ii) the Consolidated Statement of Comprehensive Income (Loss) for the three and six months ended June 30, 2023 and 2022, (iii) the Consolidated Balance Sheet at June 30, 2023 and December 31, 2022, (iv) the Consolidated Statement of Changes in Equity for the three and six months ended June 30, 2023 and 2022, (v) the Consolidated Statement of Cash Flows for the six months ended June 30, 2023 and 2022, and (vi) the Notes to Consolidated Financial Statements.

Signatures

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, HSBC USA Inc. has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: August 1, 2023

HSBC USA INC.

By: /s/ KAVITA MAHTANI

Kavita Mahtani
Senior Executive Vice President and
Chief Financial Officer

EXHIBIT 31

CERTIFICATION OF CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

Certification of Chief Executive Officer

I, Michael Roberts, certify that:

1. I have reviewed this report on Form 10-Q of HSBC USA Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    a. designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b. designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c. evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d. disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and
5. The registrant’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):
    a. all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and
    b. any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: August 1, 2023

/s/ MICHAEL ROBERTS

Michael Roberts
Chairman of the Board, President
and Chief Executive Officer

Certification of Chief Financial Officer

I, Kavita Mahtani, certify that:

1. I have reviewed this report on Form 10-Q of HSBC USA Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    a. designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b. designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c. evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d. disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    a. all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    b. any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 1, 2023

/s/ KAVITA MAHTANI

Kavita Mahtani
Senior Executive Vice President and
Chief Financial Officer

EXHIBIT 32

CERTIFICATION OF CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

The certification set forth below is being submitted in connection with the HSBC USA Inc. (the "Company") Quarterly Report on Form 10-Q for the period ending June 30, 2023 as filed with the Securities and Exchange Commission on the date hereof (the "Report") for the purpose of complying with Rule 13a-14(b) or Rule 15d-14(b) of the Securities Exchange Act of 1934 (the "Exchange Act") and Section 1350 of Chapter 63 of Title 18 of the United States Code.

I, Michael Roberts, certify that:

1. the Report fully complies with the requirements of Section 13(a) or 15(d) of the Exchange Act; and
2. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of HSBC USA Inc.

Date: August 1, 2023

/s/ MICHAEL ROBERTS
Michael Roberts
Chairman of the Board, President
and Chief Executive Officer

This certification accompanies each Report pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and shall not, except to the extent required by the Sarbanes-Oxley Act of 2002, be deemed filed by HSBC USA Inc. for purposes of Section 18 of the Securities Exchange Act of 1934, as amended.

The signed original of this written statement required by Section 906 of the Sarbanes-Oxley Act of 2002 has been provided to HSBC USA Inc. and will be retained by HSBC USA Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

Certification pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

The certification set forth below is being submitted in connection with the HSBC USA Inc. (the "Company") Quarterly Report on Form 10-Q for the period ending June 30, 2023 as filed with the Securities and Exchange Commission on the date hereof (the "Report") for the purpose of complying with Rule 13a-14(b) or Rule 15d-14(b) of the Securities Exchange Act of 1934 (the "Exchange Act") and Section 1350 of Chapter 63 of Title 18 of the United States Code.

I, Kavita Mahtani, certify that:

1. the Report fully complies with the requirements of Section 13(a) or 15(d) of the Exchange Act; and
2. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of HSBC USA Inc.

Date: August 1, 2023

/s/ KAVITA MAHTANI

Kavita Mahtani
Senior Executive Vice President and
Chief Financial Officer

This certification accompanies each Report pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and shall not, except to the extent required by the Sarbanes-Oxley Act of 2002, be deemed filed by HSBC USA Inc. for purposes of Section 18 of the Securities Exchange Act of 1934, as amended.

The signed original of this written statement required by Section 906 of the Sarbanes-Oxley Act of 2002 has been provided to HSBC USA Inc. and will be retained by HSBC USA Inc. and furnished to the Securities and Exchange Commission or its staff upon request.