
**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 **September 30, 2021**

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

(State of incorporation)

452 Fifth Avenue, New York, New York

(Address of principal executive offices)

13-2764867

(I.R.S. Employer Identification No.)

10018

(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	HBA/43	New York Stock Exchange
\$50,000,000 Zero Coupon Callable Accreting Notes due January 29, 2043	HBA/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 October 22, 2021, there were 714 shares of the registrant's common stock outstanding, all of which are owned by HSBC North America Holdings Inc.

TABLE OF CONTENTS

<u>Part/Item No.</u>		<u>Page</u>
Part I		
Item 1.	Financial Statements (Unaudited):	
	Consolidated Statement of Income (Loss)	3
	Consolidated Statement of Comprehensive Income (Loss)	4
	Consolidated Balance Sheet	5
	Consolidated Statement of Changes in Equity	7
	Consolidated Statement of Cash Flows	8
	Notes to the Consolidated Financial Statements	9
Item 2.	Management's Discussion and Analysis of Financial Condition and Results of Operations:	
	Forward-Looking Statements	81
	Executive Overview	83
	Basis of Reporting	88
	Balance Sheet Review	90
	Results of Operations	95
	Segment Results - Group Reporting Basis	105
	Credit Quality	114
	Liquidity and Capital Resources	122
	Off-Balance Sheet Arrangements, Credit Derivatives and Other Contractual Obligations	126
	Fair Value	127
	Risk Management	128
	Consolidated Average Balances and Interest Rates	134
Item 3.	Quantitative and Qualitative Disclosures about Market Risk	136
Item 4.	Controls and Procedures	136
Part II		
Item 1.	Legal Proceedings	136
Item 5.	Other Information	136
Item 6.	Exhibits	138
	Signatures	139

PART I

Item 1. Financial Statements

CONSOLIDATED STATEMENT OF INCOME (LOSS) (UNAUDITED)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
	(in millions)			
Interest income:				
Loans	\$ 416	\$ 511	\$ 1,308	\$ 1,729
Securities	154	202	491	707
Trading securities	60	64	162	192
Short-term investments	24	16	57	126
Other	4	11	17	35
Total interest income	658	804	2,035	2,789
Interest expense:				
Deposits	60	135	210	656
Short-term borrowings	4	7	13	62
Long-term debt	70	111	230	471
Other	4	3	8	10
Total interest expense	138	256	461	1,199
Net interest income	520	548	1,574	1,590
Provision for credit losses	(81)	(105)	(537)	840
Net interest income after provision for credit losses	601	653	2,111	750
Other revenues:				
Credit card fees, net	—	10	23	30
Trust and investment management fees	26	34	81	98
Other fees and commissions	160	144	496	425
Trading revenue (expense)	(42)	49	1	255
Other securities gains, net	4	52	51	111
Servicing and other fees from HSBC affiliates	79	79	232	255
Gain on instruments designated at fair value and related derivatives	8	15	33	15
Other income (loss)	7	(27)	13	18
Total other revenues	242	356	930	1,207
Operating expenses:				
Salaries and employee benefits	151	193	509	590
Support services from HSBC affiliates	389	391	1,148	1,162
Occupancy expense, net	27	44	175	222
Goodwill impairment (Note 9)	—	—	—	784
Other expenses	99	157	318	359
Total operating expenses	666	785	2,150	3,117
Income (loss) before income tax	177	224	891	(1,160)
Income tax expense (benefit)	40	36	222	(72)
Net income (loss)	\$ 137	\$ 188	\$ 669	\$ (1,088)

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

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME (LOSS) (UNAUDITED)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
	(in millions)			
Net income (loss)	\$ 137	\$ 188	\$ 669	\$ (1,088)
Net change in unrealized gains (losses), net of tax:				
Investment securities	(86)	56	(664)	924
Fair value option liabilities attributable to our own credit spread	9	(40)	9	106
Derivatives designated as cash flow hedges	(7)	(10)	(28)	83
Pension and post-retirement benefit plans	—	(2)	1	(2)
Total other comprehensive income (loss)	(84)	4	(682)	1,111
Comprehensive income (loss)	\$ 53	\$ 192	\$ (13)	\$ 23

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

CONSOLIDATED BALANCE SHEET (UNAUDITED)

	September 30, 2021	December 31, 2020
	(in millions, except share data)	
<i>Assets⁽¹⁾</i>		
Cash and due from banks	\$ 1,018	\$ 1,302
Interest bearing deposits with banks	62,140	14,353
Federal funds sold and securities purchased under agreements to resell	7,480	35,746
Trading assets (includes \$2.1 billion and \$1.3 billion pledged to creditors at September 30, 2021 and December 31, 2020, respectively)	21,985	27,284
Securities available-for-sale (includes amortized cost of \$36.4 billion and \$39.6 billion at September 30, 2021 and December 31, 2020, respectively, an allowance for credit losses of \$1 million at both September 30, 2021 and December 31, 2020, and \$2.2 billion and \$2.1 billion pledged to creditors at September 30, 2021 and December 31, 2020, respectively)	36,507	40,672
Securities held-to-maturity, net of allowance for credit losses of \$1 million and \$2 million at September 30, 2021 and December 31, 2020, respectively (fair value of \$6.1 billion and \$9.4 billion at September 30, 2021 and December 31, 2020, respectively)	5,866	8,981
Loans (includes \$27 million and \$32 million designated under fair value option at September 30, 2021 and December 31, 2020, respectively)	55,526	62,088
Less – allowance for credit losses	475	1,015
Loans, net	55,051	61,073
Loans held for sale (includes \$63 million and \$36 million designated under fair value option at September 30, 2021 and December 31, 2020, respectively, and \$2,610 million related to branch disposal group held for sale at September 30, 2021)	4,927	337
Properties and equipment, net	65	144
Goodwill	458	458
Other branch related assets held for sale	244	—
Other assets, net of allowance for credit losses of \$2 million at both September 30, 2021 and December 31, 2020	5,409	6,084
Total assets	\$ 201,150	\$ 196,434
<i>Liabilities⁽¹⁾</i>		
Debt:		
Domestic deposits:		
Noninterest bearing	\$ 43,228	\$ 32,428
Interest bearing (includes \$3.0 billion and \$4.2 billion designated under fair value option at September 30, 2021 and December 31, 2020, respectively)	92,588	107,427
Foreign deposits - interest bearing	7,231	5,295
Deposits held for sale	9,321	—
Total deposits	152,368	145,150
Short-term borrowings	6,377	4,952
Long-term debt (includes \$9.7 billion and \$10.7 billion designated under fair value option at September 30, 2021 and December 31, 2020, respectively)	18,105	19,979
Total debt	176,850	170,081
Trading liabilities	2,670	5,397
Other branch related liabilities held for sale	160	—
Interest, taxes and other liabilities	3,233	2,665
Total liabilities	182,913	178,143
<i>Equity</i>		
Preferred stock (no par value; 40,999,000 shares authorized; 1,265 shares issued and outstanding at both September 30, 2021 and December 31, 2020)	1,265	1,265
Common equity:		
Common stock (\$5 par; 150,000,000 shares authorized; 714 shares issued and outstanding at both September 30, 2021 and December 31, 2020)	—	—
Additional paid-in capital	15,743	15,746
Retained earnings	1,232	601
Accumulated other comprehensive income (loss)	(3)	679
Total common equity	16,972	17,026
Total equity	18,237	18,291
Total liabilities and equity	\$ 201,150	\$ 196,434

⁽¹⁾ The following table summarizes assets and liabilities related to our consolidated variable interest entities ("VIEs") at September 30, 2021 and December 31, 2020. Assets and liabilities exclude intercompany balances that eliminate in consolidation. See Note 18, "Variable Interest Entities," for additional information.

	September 30, 2021	December 31, 2020
	(in millions)	
Assets		
Loans	\$ 7	\$ 10
Other assets	64	79
Total assets	<u>\$ 71</u>	<u>\$ 89</u>
Liabilities		
Interest, taxes and other liabilities	\$ 18	\$ 10
Total liabilities	<u>\$ 18</u>	<u>\$ 10</u>

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

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (UNAUDITED)

Three Months Ended September 30,	2021	2020
	(in millions)	
Preferred stock		
Balance at beginning and end of period	\$ 1,265	\$ 1,265
Common stock		
Balance at beginning and end of period	—	—
Additional paid-in capital		
Balance at beginning of period	15,743	15,746
Employee benefit plans	—	4
Balance at end of period	<u>15,743</u>	<u>15,750</u>
Retained earnings		
Balance at beginning of period	1,095	303
Net income	137	188
Balance at end of period	<u>1,232</u>	<u>491</u>
Accumulated other comprehensive income (loss)		
Balance at beginning of period	81	830
Other comprehensive income (loss), net of tax	(84)	4
Balance at end of period	<u>(3)</u>	<u>834</u>
Total common equity	<u>16,972</u>	<u>17,075</u>
Total equity	<u>\$ 18,237</u>	<u>\$ 18,340</u>
Nine Months Ended September 30,		
	2021	2020
	(in millions)	
Preferred stock		
Balance at beginning and end of period	\$ 1,265	\$ 1,265
Common stock		
Balance at beginning and end of period	—	—
Additional paid-in capital		
Balance at beginning of period	15,746	15,736
Employee benefit plans	(3)	14
Balance at end of period	<u>15,743</u>	<u>15,750</u>
Retained earnings		
Balance at beginning of period	601	1,534
Cumulative effect adjustment to initially apply new accounting guidance for measuring credit losses on financial assets measured at amortized cost, net of tax	—	84
Cumulative effect adjustment to initially apply fair value option accounting election, as permitted under new accounting guidance, to certain student loans held for investment, net of tax	—	2
Reclassification from accumulated other comprehensive income (loss) of cumulative effect adjustment to initially apply new accounting guidance for measuring credit losses on securities available-for-sale, net of tax	—	(2)
Balance at beginning of period, adjusted	<u>601</u>	<u>1,618</u>
Net income (loss)	669	(1,088)
Cash dividends declared on preferred stock	(38)	(39)
Balance at end of period	<u>1,232</u>	<u>491</u>
Accumulated other comprehensive income (loss)		
Balance at beginning of period	679	(279)
Reclassification to retained earnings of cumulative effect adjustment to initially apply new accounting guidance for measuring credit losses on securities available-for-sale, net of tax	—	2
Balance at beginning of period, adjusted	<u>679</u>	<u>(277)</u>
Other comprehensive income (loss), net of tax	(682)	1,111
Balance at end of period	<u>(3)</u>	<u>834</u>
Total common equity	<u>16,972</u>	<u>17,075</u>
Total equity	<u>\$ 18,237</u>	<u>\$ 18,340</u>

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

CONSOLIDATED STATEMENT OF CASH FLOWS (UNAUDITED)

Nine Months Ended September 30,

2021 2020

	(in millions)	
Cash flows from operating activities		
Net income (loss)	\$ 669	\$ (1,088)
Adjustments to reconcile net income (loss) to net cash used in operating activities:		
Depreciation and amortization	206	204
Goodwill impairment	—	784
Provision for credit losses	(537)	840
Net realized gains on securities available-for-sale	(51)	(111)
Net change in other assets and liabilities	1,475	(1,719)
Net change in loans held for sale:		
Originations and purchases of loans held for sale	(2,049)	(2,401)
Sales and collections of loans held for sale	2,204	2,467
Net change in trading assets and liabilities	2,572	(5,020)
Lower of amortized cost or fair value adjustments on loans held for sale	5	25
Gain on instruments designated at fair value and related derivatives	(33)	(15)
Net cash provided by (used in) operating activities	<u>4,461</u>	<u>(6,034)</u>
Cash flows from investing activities		
Net change in federal funds sold and securities purchased under agreements to resell	28,266	(7,741)
Securities available-for-sale:		
Purchases of securities available-for-sale	(14,444)	(20,749)
Proceeds from sales of securities available-for-sale	7,422	10,258
Proceeds from paydowns and maturities of securities available-for-sale	9,864	7,006
Securities held-to-maturity:		
Purchases of securities held-to-maturity	—	(515)
Proceeds from sales of securities held-to-maturity	—	340
Proceeds from paydowns and maturities of securities held-to-maturity	3,094	3,193
Change in loans:		
Collections, net of originations	414	1,216
Loans sold to third parties	1,282	656
Net cash used for acquisitions of properties and equipment	(2)	(5)
Other, net	108	(198)
Net cash provided by (used in) investing activities	<u>36,004</u>	<u>(6,539)</u>
Cash flows from financing activities		
Net change in deposits	7,250	25,575
Debt:		
Net change in short-term borrowings	1,425	1,856
Issuance of long-term debt	6,861	7,250
Repayment of long-term debt	(8,402)	(8,387)
Other increases (decreases) in capital surplus	(3)	14
Dividends paid	(38)	(39)
Net cash provided by financing activities	<u>7,093</u>	<u>26,269</u>
Net change in cash and due from banks and interest bearing deposits with banks	47,558	13,696
Cash and due from banks and interest bearing deposits with banks at beginning of period	15,655	3,782
Cash and due from banks and interest bearing deposits with banks at end of period⁽¹⁾	<u>\$ 63,213</u>	<u>\$ 17,478</u>

⁽¹⁾ Includes \$55 million of cash which is reported in other branch related assets held for sale on the consolidated balance sheet at September 30, 2021.

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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

Note	Page	Note	Page
1 Organization and Presentation	9	12 Accumulated Other Comprehensive Income (Loss)	48
2 Strategic Initiatives	10	13 Pension and Other Postretirement Benefits	50
3 Branch Assets and Liabilities Held for Sale	12	14 Fee Income from Contracts with Customers	50
4 Trading Assets and Liabilities	14	15 Related Party Transactions	51
5 Securities	15	16 Business Segments	53
6 Loans	19	17 Retained Earnings and Regulatory Capital Requirements	55
7 Allowance for Credit Losses	33	18 Variable Interest Entities	57
8 Loans Held for Sale	37	19 Guarantee Arrangements, Pledged Assets and Repurchase Agreements	59
9 Goodwill	38	20 Fair Value Measurements	64
10 Derivative Financial Instruments	38	21 Litigation and Regulatory Matters	80
11 Fair Value Option	45	22 New Accounting Pronouncements	80

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. 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, 2020 (the "2020 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.

2. Strategic Initiatives

As discussed in our 2020 Form 10-K, in February 2020, our Board of Directors approved a strategic plan to restructure our operations ("Restructuring Plan") in alignment with HSBC's global strategy to refocus our wholesale operations to better serve our international corporate clients and restructure our retail operations to better meet the needs of globally mobile and affluent clients. Our Restructuring Plan also includes streamlining our functional and operations support model by removing duplication and reducing the size of our balance sheet to better align with the scope and scale of the U.S. opportunity. We previously disclosed that we expect to incur pre-tax charges in connection with this Restructuring Plan largely over the two year period of 2020-2021 of approximately \$520-\$590 million (\$390-\$450 million after-tax). As a result of the May 2021 decision to further reposition our Wealth and Personal Banking business, along with the identification of additional restructuring activities primarily relating to further simplifying our wholesale operations and support service functions as well as additional investments in systems infrastructure and new technologies, we determined we would incur additional pre-tax charges of approximately \$380-\$410 million (\$290-\$310 million after-tax). We currently expect we will incur our remaining estimated pre-tax charges through 2022. The following table presents a summary of the total pre-tax charges we expect to incur by reportable segment:

	Expected Charges in Connection with Restructuring Plan	
	Minimum	Maximum
	(in millions)	
Wealth and Personal Banking	\$ 160	\$ 180
Commercial Banking	25	35
Global Banking and Markets	115	130
Corporate Center ⁽¹⁾	600	655
Total	<u>\$ 900</u>	<u>\$ 1,000</u>

⁽¹⁾ Includes restructuring charges primarily related to lease impairment and other related costs, support service project costs and severance costs associated with certain centralized activities and functions.

Throughout 2020 and into the third quarter of 2021, we continued to progress our Restructuring Plan, including simplification of our support service functions, the exit or transfer of certain derivative contracts and consolidation of our wholesale and retail middle and back office functions, each under a single operations structure. The consolidation of our wholesale middle and back office functions was completed in the second quarter of 2021. As noted above, during the second quarter of 2021, we made the decision to exit our mass market retail banking business, including the sale or closure of certain branches, and transferred certain assets and liabilities to held for sale. See Note 3, "Branch Assets and Liabilities Held for Sale," for additional information. During the three and nine months ended September 30, 2021, we recorded pre-tax charges in connection with our Restructuring Plan totaling \$47 million and \$183 million, respectively. In 2020, we also completed the initial consolidation of our retail branch network and the creation of our Wealth and Personal Banking business. During the three and nine months ended September 30, 2020, we recorded pre-tax charges in connection with our Restructuring Plan totaling \$84 million and \$244 million, respectively. In total, we have recorded \$463 million of pre-tax charges in connection with our Restructuring Plan. We remain committed to our multi-year strategic plan to re-profile our business.

The following table summarizes the changes in the liability associated with our Restructuring Plan during the three and nine months ended September 30, 2021 and 2020:

	Severance and Other Employee Costs ⁽¹⁾	Lease Termination and Associated Costs ⁽²⁾	Other ⁽³⁾	Total
(in millions)				
Three Months Ended September 30, 2021				
Restructuring liability at beginning of period	\$ 6	\$ 46	\$ —	\$ 52
Restructuring costs accrued during the period	3	2	3	8
Restructuring costs paid during the period	(2)	(2)	(3)	(7)
Restructuring liability at end of period	<u>\$ 7</u>	<u>\$ 46</u>	<u>\$ —</u>	<u>\$ 53</u>
Three Months Ended September 30, 2020				
Restructuring liability at beginning of period	\$ 22	\$ 23	\$ —	\$ 45
Restructuring costs accrued during the period	13	4	—	17
Restructuring costs paid during the period	(12)	(3)	—	(15)
Restructuring liability at end of period	<u>\$ 23</u>	<u>\$ 24</u>	<u>\$ —</u>	<u>\$ 47</u>
Nine Months Ended September 30, 2021				
Restructuring liability at beginning of period	\$ 10	\$ 23	\$ —	\$ 33
Restructuring costs accrued during the period	8	32	9	49
Restructuring costs paid during the period	(11)	(9)	(9)	(29)
Restructuring liability at end of period	<u>\$ 7</u>	<u>\$ 46</u>	<u>\$ —</u>	<u>\$ 53</u>
Nine Months Ended September 30, 2020				
Restructuring liability at beginning of period	\$ —	\$ —	\$ —	\$ —
Restructuring costs accrued during the period	35	28	—	63
Restructuring costs paid during the period	(12)	(4)	—	(16)
Restructuring liability at end of period	<u>\$ 23</u>	<u>\$ 24</u>	<u>\$ —</u>	<u>\$ 47</u>

⁽¹⁾ Severance and other employee costs are included in salaries and employee benefits in the consolidated statement of income (loss). The majority of these costs were reported in the Wealth and Personal Banking and the Global Banking and Markets business segments. Not included in these costs are allocated severance costs from HSBC Technology & Services ("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 (loss) 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 (loss).

In addition to the restructuring costs reflected in the table above, during the second quarter of 2021, as part of our decision to exit our mass market retail banking business we determined that we would exit approximately 30 branches. As a result, we recorded impairment charges during the second quarter of 2021 to write-off the assets associated with these branches, including \$29 million of lease right-of-use ("ROU") assets, \$18 million of leasehold improvement assets and \$3 million of equipment assets. During the three and nine months ended September 30, 2021, we also recorded impairment charges of \$4 million and \$9 million, respectively, to write-down the lease ROU assets and leasehold improvement assets primarily associated with certain office space that we determined we would exit.

During the first quarter of 2020, we determined that we would exit approximately 60 branches (in addition to the approximately 20 branches for which we disclosed plans to exit in 2019). As a result, we recorded impairment charges during the first half of 2020 to write-down the lease ROU assets, net of estimated sublease income, by \$46 million and to write-down the leasehold improvement assets associated with these branches by \$16 million based on their estimated remaining useful lives. The branches were closed by the end of the second quarter of 2020. During the third quarter of 2020, we recorded additional impairment charges of \$7 million to write-down the lease ROU assets 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 (loss) and were reported in the Wealth and Personal Banking and the Corporate Center business segments.

In addition, during the three and nine months ended September 30, 2021, we recorded \$22 million and \$32 million, respectively, of trading losses associated with the continued exit of certain derivative contracts as part of our Restructuring Plan

compared with trading losses of \$47 million and \$57 million during the three and nine months ended September 30, 2020, respectively. These losses are included in trading revenue (expense) in the consolidated statement of income (loss) and were reported in the Global Banking and Markets and the Corporate Center business segments. During the first nine months of 2021, as part of our Restructuring Plan, we also continued to transfer interest rate derivative contracts associated with Fixed Income activities to HSBC Bank plc. These activities are being consolidated in and operated from HSBC Bank plc to better utilize HSBC Group's global scale, which allows us to record revenue as a business introducer and hold fewer assets on our balance sheet. Transfers of interest rate derivative contracts with a notional value of \$20.4 billion were completed during the first nine months of 2021. The remainder of these contracts, with a current notional value of approximately \$33.9 billion, not transferred by December 31, 2021 are expected to be retained as a run-off portfolio. The transferred derivatives were substantially fully collateralized which resulted in an immaterial impact on our consolidated balance sheet.

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 (loss). During the three and nine months ended September 30, 2021, we recorded \$13 million and \$43 million, respectively, of allocated costs from HTSU related to restructuring activities compared with \$13 million and \$55 million of allocated costs during the three and nine months ended September 30, 2020, respectively. 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 nine months ended September 30, 2021, we also recorded \$14 million and \$32 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 (loss) and were reported in the Corporate Center business segment.

3. Branch Assets and Liabilities Held for Sale

In May 2021, as part of our Restructuring Plan we announced that we would take further actions to strategically reposition our Wealth and Personal Banking business to focus on the banking and wealth management needs of globally-connected affluent and high net worth clients through our Premier, Jade and Private Banking propositions. We will exit our mass market retail banking business, including our Personal and Advance propositions as well as retail business banking, and will rebrand approximately 20-25 of our retail branches into international wealth centers to serve our Premier and Jade customers. In conjunction with the execution of this strategy, we have entered into definitive sale agreements with third parties to sell approximately 90 of our retail branches along with substantially all residential mortgage, unsecured and retail business banking loans and all deposits in our branch network not associated with our Premier, Jade and Private Banking customers. Certain assets under management associated with our mass market retail banking operations which are managed by an affiliate will also be transferred. The remaining branches not sold or rebranded will be closed. As a result of entering into these sale agreements, assets and liabilities with an aggregate carrying value of approximately \$2.9 billion and \$10.1 billion, respectively, were transferred to held for sale during the second quarter of 2021. The lower of amortized cost or fair value adjustment upon transferring these assets to held for sale was not material.

Although the disposal group will be sold in multiple transactions that are expected to be completed by the first quarter of 2022, the actual time to complete these sales depends on many factors, including regulatory approval. The sales are expected to result in a gain upon completion. Revenues (net interest income and other revenues) associated with the disposal group represented approximately 7 percent of total consolidated revenues for both the three and nine months ended September 30, 2021, respectively. Income before tax associated with the disposal group was not material.

The following table summarizes the assets and liabilities in the disposal group classified as held for sale at September 30, 2021 in our consolidated balance sheet:

	September 30, 2021
	(in millions)
Loans held for sale ⁽¹⁾	\$ 2,610
Other branch related assets held for sale:	
Lease ROU assets ⁽²⁾	149
Properties and equipment, net	40
Cash and other assets	55
Total other branch related assets held for sale	<u>244</u>
Total branch assets held for sale ⁽³⁾	<u>\$ 2,854</u>
Deposits held for sale	\$ 9,321
Other branch related liabilities held for sale:	
Lease liabilities ⁽²⁾	151
Other liabilities	9
Total other branch related liabilities held for sale	<u>160</u>
Total branch liabilities held for sale ⁽³⁾	<u>\$ 9,481</u>

⁽¹⁾ Includes \$99 million of commercial loans, \$1,952 million of residential mortgage loans, \$235 million of home equity mortgage loans, \$182 million of credit card loans and \$142 million of other consumer loans.

⁽²⁾ At September 30, 2021, our lease ROU assets and lease liabilities, excluding the amounts transferred to held for sale, totaled \$225 million and \$325 million, respectively.

⁽³⁾ The sale of this disposal group is expected to result in a net cash payment as the liabilities being assumed are greater than the assets being purchased.

In addition, mass market retail banking loans that will not be purchased in the transaction described above, including our remaining retail credit card portfolio, which collectively totaled \$1.1 billion, were also transferred to held for sale during the second quarter of 2021 as we did not intend to hold these loans for the foreseeable future. The lower of amortized cost or fair value adjustment upon transferring these assets to held for sale was not material. See Note 8, "Loans Held for Sale," for additional details.

Releases of the allowance for credit losses on the loans transferred to held for sale discussed above during the second quarter of 2021 resulted in a reduction to the provision for credit losses of approximately \$101 million (\$100 million of which related to consumer loans) during the second quarter of 2021. See Note 7, "Allowance for Credit Losses," for additional details.

4. Trading Assets and Liabilities

Trading assets and liabilities consisted of the following:

	September 30, 2021	December 31, 2020
	(in millions)	
Trading assets:		
U.S. Treasury	\$ 2,352	\$ 5,145
U.S. Government agency issued or guaranteed	45	—
U.S. Government sponsored enterprises	246	192
Asset-backed securities	—	143
Foreign bonds	768	7,971
Equity securities	13,287	6,043
Precious metals	3,316	4,989
Derivatives, net	1,971	2,801
Total trading assets	<u>\$ 21,985</u>	<u>\$ 27,284</u>
Trading liabilities:		
Securities sold, not yet purchased	\$ 947	\$ 727
Payables for precious metals	90	2,312
Derivatives, net	1,633	2,358
Total trading liabilities	<u>\$ 2,670</u>	<u>\$ 5,397</u>

At September 30, 2021 and December 31, 2020, the fair value of derivatives included in trading assets is net of \$2,310 million and \$2,763 million, respectively, relating to amounts recognized for the obligation to return cash collateral received under master netting agreements with derivative counterparties.

At September 30, 2021 and December 31, 2020, the fair value of derivatives included in trading liabilities is net of \$1,518 million and \$3,377 million, respectively, 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 (loss), totaled \$44 million and \$108 million during the three and nine months ended September 30, 2021, respectively, compared with \$21 million and \$50 million during the three and nine months ended September 30, 2020, respectively. Trading security positions are 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:

September 30, 2021	Amortized Cost	Allowance for Credit Losses	Unrealized Gains	Unrealized Losses	Fair Value
(in millions)					
Securities available-for-sale:					
U.S. Treasury	\$ 12,510	\$ —	\$ 216	\$ (90)	\$ 12,636
U.S. Government sponsored enterprises:					
Mortgage-backed securities	7,735	—	154	(94)	7,795
Collateralized mortgage obligations	1,831	—	9	(37)	1,803
Direct agency obligations	1,449	—	19	—	1,468
U.S. Government agency issued or guaranteed:					
Mortgage-backed securities	7,172	—	30	(41)	7,161
Collateralized mortgage obligations	2,989	—	11	(24)	2,976
Direct agency obligations	280	—	7	—	287
Asset-backed securities collateralized by:					
Home equity	21	(1)	—	—	20
Other	108	—	—	(7)	101
Foreign debt securities ⁽¹⁾	2,257	—	3	—	2,260
Total available-for-sale securities	<u>\$ 36,352</u>	<u>\$ (1)</u>	<u>\$ 449</u>	<u>\$ (293)</u>	<u>\$ 36,507</u>
Securities held-to-maturity:					
U.S. Government sponsored enterprises:					
Mortgage-backed securities	\$ 735	\$ —	\$ 30	\$ —	\$ 765
Collateralized mortgage obligations	550	—	35	—	585
U.S. Government agency issued or guaranteed:					
Mortgage-backed securities	1,250	—	39	—	1,289
Collateralized mortgage obligations	3,322	—	126	—	3,448
Obligations of U.S. states and political subdivisions	9	—	—	—	9
Asset-backed securities collateralized by residential mortgages	1	(1)	1	—	1
Total held-to-maturity securities	<u>\$ 5,867</u>	<u>\$ (1)</u>	<u>\$ 231</u>	<u>\$ —</u>	<u>\$ 6,097</u>

December 31, 2020	Amortized Cost	Allowance for Credit Losses	Unrealized Gains	Unrealized Losses	Fair Value
	(in millions)				
Securities available-for-sale:					
U.S. Treasury	\$ 16,087	\$ —	\$ 608	\$ (47)	\$ 16,648
U.S. Government sponsored enterprises:					
Mortgage-backed securities	5,986	—	280	(2)	6,264
Collateralized mortgage obligations	1,676	—	19	(2)	1,693
Direct agency obligations	1,236	—	17	—	1,253
U.S. Government agency issued or guaranteed:					
Mortgage-backed securities	6,993	—	152	—	7,145
Collateralized mortgage obligations	2,093	—	22	(11)	2,104
Direct agency obligations	296	—	5	—	301
Asset-backed securities collateralized by:					
Home equity	28	(1)	—	—	27
Other	114	—	—	(10)	104
Foreign debt securities ⁽¹⁾	5,127	—	6	—	5,133
Total available-for-sale securities	<u>\$ 39,636</u>	<u>\$ (1)</u>	<u>\$ 1,109</u>	<u>\$ (72)</u>	<u>\$ 40,672</u>
Securities held-to-maturity:					
U.S. Government sponsored enterprises:					
Mortgage-backed securities	\$ 1,137	\$ —	\$ 44	\$ —	\$ 1,181
Collateralized mortgage obligations	780	—	53	—	833
U.S. Government agency issued or guaranteed:					
Mortgage-backed securities	1,947	—	76	—	2,023
Collateralized mortgage obligations	5,107	—	212	—	5,319
Obligations of U.S. states and political subdivisions	10	—	1	—	11
Asset-backed securities collateralized by residential mortgages	2	(2)	2	—	2
Total held-to-maturity securities	<u>\$ 8,983</u>	<u>\$ (2)</u>	<u>\$ 388</u>	<u>\$ —</u>	<u>\$ 9,369</u>

⁽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 entry 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, over collateralization, 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 September 30, 2021 and December 31, 2020, the allowance for credit losses on securities available-for-sale was \$1 million.

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 September 30, 2021 and December 31, 2020 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 September 30, 2021						
U.S. Treasury	17	\$ (48)	\$ 2,416	9	\$ (42)	\$ 752
U.S. Government sponsored enterprises	60	(127)	5,879	11	(4)	185
U.S. Government agency issued or guaranteed	38	(56)	7,274	11	(9)	495
Asset-backed securities	—	—	—	5	(7)	101
Foreign debt securities	5	—	508	1	—	25
Securities available-for-sale	<u>120</u>	<u>\$ (231)</u>	<u>\$ 16,077</u>	<u>37</u>	<u>\$ (62)</u>	<u>\$ 1,558</u>
At December 31, 2020						
U.S. Treasury	5	\$ (5)	\$ 751	13	\$ (42)	\$ 1,271
U.S. Government sponsored enterprises	15	(3)	715	8	(1)	46
U.S. Government agency issued or guaranteed	13	(11)	1,482	3	—	8
Asset-backed securities	3	(10)	104	2	—	—
Foreign debt securities	6	—	766	5	—	241
Securities available-for-sale	<u>42</u>	<u>\$ (29)</u>	<u>\$ 3,818</u>	<u>31</u>	<u>\$ (43)</u>	<u>\$ 1,566</u>

Gross unrealized losses increased as compared with December 31, 2020 due primarily to increasing yields 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, 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 September 30, 2021, 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 ("lifetime 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 September 30, 2021 and December 31, 2020, the allowance for credit losses on securities held-to-maturity was \$1 million and \$2 million, respectively.

At September 30, 2021 and December 31, 2020, 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 September 30, 2021 and December 31, 2020, 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 September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
	(in millions)			
Gross realized gains	\$ 21	\$ 53	\$ 109	\$ 140
Gross realized losses	(17)	(1)	(58)	(29)
Net realized gains	\$ 4	\$ 52	\$ 51	\$ 111

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 September 30, 2021 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 September 30, 2021, 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 September 30, 2021.

	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	\$ 772	4.07 %	\$ 3,910	.95 %	\$ 3,666	1.36 %	\$ 4,162	1.93 %
U.S. Government sponsored enterprises	31	2.75	1,316	1.78	2,194	2.35	7,474	1.64
U.S. Government agency issued or guaranteed	71	.24	23	1.25	1	6.13	10,346	1.75
Asset-backed securities	—	—	—	—	58	5.13	71	3.52
Foreign debt securities	1,104	.43	1,153	.57	—	—	—	—
Total amortized cost	\$ 1,978	1.88 %	\$ 6,402	1.05 %	\$ 5,919	1.77 %	\$ 22,053	1.75 %
Total fair value	\$ 1,981		\$ 6,513		\$ 6,052		\$ 21,961	
Held-to-maturity:								
U.S. Government sponsored enterprises	\$ —	— %	\$ 184	2.65 %	\$ 327	2.26 %	\$ 774	3.30 %
U.S. Government agency issued or guaranteed	3	3.83	—	—	8	5.14	4,561	2.56
Obligations of U.S. states and political subdivisions	3	3.43	4	3.00	2	4.25	—	—
Asset-backed securities	—	—	—	—	—	—	1	7.53
Total amortized cost	\$ 6	3.78 %	\$ 188	2.66 %	\$ 337	2.34 %	\$ 5,336	2.67 %
Total fair value	\$ 6		\$ 192		\$ 350		\$ 5,549	

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

	September 30, 2021	December 31, 2020
	(in millions)	
Equity securities carried at fair value	\$ 289	\$ 284
Equity securities without readily determinable fair values	16	14

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 second quarter of 2021, we recorded an impairment loss of \$3 million associated with certain equity securities without readily determinable fair values that we determined were impaired as a component of other income (loss) in the consolidated statement of income (loss) compared with recording an impairment loss of \$2 million during the second quarter of 2020.

Also included in other assets were investments in Federal Home Loan Bank ("FHLB") stock and Federal Reserve Bank stock of \$110 million and \$558 million, respectively, at September 30, 2021 and \$259 million and \$559 million, respectively, at December 31, 2020.

6. Loans

Loans consisted of the following:

	September 30, 2021	December 31, 2020
	(in millions)	
Commercial loans:		
Real estate, including construction	\$ 8,250	\$ 10,464
Business and corporate banking ⁽¹⁾	12,788	13,479
Global banking ⁽²⁾	11,440	13,519
Other commercial:		
Affiliates ⁽³⁾	2,857	1,100
Other	3,579	3,037
Total other commercial	<u>6,436</u>	<u>4,137</u>
Total commercial	<u>38,914</u>	<u>41,599</u>
Consumer loans:		
Residential mortgages	16,093	18,377
Home equity mortgages	369	727
Credit cards	—	1,066
Other consumer ⁽⁴⁾	150	319
Total consumer ⁽⁵⁾	<u>16,612</u>	<u>20,489</u>
Total loans	<u>\$ 55,526</u>	<u>\$ 62,088</u>

⁽¹⁾ Includes loans funded under the Paycheck Protection Program ("PPP") which totaled \$437 million and \$1,043 million at September 30, 2021 and December 31, 2020, respectively. PPP loans are fully guaranteed by the Small Business Administration, if certain conditions are met.

⁽²⁾ 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.

⁽³⁾ See Note 15, "Related Party Transactions," for additional information regarding loans to HSBC affiliates.

⁽⁴⁾ Includes certain student loans that we have elected to designate under the fair value option and are therefore carried at fair value, which totaled \$27 million and \$32 million at September 30, 2021 and December 31, 2020, respectively. See Note 11, "Fair Value Option," for further details.

⁽⁵⁾ The decrease in loans at September 30, 2021 includes the impact of our decision to exit our mass market retail banking business as well as our remaining retail credit card portfolio which resulted in the transfer of certain loans to held for sale during the second quarter of 2021. See Note 8, "Loans Held for Sale," for additional information.

Net deferred origination costs totaled \$36 million and \$57 million at September 30, 2021 and December 31, 2020, respectively. At September 30, 2021 and December 31, 2020, we had a net unamortized premium on our loans of \$6 million and \$9 million, respectively.

Coronavirus ("COVID-19") Loan Forbearance Initiatives We have implemented various loan modification programs to provide borrowers relief from the economic impacts of the COVID-19 pandemic. In 2020, the Coronavirus Aid, Relief and Economic Security Act ("CARES Act") was signed into law, which provided financial institutions with the option to temporarily suspend certain requirements under U.S. GAAP related to troubled debt restructurings ("TDR Loans") beginning March 1, 2020. This TDR Loan guidance can be applied until the earlier of January 1, 2022 or 60 days following the termination of the presidentially declared national emergency. We elected to adopt the TDR Loan guidance in the CARES Act and are not applying TDR Loan classification to COVID-19 related loan modifications in the form of a long-term payment deferral (for commercial loans all payment modifications, including all payment deferrals) granted to borrowers that were current (less than 30 days past due) as of December 31, 2019 which otherwise may have been reported as TDR Loans.

In 2020, federal banking regulators issued a revised interagency statement on loan modifications and the reporting for financial institutions working with customers affected by the COVID-19 pandemic ("Interagency Statement"). The Interagency Statement confirmed that COVID-19 related short-term loan modifications (e.g., payment deferrals of six months or less) provided to borrowers that were current (less than 30 days past due) at the time the relief was granted are not TDR Loans. Borrowers that do not meet the criteria in the CARES Act or the Interagency Statement are assessed for TDR Loan classification in accordance with our accounting policies.

In addition, under the Interagency Statement, for COVID-19 related loan modifications in the form of a payment deferral, the borrower's past due status will not be affected during the deferral period and, if the loan was accruing at the time the relief was granted, the loan will generally not be placed on nonaccrual status as long as the borrower utilizes a payment deferral of six months or less. For consumer mortgage loans, when a borrower utilizes a payment deferral of more than six months, the loan will generally be placed on nonaccrual status and, if the loan does not meet the criteria in the CARES Act, assessed for TDR Loan classification. Any accrued interest recorded on these loans is generally not reversed against income and will remain recorded as accrued interest receivable. We have not modified our commercial loan nonaccrual policies as a result of this guidance.

Aging Analysis of Past Due Loans The following table summarizes the past due status of our loans at September 30, 2021 and December 31, 2020. 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. For COVID-19 related loan modifications in the form of a payment deferral, the borrower's past due status will not be affected during the deferral period.

	Past Due		Total Past Due 30 Days or More	Current ⁽¹⁾	Total Loans
	30 - 89 Days	90+ Days			
(in millions)					
At September 30, 2021					
Commercial loans:					
Real estate, including construction	\$ 56	\$ 5	\$ 61	\$ 8,189	\$ 8,250
Business and corporate banking	124	1	125	12,663	12,788
Global banking	—	23	23	11,417	11,440
Other commercial	16	—	16	6,420	6,436
Total commercial	<u>196</u>	<u>29</u>	<u>225</u>	<u>38,689</u>	<u>38,914</u>
Consumer loans:					
Residential mortgages	203	264	467	15,626	16,093
Home equity mortgages	5	19	24	345	369
Credit cards	—	—	—	—	—
Other consumer	3	3	6	144	150
Total consumer ⁽²⁾	<u>211</u>	<u>286</u>	<u>497</u>	<u>16,115</u>	<u>16,612</u>
Total loans	<u>\$ 407</u>	<u>\$ 315</u>	<u>\$ 722</u>	<u>\$ 54,804</u>	<u>\$ 55,526</u>
At December 31, 2020					
Commercial loans:					
Real estate, including construction	\$ 78	\$ —	\$ 78	\$ 10,386	\$ 10,464
Business and corporate banking	126	19	145	13,334	13,479
Global banking	—	60	60	13,459	13,519
Other commercial	24	—	24	4,113	4,137
Total commercial	<u>228</u>	<u>79</u>	<u>307</u>	<u>41,292</u>	<u>41,599</u>
Consumer loans:					
Residential mortgages	435	311	746	17,631	18,377
Home equity mortgages	11	22	33	694	727
Credit cards	23	19	42	1,024	1,066
Other consumer	7	6	13	306	319
Total consumer	<u>476</u>	<u>358</u>	<u>834</u>	<u>19,655</u>	<u>20,489</u>
Total loans	<u>\$ 704</u>	<u>\$ 437</u>	<u>\$ 1,141</u>	<u>\$ 60,947</u>	<u>\$ 62,088</u>

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

⁽²⁾ The decrease in past due loans at September 30, 2021 includes the impact of our decision to exit our mass market retail banking business as well as our remaining retail credit card portfolio which resulted in the transfer of certain loans to held for sale during the second quarter of 2021, including \$115 million of consumer loans which were past due 30 days or more.

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 September 30, 2021			
Commercial:			
Real estate, including construction	\$ 128	\$ —	\$ 35
Business and corporate banking	139	1	73
Global banking	132	—	90
Total commercial	<u>399</u>	<u>1</u>	<u>198</u>
Consumer:			
Residential mortgages ⁽¹⁾⁽²⁾⁽³⁾	785	—	214
Home equity mortgages ⁽¹⁾⁽²⁾	47	—	26
Credit cards	—	—	—
Other consumer	—	—	—
Total consumer ⁽⁴⁾	<u>832</u>	<u>—</u>	<u>240</u>
Total nonperforming loans	<u>\$ 1,231</u>	<u>\$ 1</u>	<u>\$ 438</u>
At December 31, 2020			
Commercial:			
Real estate, including construction	\$ 44	\$ —	\$ 31
Business and corporate banking	163	—	1
Global banking	337	—	93
Total commercial	<u>544</u>	<u>—</u>	<u>125</u>
Consumer:			
Residential mortgages ⁽¹⁾⁽²⁾⁽³⁾	1,079	—	241
Home equity mortgages ⁽¹⁾⁽²⁾	63	—	34
Credit cards	—	19	—
Other consumer	—	2	—
Total consumer	<u>1,142</u>	<u>21</u>	<u>275</u>
Total nonperforming loans	<u>\$ 1,686</u>	<u>\$ 21</u>	<u>\$ 400</u>

⁽¹⁾ At September 30, 2021 and December 31, 2020, nonaccrual consumer mortgage loans include \$323 million and \$375 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. At September 30, 2021 and December 31, 2020, nonaccrual consumer mortgage loans also included \$367 million and \$590 million, respectively, of loans under COVID-19 related payment deferral programs where the borrowers utilized a payment deferral of more than six months and, as a result, have been placed on nonaccrual status.

⁽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.

⁽⁴⁾ The decrease in nonperforming loans at September 30, 2021 includes the impact of our decision to exit our mass market retail banking business as well as our remaining retail credit card portfolio which resulted in the transfer of certain loans to held for sale during the second quarter of 2021, including \$206 million of nonperforming consumer loans, of which \$21 million were accruing loans contractually 90 days or more past due.

The following table provides additional information on our nonaccrual loans:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
	(in millions)			
Interest income that would have been recorded if the nonaccrual loans had been current in accordance with contractual terms during the period	\$ 11	\$ 10	\$ 44	\$ 29
Interest income that was recorded on nonaccrual loans and included in interest income during the period	6	2	31	8

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 September 30, 2021 and December 31, 2020, we had collateral-dependent residential mortgage loans totaling \$623 million and \$817 million, respectively.

For collateral-dependent commercial loans, the allowance for expected credit losses is 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 September 30, 2021 and December 31, 2020, we had collateral-dependent commercial loans totaling \$358 million and \$456 million, respectively.

Troubled debt restructurings TDR Loans represent loans for which the original contractual terms have been modified to provide for terms that are less than what we would be willing to accept for new loans with comparable risk because of deterioration in the borrower's financial condition.

Modifications for consumer or commercial loans may include changes to one or more terms of the loan, including, but not limited to, a change in interest rate, extension of the amortization period, reduction in payment amount and partial forgiveness or deferral of principal, accrued interest or other loan covenants. A substantial amount of our modifications involve interest rate reductions on consumer loans, which lower the amount of interest income we are contractually entitled to receive in future periods. Through lowering the interest rate and other loan term changes, 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. Once a consumer loan is classified as a TDR Loan, it continues to be reported as such until it is paid off or charged-off. For commercial loans, if subsequent performance is in accordance with the new terms and the loan is upgraded, it is possible the loan will no longer be reported as a TDR Loan at the earliest one year after the restructuring. During the three and nine months ended September 30, 2021 and 2020, there were no commercial loans that met this criteria and were removed from TDR Loan classification.

As previously discussed, we have implemented various loan modification payment deferral programs to provide borrowers relief from the economic impacts of COVID-19. Substantially all of the loans under these programs are not classified as TDR Loans due to our election to suspend TDR Loan classification under the CARES Act or their short-term nature as discussed under the Interagency Statement. If a borrower is experiencing financial difficulty when the payment relief period ends, they may enter into a modification program to reduce the interest rate and/or extend the term of the loan which would result in the loan being classified as a TDR Loan.

The following table summarizes our TDR Loans at September 30, 2021 and December 31, 2020:

	September 30, 2021	December 31, 2020
	(in millions)	
Commercial loans:		
Business and corporate banking	\$ 40	\$ 94
Global banking	37	74
Total commercial ⁽¹⁾⁽²⁾	<u>77</u>	<u>168</u>
Consumer loans:		
Residential mortgages ⁽³⁾⁽⁴⁾	384	582
Home equity mortgages ⁽³⁾⁽⁴⁾	17	31
Credit cards	—	5
Total consumer ⁽⁵⁾	<u>401</u>	<u>618</u>
Total TDR Loans ⁽⁶⁾	<u>\$ 478</u>	<u>\$ 786</u>

⁽¹⁾ Additional commitments to lend to commercial borrowers whose loans have been modified in TDR Loans totaled \$13 million and \$107 million at September 30, 2021 and December 31, 2020, respectively.

⁽²⁾ Not included in the table at September 30, 2021 and December 31, 2020 are \$352 million and \$924 million, respectively, of commercial loans that were exempted from TDR assessment due to our CARES Act election.

⁽³⁾ At September 30, 2021 and December 31, 2020, the carrying value of consumer mortgage TDR Loans includes \$339 million and \$487 million, respectively, of loans that are recorded at the lower of amortized cost or fair value of the collateral less cost to sell.

⁽⁴⁾ Not included in the table at September 30, 2021 and December 31, 2020 are \$404 million and \$736 million, respectively, of consumer mortgage loans under COVID-19 related payment deferral programs where the borrowers were provided with extended payment deferral relief of more than six months that were exempted from TDR assessment due to our CARES Act election.

⁽⁵⁾ The decrease in TDR Loans at September 30, 2021 includes the impact of our decision to exit our mass market retail banking business as well as our remaining retail credit card portfolio which resulted in the transfer of certain loans to held for sale during the second quarter of 2021, including \$159 million of consumer TDR Loans.

⁽⁶⁾ At September 30, 2021 and December 31, 2020, the carrying value of TDR Loans includes \$317 million and \$463 million, respectively, of loans which are classified as nonaccrual.

The following table presents information about loans which were modified during the three and nine months ended September 30, 2021 and 2020 and as a result of this action became classified as TDR Loans:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
	(in millions)			
Commercial loans:				
Business and corporate banking	\$ —	\$ 41	\$ 26	\$ 45
Global banking	—	—	15	44
Total commercial	<u>—</u>	<u>41</u>	<u>41</u>	<u>89</u>
Consumer loans:				
Residential mortgages	1	20	33	27
Home equity mortgages	—	—	1	2
Credit cards	—	1	1	3
Total consumer	<u>1</u>	<u>21</u>	<u>35</u>	<u>32</u>
Total	<u>\$ 1</u>	<u>\$ 62</u>	<u>\$ 76</u>	<u>\$ 121</u>

The weighted-average contractual rate reduction for consumer loans which became classified as TDR Loans during the three and nine months ended September 30, 2021 was 3.13 percent and 2.08 percent, respectively, compared with 1.80 percent and 2.14 percent during the three and nine months ended September 30, 2020, respectively. The weighted-average contractual rate reduction for commercial loans was not significant in either the number of loans or rate.

The following table presents consumer loans which were classified as TDR Loans during the previous 12 months which subsequently became 60 days or greater contractually delinquent during the three and nine months ended September 30, 2021 and 2020:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
(in millions)				
Consumer loans:				
Residential mortgages	\$ 1	\$ 2	\$ 4	\$ 3
Total consumer	<u>\$ 1</u>	<u>\$ 2</u>	<u>\$ 4</u>	<u>\$ 3</u>

During the three and nine months ended September 30, 2021 and 2020, there were no commercial TDR Loans which were classified as TDR Loans during the previous 12 months which subsequently became 90 days or greater contractually delinquent.

Commercial Loan Credit Quality Indicators 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 grades based on the risk rating standards of our regulator. The following facility grades 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 September 30, 2021 and December 31, 2020:

	2021	2020	2019	2018	2017	Prior	Revolving Loans	Revolving Loans Converted to Term Loans	Total at Sep. 30, 2021
(in millions)									
Real estate, including construction:									
Special mention	\$ —	\$ —	\$ 352	\$ 361	\$ 110	\$ 225	\$ —	\$ —	\$ 1,048
Substandard	—	—	706	312	357	552	21	11	1,959
Doubtful	—	—	81	2	—	11	—	—	94
Total real estate, including construction	—	—	1,139	675	467	788	21	11	3,101
Business and corporate banking:									
Special mention	—	1	94	64	28	206	226	10	629
Substandard	—	19	40	9	3	250	459	8	788
Doubtful	—	—	—	20	—	30	16	—	66
Total business and corporate banking	—	20	134	93	31	486	701	18	1,483
Global banking:									
Special mention	8	39	—	—	—	39	54	—	140
Substandard	19	—	—	—	—	106	266	—	391
Doubtful	—	—	—	—	—	—	31	—	31
Total global banking	27	39	—	—	—	145	351	—	562
Other commercial:									
Special mention	—	—	—	—	—	8	—	—	8
Substandard	—	—	—	—	—	70	40	—	110
Doubtful	—	—	—	—	—	—	—	—	—
Total other commercial	—	—	—	—	—	78	40	—	118
Total commercial:									
Special mention	8	40	446	425	138	478	280	10	1,825
Substandard	19	19	746	321	360	978	786	19	3,248
Doubtful	—	—	81	22	—	41	47	—	191
Total commercial	\$ 27	\$ 59	\$ 1,273	\$ 768	\$ 498	\$ 1,497	\$ 1,113	\$ 29	\$ 5,264

	2020	2019	2018	2017	2016	Prior	Revolving Loans	Revolving Loans Converted to Term Loans	Total at Dec. 31, 2020
(in millions)									
Real estate, including construction:									
Special mention	\$ —	\$ 306	\$ 115	\$ 171	\$ 85	\$ 437	\$ —	\$ —	\$ 1,114
Substandard	—	186	—	169	—	86	—	—	441
Doubtful	—	—	—	—	—	—	—	—	—
Total real estate, including construction	—	492	115	340	85	523	—	—	1,555
Business and corporate banking:									
Special mention	17	71	43	32	10	390	600	48	1,211
Substandard	1	44	25	23	31	181	435	1	741
Doubtful	—	—	—	—	—	41	57	—	98
Total business and corporate banking	18	115	68	55	41	612	1,092	49	2,050
Global banking:									
Special mention	—	—	—	—	—	142	98	—	240
Substandard	—	—	48	—	—	131	477	—	656
Doubtful	—	—	—	—	—	82	160	—	242
Total global banking	—	—	48	—	—	355	735	—	1,138
Other commercial:									
Special mention	—	—	—	—	—	44	40	—	84
Substandard	—	—	—	—	—	70	—	—	70
Doubtful	—	—	—	—	—	—	—	—	—
Total other commercial	—	—	—	—	—	114	40	—	154
Total commercial:									
Special mention	17	377	158	203	95	1,013	738	48	2,649
Substandard	1	230	73	192	31	468	912	1	1,908
Doubtful	—	—	—	—	—	123	217	—	340
Total commercial	\$ 18	\$ 607	\$ 231	\$ 395	\$ 126	\$ 1,604	\$ 1,867	\$ 49	\$ 4,897

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 September 30, 2021 and December 31, 2020:

	2021	2020	2019	2018	2017	Prior	Revolving Loans	Revolving Loans Converted to Term Loans	Total at Sep. 30, 2021
(in millions)									
Real estate, including construction:									
Performing loans	\$ 7	\$ 635	\$ 2,999	\$ 2,217	\$ 783	\$ 1,416	\$ 49	\$ 16	\$ 8,122
Nonaccrual loans	—	—	81	26	—	21	—	—	128
Accruing loans contractually past due 90 days or more	—	—	—	—	—	—	—	—	—
Total real estate, including construction	7	635	3,080	2,243	783	1,437	49	16	8,250
Business and corporate banking:									
Performing loans	304	647	527	210	217	4,842	5,645	256	12,648
Nonaccrual loans	—	4	14	30	54	1	36	—	139
Accruing loans contractually past due 90 days or more	—	—	—	—	—	—	1	—	1
Total business and corporate banking	304	651	541	240	271	4,843	5,682	256	12,788
Global banking:									
Performing loans	403	674	327	217	234	4,630	4,823	—	11,308
Nonaccrual loans	—	—	—	—	—	42	90	—	132
Accruing loans contractually past due 90 days or more	—	—	—	—	—	—	—	—	—
Total global banking	403	674	327	217	234	4,672	4,913	—	11,440
Other commercial:									
Performing loans	214	450	420	205	100	1,141	3,906	—	6,436
Nonaccrual loans	—	—	—	—	—	—	—	—	—
Accruing loans contractually past due 90 days or more	—	—	—	—	—	—	—	—	—
Total other commercial	214	450	420	205	100	1,141	3,906	—	6,436
Total commercial:									
Performing loans	928	2,406	4,273	2,849	1,334	12,029	14,423	272	38,514
Nonaccrual loans	—	4	95	56	54	64	126	—	399
Accruing loans contractually past due 90 days or more	—	—	—	—	—	—	1	—	1
Total commercial	\$ 928	\$ 2,410	\$ 4,368	\$ 2,905	\$ 1,388	\$ 12,093	\$ 14,550	\$ 272	\$ 38,914

	2020	2019	2018	2017	2016	Prior	Revolving Loans	Revolving Loans Converted to Term Loans	Total at Dec. 31, 2020
	(in millions)								
Real estate, including construction:									
Performing loans	\$ 545	\$ 3,775	\$ 2,775	\$ 1,368	\$ 264	\$ 1,594	\$ 79	\$ 20	\$ 10,420
Nonaccrual loans	—	—	24	—	—	20	—	—	44
Accruing loans contractually past due 90 days or more	—	—	—	—	—	—	—	—	—
Total real estate, including construction	545	3,775	2,799	1,368	264	1,614	79	20	10,464
Business and corporate banking:									
Performing loans	1,079	606	253	275	151	3,485	7,145	322	13,316
Nonaccrual loans	1	15	12	60	1	3	71	—	163
Accruing loans contractually past due 90 days or more	—	—	—	—	—	—	—	—	—
Total business and corporate banking	1,080	621	265	335	152	3,488	7,216	322	13,479
Global banking:									
Performing loans	507	495	190	231	104	6,023	5,632	—	13,182
Nonaccrual loans	—	—	—	—	—	127	210	—	337
Accruing loans contractually past due 90 days or more	—	—	—	—	—	—	—	—	—
Total global banking	507	495	190	231	104	6,150	5,842	—	13,519
Other commercial:									
Performing loans	378	431	215	105	119	630	2,259	—	4,137
Nonaccrual loans	—	—	—	—	—	—	—	—	—
Accruing loans contractually past due 90 days or more	—	—	—	—	—	—	—	—	—
Total other commercial	378	431	215	105	119	630	2,259	—	4,137
Total commercial:									
Performing loans	2,509	5,307	3,433	1,979	638	11,732	15,115	342	41,055
Nonaccrual loans	1	15	36	60	1	150	281	—	544
Accruing loans contractually past due 90 days or more	—	—	—	—	—	—	—	—	—
Total commercial	\$ 2,510	\$ 5,322	\$ 3,469	\$ 2,039	\$ 639	\$ 11,882	\$ 15,396	\$ 342	\$ 41,599

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 September 30, 2021 and December 31, 2020:

	2021	2020	2019	2018	2017	Prior	Revolving Loans	Revolving Loans Converted to Term Loans	Total at Sep. 30, 2021
(in millions)									
Real estate, including construction:									
Investment grade	\$ 6	\$ 318	\$ 563	\$ 809	\$ 129	\$ 238	\$ 15	\$ —	\$ 2,078
Non-investment grade	1	317	2,517	1,434	654	1,199	34	16	6,172
Total real estate, including construction	7	635	3,080	2,243	783	1,437	49	16	8,250
Business and corporate banking:									
Investment grade	31	263	196	42	23	2,308	2,524	69	5,456
Non-investment grade	273	388	345	198	248	2,535	3,158	187	7,332
Total business and corporate banking	304	651	541	240	271	4,843	5,682	256	12,788
Global banking:									
Investment grade	331	666	298	202	234	3,683	4,112	—	9,526
Non-investment grade	72	8	29	15	—	989	801	—	1,914
Total global banking	403	674	327	217	234	4,672	4,913	—	11,440
Other commercial:									
Investment grade	43	368	178	204	76	805	3,739	—	5,413
Non-investment grade	171	82	242	1	24	336	167	—	1,023
Total other commercial	214	450	420	205	100	1,141	3,906	—	6,436
Total commercial:									
Investment grade	411	1,615	1,235	1,257	462	7,034	10,390	69	22,473
Non-investment grade	517	795	3,133	1,648	926	5,059	4,160	203	16,441
Total commercial	\$ 928	\$ 2,410	\$ 4,368	\$ 2,905	\$ 1,388	\$ 12,093	\$ 14,550	\$ 272	\$ 38,914
(in millions)									
Real estate, including construction:									
Investment grade	\$ 339	\$ 1,123	\$ 817	\$ 318	\$ 179	\$ 640	\$ 6	\$ —	\$ 3,422
Non-investment grade	206	2,652	1,982	1,050	85	974	73	20	7,042
Total real estate, including construction	545	3,775	2,799	1,368	264	1,614	79	20	10,464
Business and corporate banking:									
Investment grade	342	147	37	34	23	1,486	2,499	47	4,615
Non-investment grade	738	474	228	301	129	2,002	4,717	275	8,864
Total business and corporate banking	1,080	621	265	335	152	3,488	7,216	322	13,479
Global banking:									
Investment grade	464	477	46	231	30	4,618	4,281	—	10,147
Non-investment grade	43	18	144	—	74	1,532	1,561	—	3,372
Total global banking	507	495	190	231	104	6,150	5,842	—	13,519
Other commercial:									
Investment grade	372	163	117	105	116	525	1,932	—	3,330
Non-investment grade	6	268	98	—	3	105	327	—	807
Total other commercial	378	431	215	105	119	630	2,259	—	4,137
Total commercial:									
Investment grade	1,517	1,910	1,017	688	348	7,269	8,718	47	21,514
Non-investment grade	993	3,412	2,452	1,351	291	4,613	6,678	295	20,085
Total commercial	\$ 2,510	\$ 5,322	\$ 3,469	\$ 2,039	\$ 639	\$ 11,882	\$ 15,396	\$ 342	\$ 41,599

Consumer Loan Credit Quality Indicators 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 September 30, 2021 and December 31, 2020:

	2021	2020	2019	2018	2017	Prior	Revolving Loans	Total at Sep. 30, 2021
	(in millions)							
Residential mortgages ⁽¹⁾⁽²⁾	\$ —	\$ 4	\$ 12	\$ 7	\$ 19	\$ 268	\$ —	\$ 310
Home equity mortgages ⁽¹⁾⁽²⁾	—	—	—	—	—	20	—	20
Credit cards	—	—	—	—	—	—	—	—
Other consumer	—	—	—	—	—	4	—	4
Total consumer	\$ —	\$ 4	\$ 12	\$ 7	\$ 19	\$ 292	\$ —	\$ 334
	(in millions)							
	2020	2019	2018	2017	2016	Prior	Revolving Loans	Total at Dec. 31, 2020
Residential mortgages ⁽¹⁾⁽²⁾	\$ 3	\$ 15	\$ 13	\$ 25	\$ 19	\$ 329	\$ —	\$ 404
Home equity mortgages ⁽¹⁾⁽²⁾	—	—	—	—	—	25	—	25
Credit cards	—	—	—	—	—	—	28	28
Other consumer	1	1	—	—	—	4	2	8
Total consumer	\$ 4	\$ 16	\$ 13	\$ 25	\$ 19	\$ 358	\$ 30	\$ 465

⁽¹⁾ At September 30, 2021 and December 31, 2020, consumer mortgage loan delinquency includes \$252 million and \$281 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 September 30, 2021 and December 31, 2020, consumer mortgage loans include \$91 million and \$109 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 September 30, 2021 and December 31, 2020:

	2021	2020	2019	2018	2017	Prior	Revolving Loans	Total at Sep. 30, 2021
	(in millions)							
Residential mortgages:								
Performing loans	\$ 3,574	\$ 3,527	\$ 1,677	\$ 885	\$ 1,016	\$ 4,629	\$ —	\$ 15,308
Nonaccrual loans	6	39	74	66	60	540	—	785
Total residential mortgages	3,580	3,566	1,751	951	1,076	5,169	—	16,093
Home equity mortgages:								
Performing loans	12	34	28	19	19	210	—	322
Nonaccrual loans	—	—	1	—	—	46	—	47
Total home equity mortgages	12	34	29	19	19	256	—	369
Credit cards:								
Performing loans	—	—	—	—	—	—	—	—
Accruing loans contractually past due 90 days or more	—	—	—	—	—	—	—	—
Total credit cards	—	—	—	—	—	—	—	—
Other consumer:								
Performing loans	6	13	5	1	1	122	2	150
Accruing loans contractually past due 90 days or more	—	—	—	—	—	—	—	—
Total other consumer	6	13	5	1	1	122	2	150
Total consumer:								
Performing loans	3,592	3,574	1,710	905	1,036	4,961	2	15,780
Nonaccrual loans	6	39	75	66	60	586	—	832
Accruing loans contractually past due 90 days or more	—	—	—	—	—	—	—	—
Total consumer	\$ 3,598	\$ 3,613	\$ 1,785	\$ 971	\$ 1,096	\$ 5,547	\$ 2	\$ 16,612

	2020	2019	2018	2017	2016	Prior	Revolving Loans	Total at Dec. 31, 2020
(in millions)								
Residential mortgages:								
Performing loans	\$ 4,491	\$ 2,369	\$ 1,338	\$ 1,572	\$ 1,852	\$ 5,676	\$ —	\$ 17,298
Nonaccrual loans	38	107	93	86	78	677	—	1,079
Total residential mortgages	4,529	2,476	1,431	1,658	1,930	6,353	—	18,377
Home equity mortgages:								
Performing loans	50	51	33	34	45	451	—	664
Nonaccrual loans	—	—	1	1	2	59	—	63
Total home equity mortgages	50	51	34	35	47	510	—	727
Credit cards:								
Performing loans	—	—	—	—	—	—	1,047	1,047
Accruing loans contractually past due 90 days or more	—	—	—	—	—	—	19	19
Total credit cards	—	—	—	—	—	—	1,066	1,066
Other consumer:								
Performing loans	87	39	—	1	8	128	54	317
Accruing loans contractually past due 90 days or more	—	—	—	—	—	—	2	2
Total other consumer	87	39	—	1	8	128	56	319
Total consumer:								
Performing loans	4,628	2,459	1,371	1,607	1,905	6,255	1,101	19,326
Nonaccrual loans	38	107	94	87	80	736	—	1,142
Accruing loans contractually past due 90 days or more	—	—	—	—	—	—	21	21
Total consumer	<u>\$ 4,666</u>	<u>\$ 2,566</u>	<u>\$ 1,465</u>	<u>\$ 1,694</u>	<u>\$ 1,985</u>	<u>\$ 6,991</u>	<u>\$ 1,122</u>	<u>\$ 20,489</u>

Troubled debt restructurings The following table summarizes TDR Loans in our consumer loan portfolio, including a disaggregation of the loans by year of origination as of September 30, 2021 and December 31, 2020:

	2021	2020	2019	2018	2017	Prior	Revolving Loans	Total at Sep. 30, 2021
(in millions)								
Residential mortgages	\$ —	\$ 1	\$ 3	\$ 6	\$ 1	\$ 373	\$ —	\$ 384
Home equity mortgages	—	—	—	—	—	17	—	17
Credit cards	—	—	—	—	—	—	—	—
Total consumer	<u>\$ —</u>	<u>\$ 1</u>	<u>\$ 3</u>	<u>\$ 6</u>	<u>\$ 1</u>	<u>\$ 390</u>	<u>\$ —</u>	<u>\$ 401</u>
(in millions)								
Residential mortgages	\$ 3	\$ 5	\$ 6	\$ 3	\$ 2	\$ 563	\$ —	\$ 582
Home equity mortgages	—	—	—	—	—	31	—	31
Credit cards	—	—	—	—	—	—	5	5
Total consumer	<u>\$ 3</u>	<u>\$ 5</u>	<u>\$ 6</u>	<u>\$ 3</u>	<u>\$ 2</u>	<u>\$ 594</u>	<u>\$ 5</u>	<u>\$ 618</u>

Concentration of Credit Risk At September 30, 2021 and December 31, 2020, our loan portfolios included interest-only residential mortgage and home equity mortgage loans totaling \$3,736 million and \$3,597 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 three 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. The three scenarios are termed the "Consensus Economic Scenarios" and represent a 'most likely outcome' (the "Central scenario") and two less likely 'outer' scenarios, referred to as the "Upside scenario" and the "Downside scenario". 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 three scenarios or additional scenarios may be included in order to consider current economic conditions. As a result of the deterioration of economic conditions and significant economic uncertainty caused by the COVID-19 pandemic, beginning in the second quarter of 2020, we developed and utilized a fourth scenario for estimating lifetime ECL, referred to as the "Alternative Downside scenario", to reflect the possibility that the adverse impact associated with the deterioration in economic conditions could manifest itself over a far longer period of time.

Updates to Economic Scenarios and Other Changes During the Nine Months Ended September 30, 2021 Although economic conditions improved during the first half of 2021, the impact of the COVID-19 pandemic continued to create uncertainty about the future economic environment. As a result, we updated our three 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, 2021 and June 30, 2021. 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 Upside and Alternative Downside scenarios. This weighting was deemed appropriate for the estimation of lifetime ECL at the time.

During the third quarter of 2021, economic conditions continued to improve, although at a slower pace than during the first half of the year. However, the impact of the COVID-19 pandemic continues to create uncertainty about the future economic environment. As a result, we updated our three 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 September 30, 2021. 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 Upside and Alternative Downside 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 September 30, 2021. The economic assumptions described in this section have been formed specifically for the purpose of calculating ECL.

In the Central scenario, Gross Domestic Product ("GDP") maintains its strong recovery path in 2021 and carries its expansion into 2022, under the assumption that economic activities continue to recover while impact from new COVID-19 infections subsides as more people are vaccinated, and high fiscal support boosts near-term economic growth. With a strong economic recovery, the unemployment rate continues on its downward trend, while demand for housing, combined with limited supply, continues to drive the residential housing market to carry its growth momentum into 2022. Commercial real estate prices also start to appreciate, after a period of sluggish growth driven by pandemic induced adjustments. In the financial markets, growth in financial asset prices remains moderate, the federal funds rate remains at the current near-zero level until the beginning of 2023, and the 10-year U.S. Treasury yield, which has experienced some increase since the start of 2021, continues to rise.

In the Upside scenario, the economy is assumed to grow at a faster pace than in the Central scenario. As a result, the unemployment rate falls faster than in the Central scenario and, with increasing mobility, commercial real estate prices start to accelerate. In this scenario, the equity price index climbs with strong momentum, and overall optimism allows the Federal Reserve Board ("FRB") to start normalizing monetary policy earlier than currently anticipated, which consequently drives the 10-year U.S. Treasury yield to a level that is significantly higher than in the Central Scenario.

In the Downside scenario, the economy drops into a mild recession, with the unemployment rate reversing its downward trend and remaining at a higher level. In this scenario, the residential housing market slowly loses its momentum in 2022 due to weakness in the labor market, and the commercial real estate market suffers a heavier blow than the residential housing market. The equity price index in this scenario loses about half of its value by the middle of 2023, driven by an overall erosion of consumer and business sentiments, which also results in a lower 10-year U.S. Treasury yield than in the Central Scenario, and the federal funds rate remains at the lowest level for the next two years.

In the Alternative Downside scenario, the U.S. economy re-enters into a recession in early 2022 and stays in until early 2023, followed by a very anemic recovery thereafter. An extended period of economic contraction keeps the unemployment rate at a very high level, which pressures residential housing prices to fall, while at the same time, contracting corporate activities and rising unemployment pushes the commercial real estate market into a severe 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 September 30, 2021, June 30, 2021 and December 31, 2020:

	For the Quarter Ended		
	December 31, 2021	June 30, 2022	December 31, 2022
Unemployment rate (quarterly average):			
Forecast at September 30, 2021	4.7 %	4.3 %	4.2 %
Forecast at June 30, 2021	4.8	4.4	4.1
Forecast at December 31, 2020	6.2	5.9	5.4
GDP growth rate (year-over-year):			
Forecast at September 30, 2021	6.8	4.9	2.3
Forecast at June 30, 2021	6.3	4.7	2.3
Forecast at December 31, 2020	5.3	3.1	1.8

In addition to the updates to the economic scenarios, during the three and nine months ended September 30, 2021, we decreased the management judgment allowance on our commercial loan portfolio for risk factors associated with higher risk client and industry exposures and, in the year-to-date period, economic uncertainty relating to the impact of COVID-19 that are not fully captured in the models. The decrease for risk factors associated with higher risk industry exposures reflects the transfer of certain commercial real estate loans to held for sale during the third quarter of 2021, which resulted in the reversal of the existing allowance for credit losses on these loans totaling \$24 million. During the three and nine months ended September 30, 2021, we also decreased the management judgment allowance on our consumer loan portfolio for risk factors associated with economic uncertainty and, in the year-to-date period, forbearance accounts that are not fully captured in the models. The decrease in the management judgment allowance on our consumer loan portfolio in the year-to-date period reflects the transfer of certain loans to held for sale. As previously disclosed, during the second quarter of 2021, we made the decision to exit our mass market retail banking business as well as our remaining retail credit card portfolio which resulted in the transfer of certain loans to held for sale and the reversal or charge-off of the existing allowances for credit losses on these loans which collectively totaled \$157 million.

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, the severe projections of macro-economic variables during the current COVID-19 pandemic represent events 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 circumstances around the COVID-19 pandemic are evolving and will continue to impact our business and our allowance for credit losses in future periods. The details of how various U.S. Government actions will impact our customers and therefore the impact on our allowance for credit losses remains uncertain. We will continue to monitor the COVID-19 situation closely and will continue to adapt our Consensus Economic Scenarios 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:

	September 30, 2021	December 31, 2020
	(in millions)	
Allowance for credit losses:		
Loans	\$ 475	\$ 1,015
Securities held-to-maturity ⁽¹⁾	1	2
Other financial assets measured at amortized cost ⁽²⁾	2	2
Securities available-for-sale ⁽¹⁾	1	1
Total allowance for credit losses	<u>\$ 479</u>	<u>\$ 1,020</u>
Liability for off-balance sheet credit exposures	\$ 110	\$ 237

⁽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 nine months ended September 30, 2021 and 2020:

	Commercial Loans				Consumer Loans				Total Loans
	Real Estate, including Construction	Business and Corporate Banking	Global Banking	Other Comm'l	Residential Mortgages	Home Equity Mortgages	Credit Cards	Other Consumer	
(in millions)									
Three Months Ended September 30, 2021									
Allowance for credit losses – beginning of period	\$ 117	\$ 284	\$ 131	\$ 6	\$ (6)	\$ 15	\$ —	\$ —	\$ 547
Provision charged (credited) to income ⁽¹⁾	(2)	(38)	(9)	(2)	(9)	(2)	(1)	(1)	(64)
Charge-offs ⁽¹⁾	—	(13)	—	—	—	(3)	—	—	(16)
Recoveries	—	1	—	—	4	1	1	1	8
Net (charge-offs) recoveries	—	(12)	—	—	4	(2)	1	1	(8)
Allowance for credit losses – end of period	\$ 115	\$ 234	\$ 122	\$ 4	\$ (11)	\$ 11	\$ —	\$ —	\$ 475
Three Months Ended September 30, 2020									
Allowance for credit losses – beginning of period	\$ 120	\$ 434	\$ 424	\$ 5	\$ (19)	\$ 16	\$ 190	\$ 22	\$ 1,192
Provision charged (credited) to income	43	(36)	(103)	3	12	(1)	(2)	9	(75)
Charge-offs	(12)	(2)	(1)	—	(1)	(1)	(23)	(4)	(44)
Recoveries	—	5	—	—	3	1	2	—	11
Net (charge-offs) recoveries	(12)	3	(1)	—	2	—	(21)	(4)	(33)
Allowance for credit losses – end of period	\$ 151	\$ 401	\$ 320	\$ 8	\$ (5)	\$ 15	\$ 167	\$ 27	\$ 1,084
Nine Months Ended September 30, 2021									
Allowance for credit losses – beginning of period	\$ 145	\$ 375	\$ 287	\$ 7	\$ (9)	\$ 22	\$ 161	\$ 27	\$ 1,015
Provision charged (credited) to income ⁽¹⁾	(30)	(115)	(153)	(3)	(3)	(10)	(78)	(18)	(410)
Charge-offs ⁽¹⁾	—	(29)	(12)	—	(10)	(5)	(88)	(11)	(155)
Recoveries	—	3	—	—	11	4	5	2	25
Net (charge-offs) recoveries	—	(26)	(12)	—	1	(1)	(83)	(9)	(130)
Allowance for credit losses – end of period	\$ 115	\$ 234	\$ 122	\$ 4	\$ (11)	\$ 11	\$ —	\$ —	\$ 475
Nine Months Ended September 30, 2020									
Allowance for credit losses – beginning of period	\$ 153	\$ 239	\$ 106	\$ 9	\$ 12	\$ 6	\$ 105	\$ 7	\$ 637
Cumulative effect adjustment to initially apply new accounting guidance for measuring credit losses ⁽²⁾	(112)	(60)	51	(5)	(86)	7	32	3	(170)
Allowance for credit losses – beginning of period, adjusted	41	179	157	4	(74)	13	137	10	467
Provision charged (credited) to income	122	283	183	3	62	1	96	24	774
Charge-offs	(12)	(69)	(20)	—	(1)	(3)	(71)	(8)	(184)
Recoveries	—	8	—	1	8	4	5	1	27
Net (charge-offs) recoveries	(12)	(61)	(20)	1	7	1	(66)	(7)	(157)
Allowance for credit losses – end of period	\$ 151	\$ 401	\$ 320	\$ 8	\$ (5)	\$ 15	\$ 167	\$ 27	\$ 1,084

⁽¹⁾ For loans that are transferred to held for sale, the existing allowance for credit losses at the time of transfer are recognized as a charge-off to the extent fair value is less than amortized cost and attributable to credit. Any remaining allowance for credit losses is released as a reduction to the provision for credit losses.

During the third quarter of 2021, we transferred certain commercial real estate loans to held for sale and, as a result, we released \$24 million of the existing allowance for credit losses as a reduction to the provision for credit losses.

During the second quarter of 2021, we made the decision to exit our mass market retail banking business as well as our remaining retail credit card portfolio which resulted in the transfer of certain loans to held for sale. As a result of transferring these loans to held for sale, during the nine months ended September 30, 2021, we recognized \$56 million of the existing allowance for credit losses on consumer loans as charge-offs, primarily related to non-performing credit cards, and released \$100 million of the existing allowance for credit losses on consumer loans as reductions to the provision for credit losses, primarily related to credit cards. The existing commercial allowance for credit losses on the retail business banking loan portfolio transferred to held for sale was not material. See Note 3, "Branch Assets and Liabilities Held for Sale."

⁽²⁾ See Note 2, "Summary of Significant Accounting Policies and New Accounting Pronouncements," in our 2020 Form 10-K for additional discussion.

The following table summarizes the changes in the liability for off-balance sheet credit exposures during the three and nine months ended September 30, 2021 and 2020:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
	(in millions)			
Balance at beginning of period	\$ 128	\$ 253	\$ 237	\$ 104
Cumulative effect adjustment to initially apply new accounting guidance for measuring credit losses ⁽¹⁾	—	—	—	54
Balance at beginning of period, adjusted	128	253	237	158
Provision charged (credited) to income	(18)	(28)	(127)	67
Balance at end of period	<u>\$ 110</u>	<u>\$ 225</u>	<u>\$ 110</u>	<u>\$ 225</u>

⁽¹⁾ See Note 2, "Summary of Significant Accounting Policies and New Accounting Pronouncements," in our 2020 Form 10-K for additional discussion.

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."

	September 30, 2021	December 31, 2020
	(in millions)	
Accrued interest receivables:		
Loans	\$ 125	\$ 140
Securities held-to-maturity	15	23
Other financial assets measured at amortized cost	2	1
Securities available-for-sale	87	100
Total accrued interest receivables	<u>229</u>	<u>264</u>
Allowance for credit losses	—	2
Accrued interest receivables, net	<u>\$ 229</u>	<u>\$ 262</u>

During the three and nine months ended September 30, 2021, we charged-off accrued interest receivables by reversing interest income for loans of \$1 million and \$3 million, respectively, compared with \$1 million and \$5 million during the three and nine months ended September 30, 2020, respectively.

8. Loans Held for Sale

Loans held for sale consisted of the following:

	September 30, 2021	December 31, 2020
(in millions)		
Commercial loans:		
Real estate, including construction	\$ 1,123	\$ 10
Business and corporate banking	105	—
Global banking	63	119
Total commercial	<u>1,291</u>	<u>129</u>
Consumer loans:		
Residential mortgages	2,449	208
Home equity mortgages	257	—
Credit cards	785	—
Other consumer	145	—
Total consumer	<u>3,636</u>	<u>208</u>
Total loans held for sale	<u>\$ 4,927</u>	<u>\$ 337</u>

Commercial Loans During the third quarter of 2021, we transferred \$1,123 million of certain commercial real estate loans to held for sale as part of an effort to reduce exposure to this sector and improve returns on risk-weighted assets. There was no lower of amortized cost or fair value adjustment recorded upon transferring these loans to held for sale.

During the second quarter of 2021, as part of our Restructuring Plan we made the decision to exit our mass market retail banking business. See Note 3, "Branch Assets and Liabilities Held for Sale," in the accompanying consolidated financial statements for additional information. As a result, during the second quarter of 2021, we transferred our retail business banking loan portfolio to held for sale with a carrying value of \$149 million. The lower of amortized cost or fair value adjustment upon transferring these loans to held for sale was not material. At September 30, 2021, the carrying value of these loans was \$105 million.

Also included in commercial loans held for sale are 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. The fair value of these loans totaled \$63 million and \$36 million at September 30, 2021 and December 31, 2020, respectively. See Note 11, "Fair Value Option," for additional information.

In addition, at December 31, 2020, commercial loans held for sale included certain other loans that we no longer intended to hold for investment and transferred to held for sale which totaled \$93 million. There were none of these loans remaining at September 30, 2021. During the three and nine months ended September 30, 2021, we reversed \$1 million and recorded \$4 million, respectively, of lower of amortized cost or fair value adjustments associated with the write-down of these commercial loans held for sale as a component of other income (loss) in the consolidated statement of income (loss) compared with recording \$16 million and \$25 million of lower of amortized cost or fair value adjustments during the three and nine months ended September 30, 2020, respectively.

Consumer Loans As discussed above, during the second quarter of 2021, as part of our Restructuring Plan we made the decision to exit our mass market retail banking business as well as our remaining retail credit card portfolio. As a result, during the second quarter of 2021, we transferred certain consumer loans to held for sale, including loans related to the branch disposal group, with a carrying value which collectively totaled \$3,616 million, including \$2,364 million of residential mortgages, \$265 million of home equity mortgages, \$829 million of credit cards and \$158 million of other consumer loans. There was no lower of amortized cost or fair value adjustment recorded upon transferring these loans to held for sale. At September 30, 2021, the carrying value of these loans collectively totaled \$3,584 million, including \$2,397 million of residential mortgages (reflecting additional residential mortgage originations to mass market retail banking customers), \$257 million of home equity mortgages, \$785 million of credit cards and \$145 million of other consumer loans.

Also 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 (loss).

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 (loss), was losses of \$1 million and \$2 million during the three and nine months ended September 30, 2021, respectively, compared with nil and a loss of \$1 million during the three and nine months ended September 30, 2020, respectively.

Valuation Allowances Excluding the commercial 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 consumer loans held for sale was \$1 million and nil at September 30, 2021 and December 31, 2020, respectively. The valuation allowance on commercial loans held for sale was nil and \$1 million at September 30, 2021 and December 31, 2020, respectively.

9. Goodwill

Goodwill was \$458 million at both September 30, 2021 and December 31, 2020. Goodwill for these periods reflects accumulated impairment losses of \$1,819 million, which were recognized in prior periods. During the third quarter of 2021, 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 reduced below its carrying amount.

During the first quarter of 2020, as a result of the deterioration in economic conditions caused by the spread of the COVID-19 pandemic and its impact on our businesses including changes to the interest rate environment as a result of FRB actions to combat the economic effects of the virus, we performed an interim impairment test of goodwill and determined that the fair value of our Commercial Banking reporting unit exceeded its carrying value, including goodwill. However, the cash flow projections for our Retail Banking and Wealth Management and our Private Banking reporting units were significantly lower than previous estimates which, in conjunction with valuation estimates under a market approach and in consideration of a challenging macroeconomic outlook, resulted in a fair value that was significantly lower than their book values, including goodwill. As a result, we recorded a non-cash impairment charge of \$784 million in the first quarter of 2020, representing the entire amount of goodwill previously allocated to these reporting units. Beginning in the second quarter of 2020, our Retail Banking and Wealth Management and our Private Banking reporting units are being reported together within a newly created Wealth and Personal Banking segment for segment reporting purposes.

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.

	September 30, 2021		December 31, 2020	
	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	\$ —	\$ 2
Derivatives accounted for as cash flow hedges⁽¹⁾				
Foreign exchange contracts - bilateral OTC ⁽²⁾	6	—	—	53
Total derivatives accounted for as hedges	6	16	—	55
Trading derivatives not accounted for as hedges⁽³⁾				
Exchange-traded ⁽²⁾	2	1	14	9
OTC-cleared ⁽²⁾	18	—	—	58
Bilateral OTC ⁽²⁾	3,068	2,978	6,584	6,555
Interest rate contracts⁽⁴⁾	3,088	2,979	6,598	6,622
Exchange-traded ⁽²⁾	—	2	—	—
OTC-cleared ⁽²⁾	60	—	168	—
Bilateral OTC ⁽²⁾	11,738	11,542	18,299	18,549
Foreign exchange contracts	11,798	11,544	18,467	18,549
Exchange-traded ⁽²⁾	1	4	—	—
Bilateral OTC ⁽²⁾	885	692	4,009	4,200
Equity contracts	886	696	4,009	4,200
Exchange-traded ⁽²⁾	4	1	—	28
Bilateral OTC ⁽²⁾	1,404	951	1,323	1,550
Precious metals contracts	1,408	952	1,323	1,578
Credit contracts - bilateral OTC⁽²⁾	36	23	367	233
Other non-qualifying derivatives not accounted for as hedges⁽¹⁾				
Interest rate contracts - bilateral OTC ⁽²⁾	55	2	89	1
Foreign exchange contracts - bilateral OTC ⁽²⁾	—	1	—	1
Equity contracts - bilateral OTC ⁽²⁾	1,469	128	1,607	91
OTC-cleared ⁽²⁾	—	13	—	14
Bilateral OTC ⁽²⁾	—	42	—	50
Credit contracts	—	55	—	64
Other contracts - bilateral OTC ⁽²⁾⁽⁵⁾	5	44	8	67
Total derivatives	18,751	16,440	32,468	31,461
Less: Gross amounts of receivable / payable subject to enforceable master netting agreements⁽⁶⁾⁽⁸⁾	13,172	13,172	25,537	25,537
Less: Gross amounts of cash collateral received / posted subject to enforceable master netting agreements⁽⁷⁾⁽⁸⁾	3,577	1,518	4,079	3,377
Net amounts of derivative assets / liabilities presented in the balance sheet	2,002	1,750	2,852	2,547
Less: Gross amounts of financial instrument collateral received / posted subject to enforceable master netting agreements but not offset in the consolidated balance sheet	222	74	817	691
Net amounts of derivative assets / liabilities	\$ 1,780	\$ 1,676	\$ 2,035	\$ 1,856

(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) The decreases in interest rate derivative assets and liabilities at September 30, 2021 primarily reflects reduced positions driven by the exit or transfer of certain contracts as part of our Restructuring Plan. See Note 2, "Strategic Initiatives," for additional information.

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

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

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

⁽⁸⁾ 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 19, "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 September 30, 2021 and December 31, 2020, 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 September 30, 2021				
Securities available-for-sale ("AFS")	\$ 7,871	\$ (92)	\$ 1,033	\$ 941
Deposits	1,621	(11)	132	121
Long-term debt	5,646	(12)	158	146
At December 31, 2020				
Securities AFS	7,966	681	738	1,419
Deposits	5,214	214	—	214
Long-term debt	2,227	242	(15)	227

⁽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 locations on the consolidated statement of income (loss):

	Location of Gain (Loss) Recognized in Income	Gain (Loss) on Derivatives	Gain (Loss) on Hedged Items
(in millions)			
Three Months Ended September 30, 2021			
Interest rate contracts / Securities AFS	Net interest income	\$ 29	\$ (4)
Interest rate contracts / Deposits	Net interest income	(3)	(13)
Interest rate contracts / Long-term debt	Net interest income	2	(17)
Total		<u>\$ 28</u>	<u>\$ (34)</u>
Three Months Ended September 30, 2020			
Interest rate contracts / Securities AFS	Net interest income	\$ 182	\$ (135)
Interest rate contracts / Deposits	Net interest income	33	(69)
Interest rate contracts / Long-term debt	Net interest income	(56)	32
Total		<u>\$ 159</u>	<u>\$ (172)</u>
Nine Months Ended September 30, 2021			
Interest rate contracts / Securities AFS	Net interest income	\$ 221	\$ (144)
Interest rate contracts / Deposits	Net interest income	(35)	(5)
Interest rate contracts / Long-term debt	Net interest income	(12)	(28)
Total		<u>\$ 174</u>	<u>\$ (177)</u>
Nine Months Ended September 30, 2020			
Interest rate contracts / Securities AFS	Net interest income	\$ (962)	\$ 1,095
Interest rate contracts / Deposits	Net interest income	153	(250)
Interest rate contracts / Long-term debt	Net interest income	171	(258)
Total		<u>\$ (638)</u>	<u>\$ 587</u>

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 income (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 September 30, 2021, active cash flow hedge relationships extend or mature through September 2024. During the three and nine months ended September 30, 2021, respectively, \$6 million and \$9 million of gains related to discontinued cash flow hedge relationships were amortized to earnings from AOCI compared with losses of \$1 million and \$11 million during the three and nine months ended September 30, 2020, respectively. During the next twelve months, we expect to amortize \$1 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 locations on the consolidated statement of income (loss):

	Gain (Loss) Recognized in AOCI on Derivatives		Location of Gain (Loss) Reclassified from AOCI into Income	Gain (Loss) Reclassified From AOCI into Income	
	2021	2020		2021	2020
(in millions)					
Three Months Ended September 30,					
Foreign exchange contracts	\$ —	\$ —	Net interest income	\$ —	\$ —
Interest rate contracts	(3)	(14)	Net interest income	6	(1)
Total	<u>\$ (3)</u>	<u>\$ (14)</u>		<u>\$ 6</u>	<u>\$ (1)</u>
Nine Months Ended September 30,					
Foreign exchange contracts	\$ (1)	\$ —	Net interest income	\$ —	\$ —
Interest rate contracts	(27)	99	Net interest income	9	(11)
Total	<u>\$ (28)</u>	<u>\$ 99</u>		<u>\$ 9</u>	<u>\$ (11)</u>

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 (expense). 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 (expense).

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 19, "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 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 locations on the consolidated statement of income (loss):

Location of Gain (Loss) Recognized in Income on Derivatives		Gain (Loss) Recognized in Income on Derivatives			
		Three Months Ended September 30,		Nine Months Ended September 30,	
		2021	2020	2021	2020
(in millions)					
Interest rate contracts	Trading revenue (expense)	\$ 45	\$ 773	\$ 197	\$ 655
Foreign exchange contracts	Trading revenue (expense)	(56)	(355)	112	(1,164)
Equity contracts	Trading revenue (expense)	(20)	(385)	(1,000)	683
Precious metals contracts	Trading revenue (expense)	74	67	115	450
Credit contracts	Trading revenue (expense)	(70)	16	101	(606)
Total		<u>\$ (27)</u>	<u>\$ 116</u>	<u>\$ (475)</u>	<u>\$ 18</u>

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

Location of Gain (Loss) Recognized in Income on Derivatives		Gain (Loss) Recognized in Income on Derivatives			
		Three Months Ended September 30,		Nine Months Ended September 30,	
		2021	2020	2021	2020
(in millions)					
Interest rate contracts	Gain on instruments designated at fair value and related derivatives	\$ (8)	\$ (13)	\$ (62)	\$ 256
Interest rate contracts	Other income (loss)	(1)	—	(2)	(1)
Foreign exchange contracts	Gain on instruments designated at fair value and related derivatives	—	—	—	(2)
Equity contracts	Gain on instruments designated at fair value and related derivatives	(62)	306	810	(307)
Credit contracts	Gain on instruments designated at fair value and related derivatives	—	—	—	37
Credit contracts	Other income (loss)	(5)	(15)	(17)	(2)
Other contracts ⁽¹⁾	Other income (loss)	3	(2)	—	(3)
Total		<u>\$ (73)</u>	<u>\$ 276</u>	<u>\$ 729</u>	<u>\$ (22)</u>

⁽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 September 30, 2021 was \$355 million, for which we had posted collateral of \$117 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, 2020 was \$221 million, for which we had posted collateral of \$67 million. Substantially all of the collateral posted is in the form of cash or securities available-for-sale. See Note 19, "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	\$ 20	\$ 67

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

	September 30, 2021	December 31, 2020
	(in millions)	
Interest rate:		
Futures and forwards	\$ 53,008	\$ 37,098
Swaps	298,670	406,609
Options written	11,924	33,269
Options purchased	11,825	32,427
Total interest rate	<u>375,427</u>	<u>509,403</u>
Foreign exchange:		
Swaps, futures and forwards	1,011,881	1,195,449
Options written	34,689	53,200
Options purchased	34,772	53,595
Spot	62,981	57,040
Total foreign exchange	<u>1,144,323</u>	<u>1,359,284</u>
Commodities, equities and precious metals:		
Swaps, futures and forwards	64,012	54,458
Options written	2,708	17,078
Options purchased	11,613	27,083
Total commodities, equities and precious metals	<u>78,333</u>	<u>98,619</u>
Credit derivatives	7,465	52,611
Other contracts ⁽¹⁾	1,238	1,216
Total	<u>\$ 1,606,786</u>	<u>\$ 2,021,133</u>

⁽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 held for investment, certain fixed-rate long-term debt issuances and all of our hybrid instruments, including structured notes and deposits. 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 on instruments designated at fair value and related derivatives in the consolidated statement of income (loss).

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 and include these loans as loans held for sale in the consolidated balance sheet. We also elected to apply FVO accounting to certain student loans held for investment. 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 (loss). 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 September 30, 2021 and December 31, 2020, 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 (loss). Excluding the fair value movement attributable to our own credit spread, the components of gain (loss) in the consolidated statement of income (loss) 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 (loss). Excluding the fair value movement attributable to our own credit spread, the components of gain (loss) in the consolidated statement of income (loss) related to hybrid instruments designated at fair value are summarized in the table below.

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 September 30, 2021			
Student loans held for investment	\$ 27	\$ 29	\$ (2)
Commercial loans held for sale	63	63	—
Fixed rate long-term debt	945	741	204
Hybrid instruments:			
Structured deposits	2,970	2,706	264
Structured notes	8,790	7,609	1,181
At December 31, 2020			
Student loans held for investment	\$ 32	\$ 34	\$ (2)
Commercial loans held for sale	36	36	—
Fixed rate long-term debt	1,030	741	289
Hybrid instruments:			
Structured deposits	4,155	3,844	311
Structured notes	9,695	8,332	1,363

Components of Gain on Instruments Designated at Fair Value and Related Derivatives The following table summarizes the components of gain on instruments designated at fair value and related derivatives reflected in the consolidated statement of income (loss) for the three and nine months ended September 30, 2021 and 2020:

	Loans and Loans Held for Sale	Long-Term Debt	Hybrid Instruments	Total
(in millions)				
Three Months Ended September 30, 2021				
Interest rate and other components ⁽¹⁾	\$ —	\$ 16	\$ 62	\$ 78
Credit risk component ⁽²⁾	—	—	—	—
Total mark-to-market on financial instruments designated at fair value	—	16	62	78
Mark-to-market on related derivatives	—	(19)	(61)	(80)
Net realized gain on related long-term debt derivatives	—	10	—	10
Gain (loss) on instruments designated at fair value and related derivatives	<u>\$ —</u>	<u>\$ 7</u>	<u>\$ 1</u>	<u>\$ 8</u>
Three Months Ended September 30, 2020				
Interest rate and other components ⁽¹⁾	\$ —	\$ 18	\$ (292)	\$ (274)
Credit risk component ⁽²⁾	(4)	—	—	(4)
Total mark-to-market on financial instruments designated at fair value	(4)	18	(292)	(278)
Mark-to-market on related derivatives	—	(24)	307	283
Net realized gain on related long-term debt derivatives	—	10	—	10
Gain (loss) on instruments designated at fair value and related derivatives	<u>\$ (4)</u>	<u>\$ 4</u>	<u>\$ 15</u>	<u>\$ 15</u>
Nine Months Ended September 30, 2021				
Interest rate and other components ⁽¹⁾	\$ —	\$ 75	\$ (791)	\$ (716)
Credit risk component ⁽²⁾	1	—	—	1
Total mark-to-market on financial instruments designated at fair value	1	75	(791)	(715)
Mark-to-market on related derivatives	—	(85)	804	719
Net realized gain on related long-term debt derivatives	—	29	—	29
Gain (loss) on instruments designated at fair value and related derivatives	<u>\$ 1</u>	<u>\$ 19</u>	<u>\$ 13</u>	<u>\$ 33</u>
Nine Months Ended September 30, 2020				
Interest rate and other components ⁽¹⁾	\$ —	\$ (114)	\$ 198	\$ 84
Credit risk component ⁽²⁾⁽³⁾	(53)	—	—	(53)
Total mark-to-market on financial instruments designated at fair value	(53)	(114)	198	31
Mark-to-market on related derivatives	37	126	(203)	(40)
Net realized gain on related long-term debt derivatives	—	24	—	24
Gain (loss) on instruments designated at fair value and related derivatives	<u>\$ (16)</u>	<u>\$ 36</u>	<u>\$ (5)</u>	<u>\$ 15</u>

⁽¹⁾ As it relates to hybrid instruments, interest rate and other components primarily includes interest rate, foreign exchange 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 nine months ended September 30, 2020, the loss in the credit risk component for loans and loans held for sale was attributable to the widening of credit spreads associated with certain commercial loans held for sale which were impacted by the COVID-19 pandemic.

12. Accumulated Other Comprehensive Income (Loss)

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

Three Months Ended September 30,	2021	2020
	(in millions)	
Unrealized gains (losses) on investment securities:		
Balance at beginning of period	\$ 172	\$ 754
Other comprehensive income (loss) for period:		
Net unrealized gains (losses) arising during period, net of tax of \$(27) million and \$26 million, respectively	(86)	84
Reclassification adjustment for gains realized in net income (loss), net of tax of \$(1) million and \$(13) million, respectively ⁽¹⁾	(3)	(39)
Reversal of provision for credit losses realized in net income (loss), 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 (loss), net of tax of \$1 million and \$4 million, respectively ⁽³⁾	3	12
Total other comprehensive income (loss) for period	(86)	56
Balance at end of period	86	810
Unrealized gains (losses) on fair value option liabilities attributable to our own credit spread:		
Balance at beginning of period	15	137
Other comprehensive income (loss) for period:		
Net unrealized gains (losses) arising during period, net of tax of \$3 million and \$(13) million, respectively	9	(40)
Total other comprehensive income (loss) for period	9	(40)
Balance at end of period	24	97
Unrealized gains (losses) on derivatives designated as cash flow hedges:		
Balance at beginning of period	(100)	(58)
Other comprehensive income (loss) for period:		
Net unrealized losses arising during period, net of tax of \$(1) million and \$(4) million, respectively	(2)	(10)
Reclassification adjustment for (gains) losses realized in net income (loss), net of tax of \$(1) million and \$1 million, respectively ⁽⁴⁾	(5)	—
Total other comprehensive loss for period	(7)	(10)
Balance at end of period	(107)	(68)
Pension and postretirement benefit liability:		
Balance at beginning of period	(6)	(3)
Other comprehensive income (loss) for period:		
Change in unfunded pension and postretirement liability, net of tax of nil and \$(1) million, respectively	—	(2)
Total other comprehensive income for period	—	(2)
Balance at end of period	(6)	(5)
Total accumulated other comprehensive income (loss) at end of period	\$ (3)	\$ 834

Nine Months Ended September 30,	2021	2020
	(in millions)	
Unrealized gains (losses) on investment securities:		
Balance at beginning of period	\$ 750	\$ (116)
Cumulative effect adjustment to initially apply new accounting guidance for measuring credit losses on securities available-for-sale, net of tax of \$1 million ⁽⁵⁾	—	2
Balance at beginning of period, adjusted	750	(114)
Other comprehensive income (loss) for period:		
Net unrealized gains (losses) arising during period, net of tax of \$(201) million and \$312 million, respectively	(636)	990
Reclassification adjustment for gains realized in net income (loss), net of tax of \$(12) million and \$(27) million, respectively ⁽¹⁾	(39)	(84)
Reversal of provision for credit losses realized in net income (loss), 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 (loss), net of tax of \$3 million and \$6 million, respectively ⁽³⁾	11	19
Total other comprehensive income (loss) for period	(664)	924
Balance at end of period	86	810
Unrealized gains (losses) on fair value option liabilities attributable to our own credit spread:		
Balance at beginning of period	15	(9)
Other comprehensive income (loss) for period:		
Net unrealized gains arising during period, net of tax of \$3 million and \$33 million, respectively	9	106
Total other comprehensive income for period	9	106
Balance at end of period	24	97
Unrealized gains (losses) on derivatives designated as cash flow hedges:		
Balance at beginning of period	(79)	(151)
Other comprehensive income (loss) for period:		
Net unrealized gains (losses) arising during period, net of tax of \$(7) million and \$24 million, respectively	(21)	75
Reclassification adjustment for (gains) losses realized in net income (loss), net of tax of \$(2) million and \$3 million, respectively ⁽⁴⁾	(7)	8
Total other comprehensive income (loss) for period	(28)	83
Balance at end of period	(107)	(68)
Pension and postretirement benefit liability:		
Balance at beginning of period	(7)	(3)
Other comprehensive income (loss) for period:		
Change in unfunded pension and postretirement liability, net of tax of less than \$1 million and \$(1) million, respectively	1	(2)
Total other comprehensive income (loss) for period	1	(2)
Balance at end of period	(6)	(5)
Total accumulated other comprehensive income (loss) at end of period	\$ (3)	\$ 834

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

⁽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 (loss).

⁽³⁾ Amount amortized to net income (loss) is included in interest income in our consolidated statement of income (loss). 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 (loss) is included in net interest income in our consolidated statement of income (loss).

⁽⁵⁾ See Note 2, "Summary of Significant Accounting Policies and New Accounting Pronouncements," in our 2020 Form 10-K for additional discussion.

13. Pension and Other Postretirement Benefits

Defined Benefit Pension Plan The following table reflects the portion of pension expense and its related components of the combined HSBC North America Pension Plan (either the "HSBC North America Pension Plan" or the "Plan") which has been allocated to us and is recorded in our consolidated statement of income (loss). We have not been allocated any portion of the Plan's net pension asset.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
	(in millions)			
Interest cost on projected benefit obligation	\$ 11	\$ 11	\$ 32	\$ 35
Expected return on plan assets	(15)	(14)	(44)	(53)
Amortization of net actuarial loss	—	—	—	4
Administrative costs	1	1	3	3
Pension (income) expense	<u>\$ (3)</u>	<u>\$ (2)</u>	<u>\$ (9)</u>	<u>\$ (11)</u>

Postretirement Plans Other Than Pensions Certain employees also participate in plans which provide medical and life insurance benefits to retirees and eligible dependents. These plans cover all eligible employees who meet certain age and vested service requirements. We have instituted dollar limits on payments under the plans to control the cost of future medical benefits. Net periodic postretirement benefit cost was less than \$1 million during the three and nine months ended September 30, 2021 and 2020.

14. 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 nine months ended September 30, 2021 and 2020. See Note 22, "Fee Income from Contracts with Customers," in our 2020 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, 2020.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
	(in millions)			
Credit card fees, net	\$ —	\$ 10	\$ 23	\$ 30
Trust and investment management fees	26	34	81	98
Other fees and commissions:				
Account services	73	66	216	185
Credit facilities	76	67	248	204
Other fees	11	11	32	36
Total other fees and commissions	160	144	496	425
Servicing and other fees from HSBC affiliates	79	79	232	255
Insurance ⁽¹⁾	2	2	5	6
Total fee income from contracts with customers	<u>267</u>	<u>269</u>	<u>837</u>	<u>814</u>
Other non-fee revenues	(25)	87	93	393
Total other revenues ⁽²⁾	<u>\$ 242</u>	<u>\$ 356</u>	<u>\$ 930</u>	<u>\$ 1,207</u>

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

⁽²⁾ See Note 16, "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 \$24 million and \$68 million during the three and nine months ended September 30, 2021, respectively, compared with \$18 million and \$53 million during the three and nine months ended September 30, 2020, respectively. Credit card rewards program costs totaled \$26 million and \$50 million during the three and

nine months ended September 30, 2021, respectively, compared with \$10 million and \$28 million during the three and nine months ended September 30, 2020, 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 19, "Guarantee Arrangements, Pledged Assets and Repurchase Agreements," and Note 20, "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 \$5 million and \$3 million at September 30, 2021 and December 31, 2020, respectively. We expect to recognize this revenue over a remaining period of one year or less.

Other than trust and investment management fees as discussed in our 2020 Form 10-K, 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.

15. 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, National Association (together with its subsidiaries, "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:

	September 30, 2021	December 31, 2020
	(in millions)	
Assets:		
Cash and due from banks	\$ 313	\$ 516
Interest bearing deposits with banks	2	187
Securities purchased under agreements to resell ⁽¹⁾	873	3,941
Trading assets	190	314
Loans	2,857	1,100
Other ⁽²⁾	289	319
Total assets	<u>\$ 4,524</u>	<u>\$ 6,377</u>
Liabilities:		
Deposits	\$ 15,624	\$ 15,163
Trading liabilities ⁽³⁾	223	2,375
Short-term borrowings	390	270
Long-term debt	5,528	2,878
Other ⁽²⁾	203	268
Total liabilities	<u>\$ 21,968</u>	<u>\$ 20,954</u>

⁽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.

⁽³⁾ The decrease in trading liabilities at September 30, 2021 primarily reflects a decrease in borrowing of gold inventory from HSBC Bank plc to support client activity levels.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
	(in millions)			
Income (Expense):				
Interest income	\$ 6	\$ 9	\$ 20	\$ 47
Interest expense	(52)	(77)	(185)	(276)
Net interest expense	(46)	(68)	(165)	(229)
Trading revenue (expense)	(1,116)	(1,755)	(2,106)	(2,372)
Servicing and other fees from HSBC affiliates:				
HSBC Bank plc	44	43	124	131
HSBC Markets (USA) Inc. ("HMUS")	22	27	70	84
Other HSBC affiliates	13	9	38	40
Total servicing and other fees from HSBC affiliates	79	79	232	255
Gain (loss) on instruments designated at fair value and related derivatives	(62)	307	803	(203)
Support services from HSBC affiliates:				
HTSU	(242)	(285)	(754)	(820)
HMUS	(26)	(17)	(72)	(63)
Other HSBC affiliates	(121)	(89)	(322)	(279)
Total support services from HSBC affiliates	(389)	(391)	(1,148)	(1,162)
Rental income from HSBC affiliates, net ⁽¹⁾	12	13	32	31
Stock based compensation expense ⁽²⁾	(1)	(3)	(12)	(16)

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

⁽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 (loss). 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 13, "Pension and Other Postretirement Benefits."

Funding Arrangements with HSBC Affiliates:

We use HSBC affiliates to fund a portion of our borrowing and liquidity needs. At September 30, 2021 and December 31, 2020, long-term debt with affiliates reflected \$5.5 billion and \$2.9 billion, respectively, of borrowings from HSBC North America. During the first quarter of 2021, \$850 million of these borrowings were repaid. The remaining outstanding balances include:

- \$2.0 billion of fixed-rate senior debt which matures in September 2025;
- \$1.5 billion of fixed-rate senior debt which was issued during the first quarter of 2021 and matures in June 2030; and
- \$2.0 billion of fixed-rate senior debt which was issued during the second quarter of 2021 and matures in June 2025.

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 September 30, 2021 or December 31, 2020.

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

Lending and Derivative Related Arrangements Extended to HSBC Affiliates:

At September 30, 2021 and December 31, 2020, we had the following loan balances outstanding with HSBC affiliates:

	September 30, 2021	December 31, 2020
	(in millions)	
HMUS and subsidiaries	\$ 1,755	\$ 1,088
HSBC North America	1,000	—
Other short-term affiliate lending	102	12
Total loans	<u>\$ 2,857</u>	<u>\$ 1,100</u>

HMUS and subsidiaries We have extended loans and lines of credit, some of them uncommitted, to HMUS and its subsidiaries in the amount of \$11.6 billion and \$12.0 billion at September 30, 2021 and December 31, 2020, respectively, of which \$1.8 billion and \$1.1 billion, respectively, was outstanding. The maturities of the outstanding balances range from overnight to three months. 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 \$1.0 billion and nil outstanding at September 30, 2021 and December 31, 2020, respectively. The outstanding balance matures in April 2022.

We have extended lines of credit to various other HSBC affiliates totaling \$3.9 billion and \$4.7 billion which did not have any outstanding balances at either September 30, 2021 or December 31, 2020.

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 September 30, 2021 and December 31, 2020, there were \$102 million and \$12 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 \$785.1 billion and \$923.6 billion at September 30, 2021 and December 31, 2020, 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 \$215 million and \$66 million at September 30, 2021 and December 31, 2020, 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.

As discussed further in Note 2, "Strategic Initiatives," during the three and nine months ended September 30, 2021, we continued to transfer certain interest rate derivative contracts to HSBC Bank plc as part of our Restructuring Plan. In addition, during the third quarter of 2021, we unwound our remaining legacy structured credit products which resulted in the sale of our remaining non-government asset-backed securities held for trading and the termination of the related derivatives. A majority of the securities were sold to HSBC Bank plc and a portion of the related terminated derivatives were total return swaps with HSBC Bank plc. The loss resulting from these unwind related transactions with HSBC Bank plc was not material.

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 23, "Related Party Transactions," in our 2020 Form 10-K. There have been no significant changes in these activities since December 31, 2020.

Other Transactions with HSBC Affiliates:

At both September 30, 2021 and December 31, 2020, we had \$1,265 million of non-cumulative preferred stock issued and outstanding to HSBC North America. See Note 18, "Preferred Stock," in our 2020 Form 10-K for additional details.

16. Business Segments

We have four distinct business segments that we utilize for management reporting and analysis purposes, which are aligned with HSBC's global business strategy: Wealth and Personal Banking ("WPB"), Commercial Banking ("CMB"), Global Banking and Markets ("GBM") and a Corporate Center ("CC").

As of January 1, 2021, we implemented a change to our internal management reporting to prospectively report assets related to our active branches within our WPB segment, which were historically reported within our CC segment. As a result, lease impairment and other related costs associated with these branches is recorded within our WPB segment beginning in 2021. Prior periods were not impacted by this change.

There have been no additional changes in the basis of our segmentation as compared with the presentation in our 2020 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.

There have been no changes in the measurement of segment profit as compared with the presentation in our 2020 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 24, "Business Segments," in our 2020 Form 10-K. There have been no significant changes since December 31, 2020 in the differences between U.S. GAAP and the Group Reporting Basis impacting our results.

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					Group Reporting Basis Adjustments ⁽¹⁾	Group Reporting Basis Reclassifications ⁽²⁾	U.S. GAAP Consolidated Totals
	WPB	CMB	GBM	CC	Total			
(in millions)								
Three Months Ended September 30, 2021								
Net interest income (expense)	\$ 202	\$ 200	\$ 74	\$ (1)	\$ 475	\$ 4	\$ 41	\$ 520
Other operating income (expense)	57	70	184	(38)	273	4	(35)	242
Total operating income (expense)	259	270	258	(39)	748	8	6	762
Expected credit losses / provision for credit losses	(35)	24	(31)	—	(42)	(39)	—	(81)
	294	246	289	(39)	790	47	6	843
Operating expenses	279	134	186	55	654	6	6	666
Profit (loss) before income tax	\$ 15	\$ 112	\$ 103	\$ (94)	\$ 136	\$ 41	\$ —	\$ 177
Three Months Ended September 30, 2020								
Net interest income (expense)	\$ 200	\$ 202	\$ 92	\$ (9)	\$ 485	\$ 1	\$ 62	\$ 548
Other operating income	110	66	217	40	433	(22)	(55)	356
Total operating income	310	268	309	31	918	(21)	7	904
Expected credit losses / provision for credit losses	12	(21)	(6)	—	(15)	(90)	—	(105)
	298	289	315	31	933	69	7	1,009
Operating expenses	527	150	251	126	1,054	(276)	7	785
Profit (loss) before income tax	\$ (229)	\$ 139	\$ 64	\$ (95)	\$ (121)	\$ 345	\$ —	\$ 224

	Group Reporting Basis Consolidated Amounts					Group Reporting Basis Adjustments ⁽¹⁾	Group Reporting Basis Reclassifications ⁽²⁾	U.S. GAAP Consolidated Totals
	WPB	CMB	GBM	CC	Total			
Nine Months Ended September 30, 2021								
Net interest income (expense)	\$ 616	\$ 580	\$ 255	\$ (3)	\$ 1,448	\$ 17	\$ 109	\$ 1,574
Other operating income (expense)	215	208	613	(9)	1,027	(2)	(95)	930
Total operating income (expense)	831	788	868	(12)	2,475	15	14	2,504
Expected credit losses / provision for credit losses	(36)	(26)	(154)	—	(216)	(321)	—	(537)
	867	814	1,022	(12)	2,691	336	14	3,041
Operating expenses	921	437	573	157	2,088	48	14	2,150
Profit (loss) before income tax	\$ (54)	\$ 377	\$ 449	\$ (169)	\$ 603	\$ 288	\$ —	\$ 891
Balances at end of period:								
Total assets	\$ 69,021	\$ 46,226	\$ 102,543	\$ 1,611	\$ 219,401	\$ (18,251)	\$ —	\$ 201,150
Total loans, net	22,046	20,998	11,290	—	54,334	(1,549)	2,266	55,051
Goodwill	—	358	—	—	358	100	—	458
Total deposits	39,762	45,239	52,130	—	137,131	(3,668)	18,905	152,368
Nine Months Ended September 30, 2020								
Net interest income (expense)	\$ 629	\$ 616	\$ 304	\$ (29)	\$ 1,520	\$ 6	\$ 64	\$ 1,590
Other operating income	283	176	743	101	1,303	(45)	(51)	1,207
Total operating income	912	792	1,047	72	2,823	(39)	13	2,797
Expected credit losses / provision for credit losses	188	283	129	—	600	240	—	840
	724	509	918	72	2,223	(279)	13	1,957
Operating expenses	1,888	439	644	324	3,295	(191)	13	3,117
Profit (loss) before income tax	\$ (1,164)	\$ 70	\$ 274	\$ (252)	\$ (1,072)	\$ (88)	\$ —	\$ (1,160)
Balances at end of period:								
Total assets	\$ 56,728	\$ 38,096	\$ 136,478	\$ 1,565	\$ 232,867	\$ (31,921)	\$ —	\$ 200,946
Total loans, net	23,821	25,852	14,122	—	63,795	(1,682)	3,212	65,325
Goodwill	—	358	—	—	358	100	—	458
Total deposits	48,477	39,736	51,566	—	139,779	(5,198)	15,747	150,328

⁽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.

17. 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 September 30, 2021 and December 31, 2020:

	September 30, 2021			December 31, 2020		
	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: ⁽⁴⁾						
HSBC USA	\$ 16,393	4.5 % ⁽²⁾	15.9 %	\$ 15,891	4.5 % ⁽²⁾	14.5 %
HSBC Bank USA	18,664	6.5	18.3	18,180	6.5	16.4
Tier 1 capital ratio: ⁽⁴⁾						
HSBC USA	17,658	6.0	17.1	17,156	6.0	15.6
HSBC Bank USA	21,164	8.0	20.8	20,680	8.0	18.7
Total capital ratio: ⁽⁴⁾						
HSBC USA	19,910	10.0	19.3	20,680	10.0	18.8
HSBC Bank USA	23,193	10.0	22.7	23,303	10.0	21.1
Tier 1 leverage ratio:						
HSBC USA	17,658	4.0 ⁽²⁾	9.1	17,156	4.0 ⁽²⁾	8.6
HSBC Bank USA	21,164	5.0	11.0	20,680	5.0	10.3
Supplementary leverage ratio ("SLR"):						
HSBC USA	17,658	3.0 ⁽³⁾	7.0	17,156	3.0 ⁽³⁾	7.8
HSBC Bank USA	21,164	3.0 ⁽³⁾	8.5	20,680	3.0 ⁽³⁾	9.3
Risk-weighted assets: ⁽⁴⁾⁽⁵⁾						
HSBC USA	103,018			109,809		
HSBC Bank USA	101,993			110,682		
Adjusted quarterly average assets: ⁽⁶⁾						
HSBC USA	193,984			198,698		
HSBC Bank USA	192,501			200,026		
Total leverage exposure: ⁽⁷⁾						
HSBC USA	252,239			221,216		
HSBC Bank USA	250,003			221,334		

⁽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⁾ There is no SLR component in the definition of a well-capitalized banking institution. The ratios shown are the regulatory minimums.

⁽⁴⁾ During the first quarter of 2021, it was determined that certain collateral did not qualify for risk-weighted asset reduction purposes under U.S. capital rules. As a result, reported risk-weighted assets were understated and reported Common equity Tier 1 capital, Tier 1 capital and Total capital ratios were overstated at HSBC USA and HSBC Bank USA at December 31, 2020. We have revised December 31, 2020 amounts to conform to the current period presentation. The following table summarizes the impact of this change on reported risk-weighted assets and capital ratios as of December 31, 2020:

	December 31, 2020			
	As Previously Reported		As Revised	
	HSBC USA	HSBC Bank USA	HSBC USA	HSBC Bank USA
(in millions)				
Common equity Tier 1 ratio	14.7 %	17.2 %	14.5 %	16.4 %
Tier 1 capital ratio	15.9 %	19.6 %	15.6 %	18.7 %
Total capital ratio	19.2 %	22.0 %	18.8 %	21.1 %
Risk-weighted assets	\$ 107,808	\$ 105,681	\$ 109,809	\$ 110,682

- ⁽⁵⁾ Calculated using the generally-applicable Standardized Approach.
- ⁽⁶⁾ Represents the Tier 1 leverage ratio denominator which reflects quarterly average assets adjusted for amounts permitted to be deducted from Tier 1 capital.
- ⁽⁷⁾ Represents the SLR denominator which includes adjusted quarterly average assets plus certain off-balance sheet exposures.

In response to the COVID-19 pandemic, the federal banking agencies issued a final rule that provides the option to transition in the regulatory capital impacts of the new current expected credit loss accounting standard over a five-year period. HSBC North America and HSBC Bank USA have elected the five-year transition option and, as a result, beginning in 2020, our capital ratios are reported in accordance with the transition rules in the final rule. Accordingly, during 2020 and 2021, we will exclude from regulatory capital the change in retained earnings resulting from adoption of the new accounting standard on January 1, 2020 as well as 25 percent of the change in the allowance for credit losses recognized between January 1, 2020 and December 31, 2021. Beginning January 1, 2022, the excluded impacts will be phased in to regulatory capital over a three-year transition period and will be fully reflected at January 1, 2025.

Also in response to the COVID-19 pandemic, the federal banking agencies issued final rules that permitted intermediate holding companies, such as HSBC North America, and depository institutions, such as HSBC Bank USA, to temporarily exclude U.S. Treasury securities and deposits at Federal Reserve Banks from the denominator of their SLR. The rules were designed to allow banking institutions to expand their balance sheets to accommodate increased customer deposits while continuing to provide credit to companies and households. These changes took effect in 2020 and expired on April 1, 2021.

18. *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 September 30, 2021 and December 31, 2020 which are consolidated on our balance sheet. Assets and liabilities exclude intercompany balances that eliminate in consolidation.

	September 30, 2021		December 31, 2020	
	Consolidated Assets	Consolidated Liabilities	Consolidated Assets	Consolidated Liabilities
(in millions)				
Low income housing limited liability partnership:				
Other assets	\$ 64	\$ —	\$ 79	\$ —
Interest, taxes and other liabilities	—	16	—	9
Subtotal	<u>64</u>	<u>16</u>	<u>79</u>	<u>9</u>
Venture debt financing entity:				
Loans	7	—	10	—
Interest, taxes and other liabilities	—	2	—	1
Subtotal	<u>7</u>	<u>2</u>	<u>10</u>	<u>1</u>
Total	<u>\$ 71</u>	<u>\$ 18</u>	<u>\$ 89</u>	<u>\$ 10</u>

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") in exchange for debt and equity while a third party invested cash for an equity interest that was mandatorily redeemable. 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 as 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 consolidated the LLP and reported the equity interest issued to the third party investor in long-term debt and 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. In 2019, the equity interest issued to the third party investor was redeemed.

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 (benefit).

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 September 30, 2021 and December 31, 2020:

	Total Assets Held by Unconsolidated VIEs	Carrying Value of Variable Interests Held Reported as		Maximum Exposure to Loss
		Assets	Liabilities	
(in millions)				
At September 30, 2021				
Limited partnership investments	\$ 4,759	\$ 737	\$ 405	\$ 737
At December 31, 2020				
Limited partnership investments	\$ 4,266	\$ 629	\$ 285	\$ 629

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 also 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.

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 20, "Fair Value Measurements," and, therefore, are not disclosed in this note to avoid redundancy.

19. 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 September 30, 2021 and December 31, 2020. Following the table is a description of the various arrangements.

	September 30, 2021		December 31, 2020	
	Carrying Value	Notional / Maximum Exposure to Loss	Carrying Value	Notional / Maximum Exposure to Loss
	(in millions)			
Credit derivatives ⁽¹⁾⁽²⁾	\$ 8	\$ 2,063	\$ 144	\$ 19,500
Financial standby letters of credit, net of participations ⁽³⁾⁽⁴⁾	—	5,364	—	5,703
Performance standby letters of credit, net of participations ⁽³⁾⁽⁴⁾	—	2,700	—	2,842
Total	<u>\$ 8</u>	<u>\$ 10,127</u>	<u>\$ 144</u>	<u>\$ 28,045</u>

⁽¹⁾ Includes \$1,691 million and \$13,550 million of notional issued for the benefit of HSBC affiliates at September 30, 2021 and December 31, 2020, 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 \$1,957 million and \$1,836 million of both financial and performance standby letters of credit issued for the benefit of HSBC affiliates at September 30, 2021 and December 31, 2020, 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 September 30, 2021 and December 31, 2020:

	September 30, 2021		December 31, 2020	
	Carrying / Fair Value	Notional	Carrying / Fair Value	Notional
	(in millions)			
Sell-protection credit derivative positions	\$ 8	\$ 2,063	\$ 144	\$ 19,500
Buy-protection credit derivative positions	(52)	5,402	(74)	33,111
Net position ⁽¹⁾	<u>\$ (44)</u>	<u>\$ 3,339</u>	<u>\$ 70</u>	<u>\$ 13,611</u>

⁽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 \$43 million and \$44 million at September 30, 2021 and December 31, 2020, respectively. Also included in other liabilities is an allowance for credit losses on unfunded standby letters of credit of \$16 million and \$32 million at September 30, 2021 and December 31, 2020, 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 September 30, 2021 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 ("CDS")	2.3	\$ 1,232	\$ 606	\$ 1,838
Index credit derivatives	22.5	215	10	225
Subtotal		1,447	616	2,063
Standby Letters of Credit ⁽²⁾	1.2	6,291	1,773	8,064
Total		<u>\$ 7,738</u>	<u>\$ 2,389</u>	<u>\$ 10,127</u>

⁽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 29, "Litigation and Regulatory Matters" in our 2020 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 2017, we sold substantially all of our remaining 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 \$44 million and \$67 million at September 30, 2021 and December 31, 2020, respectively. The swap agreements we entered into with the purchaser requires 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). 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 11, "Leases," in our 2020 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 September 30, 2021 and December 31, 2020.

Our estimated repurchase liability for obligations arising from the breach of representations and warranties associated with mortgage loans sold was \$4 million and \$3 million at September 30, 2021 and December 31, 2020, 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 \$25 million at September 30, 2021. This estimated range of reasonably possible losses was determined 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 29, "Litigation and Regulatory Matters," in our 2020 Form 10-K for additional discussion of related exposure. The outstanding principal balance on these loans was approximately \$2.8 billion and \$3.1 billion at September 30, 2021 and December 31, 2020, respectively.

Pledged Assets

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

	September 30, 2021	December 31, 2020
	(in millions)	
Interest bearing deposits with banks ⁽¹⁾	\$ 773	\$ 2,158
Trading assets ⁽²⁾	2,053	1,265
Securities available-for-sale ⁽³⁾	7,470	8,652
Securities held-to-maturity ⁽³⁾	660	1,076
Loans ⁽⁴⁾	18,854	18,146
Other assets ⁽⁵⁾	1,340	2,352
Total	\$ 31,150	\$ 33,649

⁽¹⁾ Represents gross amount of cash on deposit with banks 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 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 \$2,241 million and \$2,077 million at September 30, 2021 and December 31, 2020, respectively. The fair value of trading assets that could be sold or repledged was \$2,053 million and \$1,265 million at September 30, 2021 and December 31, 2020, respectively.

The fair value of collateral we accepted under security resale agreements but was not reported on the consolidated balance sheet was \$9,702 million and \$41,447 million at September 30, 2021 and December 31, 2020, respectively. Of this collateral, \$8,702 million and \$41,047 million could be sold or repledged at September 30, 2021 and December 31, 2020, respectively, of which \$128 million and \$4,063 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 September 30, 2021 and December 31, 2020:

	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 September 30, 2021							
Assets:							
Securities purchased under resale agreements ...	\$ 9,720	\$ 2,240	\$ 7,480	\$ 7,480	\$ —	\$ —	\$ —
Liabilities:							
Securities sold under repurchase agreements	\$ 4,510	\$ 2,240	\$ 2,270	\$ 2,256	\$ —	\$ —	\$ 14
At December 31, 2020							
Assets:							
Securities purchased under resale agreements ...	\$ 41,382	\$ 5,636	\$ 35,746	\$ 35,746	\$ —	\$ —	\$ —
Liabilities:							
Securities sold under repurchase agreements	\$ 7,401	\$ 5,636	\$ 1,765	\$ 1,762	\$ —	\$ —	\$ 3

⁽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 September 30, 2021 and December 31, 2020:

	Overnight and Continuous	Up to 30 Days	31 to 90 Days	91 Days to One Year	Greater Than One Year	Total
At September 30, 2021						
U.S. Treasury, U.S. Government sponsored and U.S. Government agency securities	\$ 102	\$ 2,552	\$ 1,856	\$ —	\$ —	\$ 4,510
At December 31, 2020						
U.S. Treasury, U.S. Government sponsored and U.S. Government agency securities	\$ 4,091	\$ 2,810	\$ 500	\$ —	\$ —	\$ 7,401

20. 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 rates other than the Overnight Indexed Swap ("OIS") rate. 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 September 30, 2021 and December 31, 2020, 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 (loss).

September 30, 2021	Fair Value Measurements on a Recurring Basis					
	Level 1	Level 2	Level 3	Gross Balance	Netting ⁽⁶⁾	Net Balance
	(in millions)					
Assets:						
Trading assets, excluding derivatives:						
U.S. Treasury, U.S. Government agencies and sponsored enterprises	\$ 2,352	\$ 291	\$ —	\$ 2,643	\$ —	\$ 2,643
Debt securities issued by foreign entities	606	162	—	768	—	768
Equity securities	13,287	—	—	13,287	—	13,287
Precious metals trading	—	3,316	—	3,316	—	3,316
Derivatives: ⁽¹⁾						
Interest rate contracts	2	3,140	1	3,143	—	3,143
Foreign exchange contracts	—	11,789	15	11,804	—	11,804
Equity contracts	1	2,056	298	2,355	—	2,355
Precious metals contracts	4	1,404	—	1,408	—	1,408
Credit contracts	—	36	—	36	—	36
Other contracts ⁽²⁾	—	—	5	5	—	5
Derivatives netting	—	—	—	—	(16,749)	(16,749)
Total derivatives	7	18,425	319	18,751	(16,749)	2,002
Securities available-for-sale: ⁽³⁾						
U.S. Treasury, U.S. Government agencies and sponsored enterprises	13,734	20,392	—	34,126	—	34,126
Asset-backed securities:						
Home equity	—	—	20	20	—	20
Other	—	—	101	101	—	101
Debt securities issued by foreign entities	2,073	187	—	2,260	—	2,260
Loans ⁽⁴⁾	—	27	—	27	—	27
Loans held for sale ⁽⁴⁾	—	63	—	63	—	63
Other assets:						
Mortgage servicing rights	—	—	14	14	—	14
Equity securities	—	145	—	145	—	145
Equity securities measured at net asset value ⁽⁵⁾	—	—	—	144	—	144
Total assets	<u>\$ 32,059</u>	<u>\$ 43,008</u>	<u>\$ 454</u>	<u>\$ 75,665</u>	<u>\$ (16,749)</u>	<u>\$ 58,916</u>
Liabilities:						
Domestic deposits ⁽⁴⁾	\$ —	\$ 2,454	\$ 516	\$ 2,970	\$ —	\$ 2,970
Trading liabilities, excluding derivatives	947	90	—	1,037	—	1,037
Derivatives: ⁽¹⁾						
Interest rate contracts	2	2,994	1	2,997	—	2,997
Foreign exchange contracts	2	11,527	16	11,545	—	11,545
Equity contracts	4	636	184	824	—	824
Precious metals contracts	1	951	—	952	—	952
Credit contracts	—	76	2	78	—	78
Other contracts ⁽²⁾	—	—	44	44	—	44
Derivatives netting	—	—	—	—	(14,690)	(14,690)
Total derivatives	9	16,184	247	16,440	(14,690)	1,750
Long-term debt ⁽⁴⁾	—	8,252	1,483	9,735	—	9,735
Total liabilities	<u>\$ 956</u>	<u>\$ 26,980</u>	<u>\$ 2,246</u>	<u>\$ 30,182</u>	<u>\$ (14,690)</u>	<u>\$ 15,492</u>

December 31, 2020	Fair Value Measurements on a Recurring Basis					
	Level 1	Level 2	Level 3	Gross Balance	Netting ⁽⁶⁾	Net Balance
	(in millions)					
Assets:						
Trading assets, excluding derivatives:						
U.S. Treasury, U.S. Government agencies and sponsored enterprises	\$ 5,145	\$ 192	\$ —	\$ 5,337	\$ —	\$ 5,337
Asset-backed securities:						
Collateralized debt obligations	—	63	—	63	—	63
Residential mortgages	—	—	15	15	—	15
Student loans	—	65	—	65	—	65
Debt securities issued by foreign entities	7,953	18	—	7,971	—	7,971
Equity securities	6,043	—	—	6,043	—	6,043
Precious metals trading	—	4,989	—	4,989	—	4,989
Derivatives: ⁽¹⁾						
Interest rate contracts	15	6,637	35	6,687	—	6,687
Foreign exchange contracts	—	18,452	15	18,467	—	18,467
Equity contracts	—	5,051	565	5,616	—	5,616
Precious metals contracts	—	1,323	—	1,323	—	1,323
Credit contracts	—	298	69	367	—	367
Other contracts ⁽²⁾	—	—	8	8	—	8
Derivatives netting	—	—	—	—	(29,616)	(29,616)
Total derivatives	15	31,761	692	32,468	(29,616)	2,852
Securities available-for-sale: ⁽³⁾						
U.S. Treasury, U.S. Government agencies and sponsored enterprises	22,880	12,528	—	35,408	—	35,408
Asset-backed securities:						
Home equity	—	—	27	27	—	27
Other	—	—	104	104	—	104
Debt securities issued by foreign entities	1,942	3,191	—	5,133	—	5,133
Loans ⁽⁴⁾	—	32	—	32	—	32
Loans held for sale ⁽⁴⁾	—	36	—	36	—	36
Other assets:						
Mortgage servicing rights	—	—	7	7	—	7
Equity securities	—	149	—	149	—	149
Equity securities measured at net asset value ⁽⁵⁾	—	—	—	135	—	135
Total assets	\$ 43,978	\$ 53,024	\$ 845	\$ 97,982	\$ (29,616)	\$ 68,366
Liabilities:						
Domestic deposits ⁽⁴⁾	\$ —	\$ 3,509	\$ 646	\$ 4,155	\$ —	\$ 4,155
Trading liabilities, excluding derivatives	727	2,312	—	3,039	—	3,039
Derivatives: ⁽¹⁾						
Interest rate contracts	9	6,615	1	6,625	—	6,625
Foreign exchange contracts	—	18,597	6	18,603	—	18,603
Equity contracts	—	3,845	446	4,291	—	4,291
Precious metals contracts	28	1,550	—	1,578	—	1,578
Credit contracts	—	291	6	297	—	297
Other contracts ⁽²⁾	—	—	67	67	—	67
Derivatives netting	—	—	—	—	(28,914)	(28,914)
Total derivatives	37	30,898	526	31,461	(28,914)	2,547
Long-term debt ⁽⁴⁾	—	10,277	448	10,725	—	10,725
Total liabilities	\$ 764	\$ 46,996	\$ 1,620	\$ 49,380	\$ (28,914)	\$ 20,466

⁽¹⁾ Includes trading derivative assets of \$1,971 million and \$2,801 million and trading derivative liabilities of \$1,633 million and \$2,358 million at September 30, 2021 and December 31, 2020, respectively, as well as derivatives held for hedging and commitments accounted for as derivatives. 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 (loss).

⁽²⁾ Consists of swap agreements entered into in conjunction with the sales of Visa Class B Shares.

⁽³⁾ 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 (loss).

(4) 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 (loss).

(5) 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.

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

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 nine months ended September 30, 2021 and 2020. 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			
	Jul. 1, 2021	Earnings	Other Comprehensive Income	Purchases	Issuances	Settlements	Transfers Into Level 3	Transfers Out of Level 3	Sep. 30, 2021	Earnings	Other Comprehensive Income				
(in millions)															
Assets:															
Derivatives, net: ⁽¹⁾															
Interest rate contracts.....	\$ 8	\$ (8)	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Foreign exchange contracts.....	(1)	—	—	—	—	—	—	—	(1)	—	—	—	—	—	—
Equity contracts ...	(13)	(91)	—	—	—	256	(38)	—	114	(2)	—	—	—	—	—
Credit contracts ...	46	(49)	—	—	—	1	—	—	(2)	—	—	—	—	—	—
Other contracts ⁽²⁾ ..	(48)	3	—	—	—	6	—	—	(39)	—	—	—	—	—	—
Asset-backed securities available-for-sale ⁽³⁾	126	—	(2)	—	—	(3)	—	—	121	—	—	—	—	(2)	—
Mortgage servicing rights ⁽⁴⁾	12	1	—	—	1	—	—	—	14	1	—	—	—	—	—
Total assets	<u>\$ 130</u>	<u>\$ (144)</u>	<u>\$ (2)</u>	<u>\$ —</u>	<u>\$ 1</u>	<u>\$ 260</u>	<u>\$ (38)</u>	<u>\$ —</u>	<u>\$ 207</u>	<u>\$ (1)</u>	<u>\$ (2)</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>
Liabilities:															
Domestic deposits ⁽⁵⁾ \$	(593)	\$ 9	\$ 1	\$ —	\$ —	\$ 58	\$ —	\$ 9	\$ (516)	\$ 6	\$ 1	\$ —	\$ —	\$ —	\$ —
Long-term debt ⁽⁵⁾	(919)	33	—	—	(660)	54	(9)	18	(1,483)	34	—	—	—	—	—
Total liabilities	<u>\$ (1,512)</u>	<u>\$ 42</u>	<u>\$ 1</u>	<u>\$ —</u>	<u>\$ (660)</u>	<u>\$ 112</u>	<u>\$ (9)</u>	<u>\$ 27</u>	<u>\$ (1,999)</u>	<u>\$ 40</u>	<u>\$ 1</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>

	Total Realized / Unrealized Gains (Losses) Included in								Current Period Unrealized Gains (Losses) Still Held Included in		
	Jan. 1, 2021	Earnings	Other Compre- hensive Income	Purch- ases	Issu- ances	Settle- ments	Transfers Into Level 3	Transfers Out of Level 3	Sep. 30, 2021	Earnings	Other Compre- hensive Income
(in millions)											
Assets:											
Trading assets, excluding derivatives: ⁽⁶⁾											
Residential mortgage asset- backed securities											
	\$ 15	\$ 9	\$ —	\$ —	\$ —	\$ —	\$ —	\$ (24)	\$ —	\$ —	\$ —
Derivatives, net: ⁽¹⁾											
Interest rate contracts											
	34	(34)	—	—	—	—	—	—	—	(5)	—
Foreign exchange contracts											
	9	(10)	—	—	—	—	—	—	(1)	(11)	—
Equity contracts											
	119	(230)	—	—	—	283	(30)	(28)	114	22	—
Credit contracts											
	63	(65)	—	—	—	—	—	—	(2)	(2)	—
Other contracts ⁽²⁾											
	(59)	—	—	—	—	20	—	—	(39)	—	—
Asset-backed securities available-for- sale ⁽³⁾											
	131	—	(3)	—	—	(7)	—	—	121	—	(3)
Mortgage servicing rights ⁽⁴⁾											
	7	—	—	—	7	—	—	—	14	—	—
Total assets											
	<u>\$ 319</u>	<u>\$ (330)</u>	<u>\$ (3)</u>	<u>\$ —</u>	<u>\$ 7</u>	<u>\$ 296</u>	<u>\$ (30)</u>	<u>\$ (52)</u>	<u>\$ 207</u>	<u>\$ 4</u>	<u>\$ (3)</u>
Liabilities:											
Domestic deposits ⁽⁵⁾											
	\$ (646)	\$ 1	\$ 2	\$ —	\$ —	\$ 146	\$ (109)	\$ 90	\$ (516)	\$ 3	\$ 2
Long-term debt ⁽⁵⁾											
	(448)	10	(1)	—	(1,201)	177	(45)	25	(1,483)	14	(1)
Total liabilities											
	<u>\$ (1,094)</u>	<u>\$ 11</u>	<u>\$ 1</u>	<u>\$ —</u>	<u>\$ (1,201)</u>	<u>\$ 323</u>	<u>\$ (154)</u>	<u>\$ 115</u>	<u>\$ (1,999)</u>	<u>\$ 17</u>	<u>\$ 1</u>

	Total Realized / Unrealized Gains (Losses) Included in							Current Period Unrealized Gains (Losses) Still Held Included in			
	Jul. 1, 2020	Earnings	Other Compre- hensive Income	Purch- ases	Issu- ances	Settle- ments	Transfers Into Level 3	Transfers Out of Level 3	Sep. 30, 2020	Earnings	Other Compre- hensive Income
(in millions)											
Assets:											
Trading assets, excluding derivatives: ⁽⁶⁾											
Residential mortgage asset- backed securities											
	\$ 15	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ 15	\$ —	\$ —
Corporate and other domestic debt securities ..											
	501	(4)	—	—	—	(497)	—	—	—	—	—
Derivatives, net: ⁽¹⁾											
Interest rate contracts											
	33	1	—	—	—	—	—	34	1	—	
Foreign exchange contracts											
	(2)	—	—	—	—	—	—	(2)	—	—	
Equity contracts ...											
	92	50	—	—	—	(75)	—	(1)	66	44	—
Credit contracts ...											
	62	(16)	—	—	—	19	—	—	65	(16)	—
Other contracts ⁽²⁾ ..											
	(64)	(2)	—	—	—	7	—	—	(59)	—	—
Asset-backed securities available-for- sale ⁽³⁾											
	117	—	(8)	—	—	(2)	20	—	127	—	(8)
Mortgage servicing rights ⁽⁴⁾											
	4	—	—	—	2	—	—	6	—	—	—
Total assets	<u>\$ 758</u>	<u>\$ 29</u>	<u>\$ (8)</u>	<u>\$ —</u>	<u>\$ 2</u>	<u>\$ (548)</u>	<u>\$ 20</u>	<u>\$ (1)</u>	<u>\$ 252</u>	<u>\$ 29</u>	<u>\$ (8)</u>
Liabilities:											
Domestic deposits ⁽⁵⁾ \$ (672) \$ (10) \$ (3) \$ — \$ — \$ 27 \$ — \$ 8 \$ (650) \$ (8) \$ (3)											
Long-term debt ⁽⁵⁾ .. (347) (21) — — (24) 18 (1) 3 (372) (17) —											
Total liabilities	<u>\$ (1,019)</u>	<u>\$ (31)</u>	<u>\$ (3)</u>	<u>\$ —</u>	<u>\$ (24)</u>	<u>\$ 45</u>	<u>\$ (1)</u>	<u>\$ 11</u>	<u>\$ (1,022)</u>	<u>\$ (25)</u>	<u>\$ (3)</u>

	Total Realized / Unrealized Gains (Losses) Included in							Current Period Unrealized Gains (Losses) Still Held Included in			
	Jan. 1, 2020	Earnings	Other Compre- hensive Income	Purch- ases	Issu- ances	Settle- ments	Transfers Into Level 3	Transfers Out of Level 3	Sep. 30, 2020	Earnings	Other Compre- hensive Income
(in millions)											
Assets:											
Trading assets, excluding derivatives: ⁽⁶⁾											
Residential mortgage asset- backed securities											
	\$ 17	\$ (2)	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ 15	\$ (2)	\$ —
Corporate and other domestic debt securities ..											
	510	(13)	—	—	—	(497)	—	—	—	—	—
Derivatives, net: ⁽¹⁾											
Interest rate contracts											
	10	24	—	—	—	—	—	34	24	—	—
Foreign exchange contracts											
	(1)	(1)	—	—	—	—	—	(2)	(1)	—	—
Equity contracts ...											
	72	62	—	—	—	(69)	—	1	66	76	—
Credit contracts ...											
	59	10	—	—	—	(4)	—	—	65	(5)	—
Other contracts ⁽²⁾ ..											
	(75)	(3)	—	—	—	19	—	—	(59)	—	—
Asset-backed securities available-for- sale ⁽³⁾											
	111	—	(10)	—	—	(2)	28	—	127	—	(10)
Mortgage servicing rights ⁽⁴⁾											
	4	(2)	—	—	4	—	—	—	6	(2)	—
Total assets											
	<u>\$ 707</u>	<u>\$ 75</u>	<u>\$ (10)</u>	<u>\$ —</u>	<u>\$ 4</u>	<u>\$ (553)</u>	<u>\$ 28</u>	<u>\$ 1</u>	<u>\$ 252</u>	<u>\$ 90</u>	<u>\$ (10)</u>
Liabilities:											
Domestic deposits ⁽⁵⁾ \$ (774) \$ 3 \$ (1) \$ — \$ (43) \$ 109 \$ — \$ 56 \$ (650) \$ (1) \$ (1)											
Long-term debt ⁽⁵⁾ (354) 17 2 — (162) 107 (1) 19 (372) 5 2											
Total liabilities											
	<u>\$ (1,128)</u>	<u>\$ 20</u>	<u>\$ 1</u>	<u>\$ —</u>	<u>\$ (205)</u>	<u>\$ 216</u>	<u>\$ (1)</u>	<u>\$ 75</u>	<u>\$ (1,022)</u>	<u>\$ 4</u>	<u>\$ 1</u>

⁽¹⁾ Level 3 net derivatives included derivative assets of \$319 million and derivative liabilities of \$247 million at September 30, 2021 and derivative assets of \$343 million and derivative liabilities of \$239 million at September 30, 2020. Gains (losses) on derivatives, net are predominantly included in trading revenue (expense) and gain on instruments designated at fair value and related derivatives in the consolidated statement of income (loss).

⁽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 (loss).

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

⁽⁴⁾ Gain (losses) on mortgage servicing rights are included in other income (loss) in the consolidated statement of income (loss).

⁽⁵⁾ 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 liabilities are included in gain on instruments designated at fair value and related derivatives in the consolidated statement of income (loss).

⁽⁶⁾ Gains (losses) on trading assets, excluding derivatives are included in trading revenue (expense) in the consolidated statement of income (loss).

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 September 30, 2021 and December 31, 2020:

September 30, 2021

Financial Instrument Type	Fair Value (in millions)	Valuation Technique(s)	Significant Unobservable Inputs	Range of Inputs	Weighted Average⁽¹⁾
Interest rate derivative contracts.....	\$ —	Market comparable adjusted for probability to fund and, where applicable, discounted cash flows or option pricing model	Probability to fund for rate lock commitments	25% - 100%	81%
			Interest rate yield curve	8%	N/A
Foreign exchange derivative contracts ⁽²⁾	\$ (1)	Option pricing model	Implied volatility of currency pairs	16%	N/A
			Cross-currency basis	(40)bps	N/A
Equity derivative contracts ⁽²⁾	\$ 114	Option pricing model	Equity / Equity Index volatility	8% - 69%	41%
			Equity / Equity and Equity / Index correlation	41% - 98%	72%
			Equity dividend yields and forward price	(4)% - 1%	0%
Credit derivative contracts.....	\$ (2)	Option pricing model and, where applicable, discounted cash flows	Credit default swap spreads	77bps - 294bps	196bps
Other derivative contracts.....	\$ (39)	Discounted cash flows	Conversion rate	1.6 times	N/A
			Expected duration	1.2 years	N/A
Asset-backed securities available-for-sale.....	\$ 121	Discounted cash flows	Market assumptions related to yields for comparable instruments	3% - 4%	3%
Mortgage servicing rights.....	\$ 14	Discounted cash flows	Constant prepayment rates	10% - 18%	12%
			Discount rate	8% - 13%	8%
			Estimated annualized costs to service	\$72 - \$93 per account	\$75 per account
Domestic deposits (structured deposits) ⁽²⁾⁽³⁾	\$ (516)	Option adjusted discounted cash flows	Equity / Equity Index volatility	8% - 22%	16%
			Equity / Equity and Equity / Index correlation	56% - 85%	57%
Long-term debt (structured notes) ⁽²⁾⁽³⁾	\$ (1,483)	Option adjusted discounted cash flows	Implied volatility of currency pairs	16%	N/A
			Equity / Equity Index volatility	8% - 61%	25%
			Equity / Equity and Equity / Index correlation	41% - 98%	73%

December 31, 2020

Financial Instrument Type	Fair Value (in millions)	Valuation Technique(s)	Significant Unobservable Inputs	Range of Inputs	Weighted Average ⁽¹⁾
Residential mortgage asset-backed securities	\$ 15	Broker quotes or consensus pricing and, where applicable, discounted cash flows	Prepayment rates	10%	N/A
			Conditional default rates	5%	N/A
			Loss severity rates	65%	N/A
			Discount margin	500bps	N/A
Interest rate derivative contracts	\$ 34	Market comparable adjusted for probability to fund and, where applicable, discounted cash flows or option pricing model	Probability to fund for rate lock commitments	41% - 100%	78%
			Likelihood of transaction being executed	90%	N/A
			Interest rate yield curve	4% - 7%	6%
Foreign exchange derivative contracts ⁽²⁾	\$ 9	Option pricing model	Implied volatility of currency pairs	9% - 11%	10%
			Cross-currency basis	(9)bps - 40bps	24bps
Equity derivative contracts ⁽²⁾	\$ 119	Option pricing model	Equity / Equity Index volatility	0% - 67%	27%
			Equity / Equity and Equity / Index correlation	17% - 62%	30%
			Equity dividend yields and forward price	(1)% - 0%	0%
Credit derivative contracts	\$ 63	Option pricing model and, where applicable, discounted cash flows	Credit default swap spreads	150bps	N/A
Other derivative contracts	\$ (59)	Discounted cash flows	Conversion rate	1.6 times	N/A
			Expected duration	2 years	N/A
Asset-backed securities available-for-sale	\$ 131	Discounted cash flows	Market assumptions related to yields for comparable instruments	4%	N/A
Mortgage servicing rights	\$ 7	Discounted cash flows	Constant prepayment rates	17% - 26%	19%
			Discount rate	9% - 10%	9%
			Estimated annualized costs to service	\$73 - \$157 per account	\$76 per account
Domestic deposits (structured deposits) ⁽²⁾⁽³⁾	\$ (646)	Option adjusted discounted cash flows	Implied volatility of currency pairs	9% - 11%	10%
			Equity / Equity Index volatility	0% - 42%	15%
			Equity / Equity and Equity / Index correlation	43% - 47%	45%
Long-term debt (structured notes) ⁽²⁾⁽³⁾	\$ (448)	Option adjusted discounted cash flows	Implied volatility of currency pairs	9% - 11%	10%
			Equity / Equity Index volatility	0% - 67%	23%
			Equity / Equity and Equity / Index correlation	32% - 62%	52%

⁽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 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 neutral. The corresponding intra-group derivatives are presented as equity derivatives and foreign exchange 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 and foreign exchange 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.

Equity and foreign exchange derivatives - The fair value measurement of a structured equity or foreign exchange derivative is primarily affected by the implied volatility of the underlying equity price or exchange rate of the paired foreign currencies. 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 variables such as equities or foreign currencies, the fair value measurement is also affected by the correlation of the referenced variables. Correlation measures the relative change in values among two or more variables (i.e., equity or foreign currency 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. For certain other 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.

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.

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 nine months ended September 30, 2021, we transferred \$9 million and \$90 million, respectively, of domestic deposits and \$18 million and \$25 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 second quarter of 2021, we also transferred \$24 million of residential mortgage asset-backed securities and \$27 million of equity derivatives from Level 3 to Level 2 as the inputs used to value these securities and derivative contracts have become more observable. During the three and nine months ended September 30, 2021, we transferred nil and \$109 million, respectively, of domestic deposits and \$9 million and \$45 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 third quarter of 2021, we transferred \$38 million of equity derivatives from Level 2 to Level 3 as the inputs used to value these contracts have become less observable.

During the three and nine months ended September 30, 2020, we transferred \$8 million and \$56 million, respectively, of domestic deposits and \$3 million and \$19 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.

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) goodwill, 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 September 30, 2021 and December 31, 2020. The gains (losses) during the three and nine months ended September 30, 2021 and 2020 are also included.

	Non-Recurring Fair Value Measurements at September 30, 2021				Total Gains (Losses) For the Three Months Ended September 30, 2021	Total Gains (Losses) For the Nine Months Ended September 30, 2021
	Level 1	Level 2	Level 3	Total		
	(in millions)					
Consumer loans held for sale ⁽¹⁾	\$ —	\$ 9	\$ 795	\$ 804	\$ (1)	\$ (1)
Consumer loans ⁽²⁾	—	198	—	198	2	8
Commercial loans held for sale ⁽³⁾	—	—	92	92	—	(12)
Commercial loans ⁽⁴⁾	—	—	142	142	(12)	57
Leases ⁽⁵⁾	—	—	—	—	(4)	(59)
Total assets at fair value on a non-recurring basis	\$ —	\$ 207	\$ 1,029	\$ 1,236	\$ (15)	\$ (7)
	Non-Recurring Fair Value Measurements at December 31, 2020				Total Gains (Losses) For the Three Months Ended September 30, 2020	Total Gains (Losses) For the Nine Months Ended September 30, 2020
	Level 1	Level 2	Level 3	Total		
	(in millions)					
Consumer loans held for sale ⁽¹⁾	\$ —	\$ 4	\$ —	\$ 4	\$ —	\$ —
Consumer loans ⁽²⁾	—	312	—	312	4	11
Commercial loans held for sale ⁽³⁾	—	68	—	68	(16)	(25)
Commercial loans ⁽⁴⁾	—	—	270	270	6	(164)
Real estate owned ⁽⁶⁾	—	1	—	1	—	1
Goodwill ⁽⁷⁾	—	—	—	—	—	(784)
Leases ⁽⁵⁾	—	—	3	3	(7)	(69)
Total assets at fair value on a non-recurring basis	\$ —	\$ 385	\$ 273	\$ 658	\$ (13)	\$ (1,030)

⁽¹⁾ At September 30, 2021 and December 31, 2020, the fair value of the loans held for sale was below cost. During the second quarter of 2021, certain consumer loans were transferred to held for sale for which significant inputs in estimating fair value were unobservable.

⁽²⁾ Represents residential mortgage loans held for investment whose carrying amount was adjusted during the period based on the fair value of the underlying collateral.

⁽³⁾ At September 30, 2021 and December 31, 2020, the fair value of the loans held for sale was below cost. During the second quarter of 2021, certain commercial loans were transferred to held for sale for which significant inputs in estimating fair value were unobservable.

⁽⁴⁾ 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.

⁽⁵⁾ During the second quarter of 2021, we determined that we would exit certain branches and, as a result, the lease ROU assets, leasehold improvement assets and equipment assets associated with these branches were written off. During the three and nine months ended September 30, 2021, we also wrote down the lease ROU assets and leasehold improvement assets primarily associated with certain office space that we determined we would exit. During the first quarter of 2020, we determined that we would exit certain branches and, as a result, the lease ROU assets and leasehold improvement assets associated with these branches were written down based on their estimated remaining useful lives. During the third quarter of 2020, we also wrote down the lease ROU assets associated with certain office space that we determined we would exit. See Note 2, "Strategic Initiatives," in this Form 10-Q for further discussion.

⁽⁶⁾ Real estate owned is required to be reported on the balance sheet net of transactions costs. The real estate owned amounts in the table above reflect the fair value unadjusted for transaction costs.

⁽⁷⁾ During the first quarter of 2020, the goodwill allocated to our previously separate RBWM and PB businesses were both written down to \$0 million. See Note 9, "Goodwill," in this Form 10-Q for further discussion of the results of our goodwill impairment testing, including the events and circumstances leading to the impairments.

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 September 30, 2021 and December 31, 2020:

At September 30, 2021

Financial Instrument Type	Fair Value (in millions)	Valuation Technique(s)	Significant Unobservable Inputs	Range of Inputs	Weighted Average ⁽¹⁾
Consumer loans held for sale	\$ 795	Market comparables and internal assumptions	Adjusted market price	95% - 100%	99%
Commercial loans held for sale	92	Market comparables and internal assumptions	Adjusted market price	94%	N/A
Commercial loans	142	Valuation of third party appraisal on underlying collateral	Loss severity rates	8% - 78%	30%

At December 31, 2020

Financial Instrument Type	Fair Value (in millions)	Valuation Technique(s)	Significant Unobservable Inputs	Range of Inputs	Weighted Average ⁽¹⁾
Commercial loans	\$ 270	Valuation of third party appraisal on underlying collateral	Loss severity rates	0% - 76%	35%

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

N/A Not Applicable

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 held for investment. 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. For consumer loans transferred to held for sale during the second quarter of 2021, the fair value measurement processes use significant unobservable inputs to adjust market prices which are specific to the characteristics of the various loan portfolios.

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. For certain commercial loans transferred to held for sale during the second quarter of 2021, the fair value measurement process uses significant unobservable inputs to adjust market prices which are specific to the characteristics of the loan portfolio.

Commercial loans held for sale designated under FVO – We elected to apply FVO accounting to certain commercial loans held for sale at fair value. 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.

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 \$29 million and \$33 million at September 30, 2021 and December 31, 2020, respectively.

The following tables provide additional information relating to our available-for-sale asset-backed securities at September 30, 2021:

Rating of Securities: ⁽¹⁾	Collateral Type:	Level 3 (in millions)
AAA - A	Home equity - Alt A	\$ 20
BBB - B	Other	101
		<u>\$ 121</u>

⁽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 default correlations of the referenced credit and volatilities of embedded options. These estimates are susceptible to significant change in future periods as market conditions change.

We use the OIS 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 rates other than the OIS 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.

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 September 30, 2021 and December 31, 2020, and their classification within the fair value hierarchy:

September 30, 2021	Carrying Value	Fair Value	Level 1	Level 2	Level 3
(in millions)					
Financial assets:					
Short-term financial assets, net of allowance for credit losses	\$ 63,204	\$ 63,204	\$ 1,018	\$ 62,140	\$ 46
Federal funds sold and securities purchased under agreements to resell	7,480	7,480	—	7,480	—
Securities held-to-maturity, net of allowance for credit losses	5,866	6,097	—	6,097	—
Commercial loans, net of allowance for credit losses	38,439	39,026	—	—	39,026
Commercial loans held for sale	1,228	1,231	—	—	1,231
Consumer loans, net of allowance for credit losses	16,585	16,140	—	—	16,140
Consumer loans held for sale	3,636	3,738	—	53	3,685
Financial liabilities:					
Short-term financial liabilities	\$ 6,425	\$ 6,425	\$ —	\$ 6,377	\$ 48
Deposits	140,077	140,072	—	140,072	—
Deposits held for sale	9,321	9,321	—	9,321	—
Long-term debt	8,370	8,878	—	8,878	—
December 31, 2020	Carrying Value	Fair Value	Level 1	Level 2	Level 3
(in millions)					
Financial assets:					
Short-term financial assets, net of allowance for credit losses	\$ 15,667	\$ 15,667	\$ 1,302	\$ 14,353	\$ 12
Federal funds sold and securities purchased under agreements to resell	35,746	35,746	—	35,746	—
Securities held-to-maturity, net of allowance for credit losses	8,981	9,369	—	9,369	—
Commercial loans, net of allowance for credit losses	40,785	41,417	—	—	41,417
Commercial loans held for sale	93	93	—	93	—
Consumer loans, net of allowance for credit losses	20,256	19,865	—	—	19,865
Consumer loans held for sale	208	217	—	217	—
Financial liabilities:					
Short-term financial liabilities	\$ 4,965	\$ 4,965	\$ —	\$ 4,952	\$ 13
Deposits	140,995	141,001	—	141,001	—
Long-term debt	9,254	9,720	—	9,720	—

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 \$140 million and \$137 million at September 30, 2021 and December 31, 2020, respectively.

21. *Litigation and Regulatory Matters*

The following supplements, and should be read together with, the disclosure in Note 29, "Litigation and Regulatory Matters," in our 2020 Form 10-K, in Note 20, "Litigation and Regulatory Matters," in our Form 10-Q for the three month period ended March 31, 2021 (the "2021 First Quarter Form 10-Q") and in Note 21, "Litigation and Regulatory Matters," in our Form 10-Q for the six month period ended June 30, 2021 (the "2021 Second Quarter Form 10-Q"). Only those matters with significant updates and new matters since our disclosure in our 2020 Form 10-K, our 2021 First Quarter Form 10-Q and our 2021 Second Quarter Form 10-Q are reported herein.

In addition to the matters described below and in our 2020 Form 10-K, our 2021 First Quarter Form 10-Q and our 2021 Second 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.

For the legal matters disclosed below, including litigation and governmental and regulatory matters, as well as for the legal matters disclosed in Note 29, "Litigation and Regulatory Matters," in our 2020 Form 10-K, in Note 20, "Litigation and Regulatory Matters," in our 2021 First Quarter Form 10-Q and in Note 21, "Litigation and Regulatory Matters," in our 2021 Second 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 \$150 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.

In addition, based on the facts currently known for each of the ongoing investigations disclosed in Note 29, "Litigation and Regulatory Matters," in our 2020 Form 10-K, in Note 20, "Litigation and Regulatory Matters," in our 2021 First Quarter Form 10-Q and in Note 21, "Litigation and Regulatory Matters," in our 2021 Second Quarter Form 10-Q, 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 such 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.

Foreign Exchange ("FX") Matters

Investigations

In August 2021, the charges deferred by the Department of Justice's three-year deferred prosecution agreement with HSBC Holdings plc (the "FX DPA") were dismissed.

22. *New Accounting Pronouncements*

There have been no accounting pronouncements issued that are expected to have or could 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. All discussions related to strategy, including the matters discussed under the heading "Management's Discussion and Analysis of Financial Condition and Results of Operations - Executive Overview" and discussions of those matters elsewhere in this Form 10-Q are forward-looking statements. These matters or statements will relate to our future structure, 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:

- the impact of the coronavirus ("COVID-19") pandemic and subsequent outbreaks, including the economic downturn and recovery, effect on global trade and changes in customer behavior and corporate strategy;
- 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 and unemployment levels, a decline in housing prices, the availability of credit and liquidity, 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 applicable consent orders 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, climate change, outbreaks of contagious disease, acts of war, terrorist attacks, or essential utility outages;
- 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;
- the potential for additional financial contribution requirements to the HSBC North America Holdings Inc. ("HSBC North America") pension plan;
- 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, 2020 (the "2020 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, 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 continued its recovery during the first nine months of 2021, although the pace of growth slowed in the third quarter as stimulus spending abated and a surge in COVID-19 cases driven by the Delta variant weighed on consumer sentiment and job growth. As previously discussed, the COVID-19 pandemic has resulted in disruption to business and economic activity as well as to the capital markets. COVID-19's effects in the U.S. and globally have been extreme, and the duration of the pandemic and its ultimate repercussions continue to remain unclear. Unprecedented government economic intervention, including additional government support enacted during the first quarter of 2021, has likely dampened the pandemic's effects, but at uncertain long-term cost. However, these government support measures combined with progress on vaccinations along with the easing and removal of many restrictions by states, have helped speed the economic recovery along considerably while also contributing to higher inflation. U.S. Gross Domestic Product ("GDP") is currently forecast to grow at a slower pace in the third quarter of 2021, while the U.S. economy added over 1.3 million jobs during the first nine months of 2021 and the total unemployment rate fell to 4.8 percent at September 2021 as compared with 6.7 percent at December 2020. In September 2021, the FRB decided to hold short-term interest rates steady (at near zero) while indicating it expects to begin reducing its bond buying program soon.

Although the U.S. economy continued to improve in the first nine months of 2021, the impact of the COVID-19 pandemic, including the emergence of new variants, on economic conditions both in the United States and abroad continues to create global uncertainty about the future economic environment, including the pace and extent of the economic recovery. Concerns over interest rate levels, energy prices, 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 this global uncertainty. Interest rate levels and energy prices, 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 2021 and beyond.

Performance, Developments and Trends As mentioned above, the COVID-19 pandemic has disrupted global financial markets, negatively affected supply and demand across a broad range of industries and caused disruption to our customers, vendors and employees. This pandemic has had a significant impact on our business, financial condition and results of operations. Despite the improvement in economic conditions during the first nine months of 2021 as discussed above, the circumstances around this pandemic will continue to impact our business in future periods. The extent of such impact will depend on the outcome of certain developments, including but not limited to, the duration of the pandemic as well as its continuing impact on our customers, vendors and employees, all of which are uncertain. See Part II, Item 1A, "Risk Factors - Risks related to the impact of COVID-19," in our 2020 Form 10-K for further discussion.

We continue to progress our strategic plan to restructure our operations ("Restructuring Plan") as discussed further in Note 2, "Strategic Initiatives," in the accompanying consolidated financial statements. We remain committed to our multi-year strategic plan to re-profile our business.

In May 2021, we announced that we would take further actions to strategically reposition our Wealth and Personal Banking business to focus on the banking and wealth management needs of globally-connected affluent and high net worth clients through our Premier, Jade and Private Banking propositions. We will exit our mass market retail banking business, including our Personal and Advance propositions as well as retail business banking, and will rebrand approximately 20-25 of our retail branches into international wealth centers to serve our Premier and Jade customers. In conjunction with the execution of this strategy, we have entered into definitive sale agreements with third parties to sell approximately 90 of our retail branches along with substantially all residential mortgage, unsecured and retail business banking loans and all deposits in our branch network not associated with our Premier, Jade and Private Banking customers. Certain assets under management associated with our mass market retail banking business which are managed by an affiliate will also be transferred. The remaining branches not sold or rebranded will be closed. As a result of entering into these sale agreements, assets and liabilities with an aggregate carrying value of approximately \$2.9 billion and \$10.1 billion, respectively, were transferred to held for sale during the second quarter of 2021. Although the disposal group will be sold in multiple transactions that are expected to be completed by the first quarter of 2022, the actual time to complete these sales depends on many factors, including regulatory approval. In addition, mass market retail banking loans that will not be purchased in the transaction described above, including our remaining retail credit card portfolio, which collectively totaled \$1.1 billion, were also transferred to held for sale during the second quarter of 2021 as we did not intend to hold these loans for the foreseeable future. See Note 3, "Branch Assets and Liabilities Held for Sale," in the accompanying consolidated financial statements for additional information.

The following table sets forth selected financial highlights of HUSI on a U.S. GAAP basis for the three and nine months ended September 30, 2021 and 2020 and at September 30, 2021 and December 31, 2020:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
	(dollars are in millions)			
Net income (loss)	\$ 137	\$ 188	\$ 669	\$(1,088)
Rate of return on average:				
Total assets .....	.3 %	.4 %	.5 %	(.7)%
Risk-weighted assets .....	.5	.6	.8	(1.2)
Common equity	3.2	4.4	5.0	(8.8)
Tangible common equity	3.3	4.5	5.1	(9.2)
Total equity	3.0	4.1	4.9	(7.9)
Net interest margin	1.13	1.15	1.15	1.13
Efficiency ratio	87.4	86.8	85.9	111.4
Commercial net charge-off ratio ⁽¹⁾12	.08	.13	.23
Consumer net charge-off ratio ⁽¹⁾	(.10)	.45	.66	.43

⁽¹⁾ Excludes loans held for sale.

	September 30, 2021	December 31, 2020
	(dollars are in millions)	
Additional Select Ratios:		
Allowance as a percent of loans ⁽¹⁾86 %	1.63 %
Commercial allowance as a percent of loans ⁽¹⁾	1.22	1.96
Consumer allowance as a percent of loans ⁽¹⁾	—	.98
Consumer two-months-and-over contractual delinquency	2.01	2.27
Loans to deposits ratio ⁽²⁾	46.51	48.90
Common equity Tier 1 capital to risk-weighted assets ⁽³⁾	15.9	14.5
Tier 1 capital to risk-weighted assets ⁽³⁾	17.1	15.6
Total capital to risk-weighted assets ⁽³⁾	19.3	18.8
Tier 1 leverage ratio	9.1	8.6
Supplementary leverage ratio	7.0	7.8
Total equity to total assets	9.1	9.3
Select Balance Sheet Data:		
Cash and interest bearing deposits with banks	\$ 63,158	\$ 15,655
Trading assets	21,985	27,284
Securities available-for-sale	36,507	40,672
Loans:		
Commercial loans	38,914	41,599
Consumer loans	16,612	20,489
Total loans	55,526	62,088
Deposits ⁽⁴⁾	152,368	145,150

⁽¹⁾ Excludes loans held for sale.

⁽²⁾ Represents period end loans, net of allowance for loan losses, as a percentage of core deposits as calculated in accordance with Federal Financial Institutions Examination Council guidelines which generally include all domestic demand, money market and other savings accounts, as well as time deposits with balances not exceeding \$250,000.

⁽³⁾ Prior period amounts have been revised to conform to the current period presentation. See Note 17, "Retained Earnings and Regulatory Capital Requirements," in the accompanying consolidated financial statements for further discussion.

⁽⁴⁾ Includes \$9.3 billion of deposits held for sale at September 30, 2021.

Net income (loss) was income of \$137 million and \$669 million during the three and nine months ended September 30, 2021, respectively, compared with income of \$188 million and a loss of \$1,088 million during the three and nine months ended September 30, 2020, respectively. Income (loss) before income tax was income of \$177 million and \$891 million during the three and nine months ended September 30, 2021, respectively, compared with income of \$224 million and a loss of \$1,160 million during the three and nine months ended September 30, 2020, respectively. The decrease in income (loss) before income tax during the three months ended September 30, 2021 was due to lower other revenues driven by lower trading revenue as well as lower net interest income and a higher provision for credit losses. These decreases in the three-month period were partially offset by lower operating expenses. In the year-to-date period, income (loss) before income tax increased due primarily to a lower provision for credit losses driven by improved economic conditions and the impact of our decision to exit our mass market retail banking business as well as our remaining credit card portfolio which resulted in a release of credit loss reserves and a reduction to the provision for credit losses of approximately \$101 million during the second quarter of 2021. Also contributing to the increase in the year-to-date period was lower operating expenses driven by the non-recurrence of a \$784 million goodwill impairment charge recorded during the first quarter of 2020. These increases in the year-to-date period were partially offset by lower other revenues driven by lower trading revenue.

Our reported results in all periods were impacted by certain items management believes to be significant, which affect comparability between periods. Significant items are excluded to arrive at adjusted performance because management would ordinarily identify and consider them separately to better understand underlying business trends. The following table summarizes the impact of these significant items for all periods presented:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
	(in millions)			
Income (loss) before income tax, as reported	\$ 177	\$ 224	\$ 891	\$ (1,160)
Goodwill impairment	—	—	—	784
Costs to achieve ⁽¹⁾	61	84	215	235
Adjusted performance ⁽²⁾	<u>\$ 238</u>	<u>\$ 308</u>	<u>\$ 1,106</u>	<u>\$ (141)</u>

⁽¹⁾ Reflects costs related to the delivery of our Restructuring Plan. Costs to achieve primarily consists of lease impairment and other related costs, severance costs, allocated costs from HSBC Technology & Services ("HTSU"), and trading losses associated with the exit of certain derivative contracts. See Note 2, "Strategic Initiatives," in the accompanying consolidated financial statements for a more detailed discussion of these costs. The expense during the three and nine months ended September 30, 2021 also includes \$14 million and \$32 million, respectively, of allocated costs from other HSBC affiliates related to the HSBC Group's restructuring activities. The expense during the nine months ended September 30, 2020 also includes a \$9 million gain on the sale of one of our owned retail branch properties.

⁽²⁾ Represents a non-U.S. GAAP financial measure.

Excluding the impact of the items in the table above, our adjusted performance during the three and nine months ended September 30, 2021 decreased \$70 million and increased \$1,247 million, respectively, compared with the prior year periods. The decrease in the three-month period was due to lower other revenues driven by lower trading revenue as well as lower net interest income and a higher provision for credit losses. These decreases in the three-month period were partially offset by lower operating expenses. In the year-to-date period, the increase was due primarily to a lower provision for credit losses driven by improved economic conditions and, to a lesser extent, the impact of our decision to exit our mass market retail banking business as well as our remaining credit card portfolio which resulted in a release in credit loss reserves during the second quarter of 2021 as discussed above. Also contributing to the increase in the year-to-date period were lower operating expenses. These increases in the year-to-date period were partially offset by lower other revenues driven by lower trading revenue.

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 continue to actively work to help transition from interbank offered rates ("IBORs") to acceptable alternative rates, such as the Secured Overnight Financing Rate ("SOFR") recommended by the Alternative Reference Rates Committee convened by the FRB. We have a considerable number of contracts referencing IBORs, primarily U.S. dollar ("USD") LIBOR, such as loans, derivatives and long-term debt.

In March 2021, the United Kingdom ("U.K.") Financial Conduct Authority ("FCA") confirmed that all LIBOR tenors will either cease to be provided by any administrator or no longer be representative immediately after December 31, 2021, in the case of the one-week and two-month USD LIBOR tenors and all non-USD LIBOR tenors, and immediately after June 30, 2023,

in the case of the remaining overnight, one-month, three-month, six-month and twelve-month USD LIBOR tenors. The extension of certain USD LIBOR tenors until June 2023 will allow many legacy LIBOR-based contracts to mature naturally and significantly aids in reducing the risks associated with transitioning legacy contracts onto replacement rates. Additionally, in September 2021, the FCA confirmed that to avoid a disruption to legacy contracts that reference the one-month, three-month and six-month sterling and Japanese yen LIBOR settings, it will require the administrator to publish these settings for the duration of 2022. These six settings will be available only for use in some legacy contracts, and are not for use in new business.

Separately, the International Swaps and Derivatives Association ("ISDA") has confirmed that the fallback spread adjustments to be used in its ISDA fallbacks have been fixed as of the date of the March FCA announcement. As a result, the ISDA fallbacks (i.e. to the adjusted risk-free rate plus the fixed spread adjustment) will automatically occur for outstanding derivative contracts that incorporate the ISDA fallback language or adhere to the ISDA fallback protocol generally when each LIBOR tenor ceases or becomes non-representative. For all outstanding derivatives referenced to USD LIBOR tenors, the ISDA fallback will occur at the first reset subsequent to June 30, 2023. These announcements provide clarity on the future terms of the many derivative contracts which now incorporate the ISDA fallbacks. In addition, central clearing counterparties amended their rules to incorporate the new ISDA fallback language and adhere to the ISDA fallback protocol for cleared derivative contracts.

We continue to actively participate in HSBC's global transition program with the objective of facilitating an orderly transition of all products, processes, models and curves, as well as all legacy LIBOR-based contracts, onto replacement rates. In particular, during the first nine months of 2021, we:

- implemented the capabilities for SOFR-based derivatives in our Markets Treasury function and to offer SOFR-based bilateral loans in our Commercial Banking and our Wealth and Personal Banking businesses;
- continued to reduce our LIBOR derivative exposures through the exit or transfer of certain derivative contracts as part of our Restructuring Plan; and
- started to engage our clients to provide alternative products and determine their ability and readiness to transition.

The current focus of our client transition efforts is on those contracts that will be impacted by tenors ceasing or becoming non-representative immediately after December 31, 2021. Such contracts outstanding at September 30, 2021 included contracts for non-derivative financial assets with a carrying value of approximately \$667 million, primarily consisting of certain non-USD LIBOR-based commercial loans, and contracts for non-USD LIBOR-based derivatives with a notional value of approximately \$2.0 billion. Such contracts for non-derivative financial liabilities were immaterial at September 30, 2021. The ability of HUSI and its clients to transition legacy contracts onto replacement rates is dependent on the availability and market liquidity of products that reference replacement rates, including SOFR, and on our clients being ready and able to adapt their own processes and systems to accommodate the replacement products. We continue to engage with industry participants, the official sector and our clients to support an orderly transition and the mitigation of the risks resulting from the transition. For further discussion of our LIBOR transition program and the associated risks, see "Executive Overview" in MD&A in our 2020 Form 10-K.

Other COVID-19 Related Developments

The COVID-19 pandemic has significantly disrupted economic activity in many countries, including the United States, and the U.S. Government has taken multiple actions to mitigate the magnitude and persistence of the effects of the COVID-19 pandemic. The United States has been operating under a presidentially declared national emergency since March 2020. In March 2020, the Coronavirus Aid, Relief and Economic Security Act ("CARES Act") was signed into law, which provided financial assistance for businesses and individuals and targeted regulatory relief for financial institutions. In December 2020, the Consolidated Appropriations Act was signed into law, which extended many of the CARES Act programs and provided additional financial assistance for businesses and individuals.

Loan Forbearance Initiatives The CARES Act created a forbearance program for federally-backed mortgage loans and provided financial institutions with the option to temporarily suspend certain requirements under U.S. GAAP related to troubled debt restructurings ("TDR Loans") beginning March 1, 2020. This TDR Loan guidance can be applied until the earlier of January 1, 2022 or 60 days following the termination of the presidentially declared national emergency. We elected to adopt the TDR Loan guidance in the CARES Act and are not applying TDR Loan classification to COVID-19 related loan modifications in the form of a long-term payment deferral (for commercial loans all payment modifications, including all payment deferrals) granted to borrowers that were current (less than 30 days past due) as of December 31, 2019 which otherwise may have been reported as TDR Loans. The CARES Act also prohibited servicers of federally-backed mortgage loans from initiating any foreclosure action on any residential property that is not vacant or abandoned for a period of 60 days. This moratorium expired on July 31, 2021, although homeowners continued to have protection from eviction due to foreclosure through September 30, 2021. In addition to these federal measures, some state governments have taken action to require forbearance with respect to certain loans and fees. We are continuing to monitor federal, state and international regulatory developments in relation to COVID-19 and their potential impact on our operations.

In 2020, federal banking regulators issued a revised interagency statement on loan modifications and the reporting for financial institutions working with customers affected by the COVID-19 pandemic ("Interagency Statement"). The Interagency Statement confirmed that COVID-19 related short-term loan modifications (e.g., payment deferrals of six months or less) provided to borrowers that were current (less than 30 days past due) at the time the relief was granted are not TDR Loans. Borrowers that do not meet the criteria in the CARES Act or the Interagency Statement are assessed for TDR Loan classification in accordance with our accounting policies.

In addition, under the Interagency Statement, for COVID-19 related loan modifications in the form of a payment deferral, the borrower's past due status will not be affected during the deferral period and, if the loan was accruing at the time the relief was granted, the loan will generally not be placed on nonaccrual status as long as the borrower utilizes a payment deferral of six months or less. For consumer mortgage loans, when a borrower utilizes a payment deferral of more than six months, the loan will generally be placed on nonaccrual status and, if the loan does not meet the criteria in the CARES Act, assessed for TDR Loan classification. Any accrued interest recorded on these loans is generally not reversed against income and will remain recorded as accrued interest receivable. We have not modified our commercial loan nonaccrual policies as a result of this guidance.

We have implemented various loan modification payment deferral programs to provide borrowers relief from the economic impacts of the COVID-19 pandemic. The following table summarizes information about loans under these programs as of September 30, 2021. Not included in the following table are loans that have exited the programs or have been transferred to held for sale as well as other forms of relief that we have provided to commercial clients affected by the impact of COVID-19, such as covenant waivers and amendments, and deferrals of financial statement and covenant compliance reporting requirements.

	September 30, 2021			Program Details
	Number of Loans (in thousands)	Loan Amount (in millions)	% of Loans with Payment ⁽¹⁾	
Commercial:				
Real estate, including construction	—	\$ 227	0%	Primarily deferrals of up to twenty-four months
Business and corporate banking	—	82	0	Primarily deferrals of up to twenty-four months
Global banking	—	39	0	Primarily deferrals of up to twenty-four months
Other commercial	—	4	0	Primarily deferrals of up to twenty-four months
Total commercial ⁽²⁾	—	352	0	
Consumer:				
Residential mortgages ⁽³⁾9	429	33	Deferrals of either three or six month increments up to a maximum of eighteen months
Home equity mortgages ⁽³⁾2	23	22	Deferrals of either three or six month increments up to a maximum of eighteen months
Total consumer ⁽⁴⁾	1.1	452	33	
Total	1.1	\$ 804	18	

⁽¹⁾ Represents the percentage of loans under a COVID-19 related payment deferral program at September 30, 2021 for which at least one payment was collected during the third quarter of 2021.

⁽²⁾ Total number of commercial loans is less than 15.

⁽³⁾ Includes \$417 million of consumer mortgage loans where the borrowers were provided with extended payment deferral relief of more than six months at September 30, 2021. Due to our CARES Act election, \$404 million of these loans were exempted from TDR assessment. In addition, \$367 million of these loans have been placed on nonaccrual status, because the borrowers utilized a payment deferral of more than six months.

⁽⁴⁾ Not included in the table at September 30, 2021 are \$117 million of consumer loans under COVID-19 payment deferral programs which were transferred to held for sale during the second quarter of 2021 as part of our decision to exit our mass market retail banking business as well as our remaining retail credit card portfolio.

When the payment relief period ends, borrowers have various options, including repaying the deferred payments in full, repaying the deferred payments over an installment period or moving the deferred payments to the end of the loan. If a borrower is experiencing financial difficulty when the payment relief period ends, they may enter into a modification program to reduce the interest rate and/or extend the term of the loan which would result in the loan being classified as a TDR Loan. As of September 30, 2021, \$1,042 million and \$1,039 million of commercial and consumer loans, respectively, have exited a COVID-19 related payment deferral program, of which nil and \$27 million, respectively, entered into a modification program upon exiting that resulted in the loans being classified as TDR Loans. Of the commercial and consumer loans that have exited a

COVID-19 related payment deferral program, 100 percent and 79 percent, respectively, were current or less than 30 days past due as of September 30, 2021.

Paycheck Protection Program The CARES Act created a new loan guarantee program entitled the Paycheck Protection Program ("PPP") targeted to provide small businesses with support to cover payroll and certain other expenses. Loans made under the PPP are fully guaranteed by the Small Business Administration ("SBA"), whose guarantee is backed by the full faith and credit of the United States. PPP covered loans also afford borrowers forgiveness up to the principal amount of the PPP covered loan, plus accrued interest, if the loan proceeds are used to retain workers and maintain payroll or to make certain mortgage interest, lease and utility payments, and certain other criteria are satisfied. The SBA will reimburse PPP lenders for any amount of a PPP covered loan that is forgiven, and PPP lenders will not be held liable for any representations made by PPP borrowers in connection with their requests for loan forgiveness. Lenders receive pre-determined fees for processing and servicing PPP loans. In addition, PPP loans are risk-weighted at zero percent under the generally-applicable Standardized Approach used to calculate risk-weighted assets for regulatory capital purposes. HSBC Bank USA is a PPP participating lender and had loans funded under the PPP which totaled \$437 million at September 30, 2021. The SBA deadline for accepting PPP loan applications from participating lenders expired on May 31, 2021.

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 September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
	(in millions)			
Profit (loss) before tax – U.S. GAAP basis	\$ 177	\$ 224	\$ 891	\$ (1,160)
Adjustments:				
Expected credit losses	(41)	(73)	(229)	257
Loans held for sale	(2)	3	(106)	3
Pension and other postretirement benefit costs	(4)	(4)	(9)	(14)
Loan origination	(1)	4	(7)	13
Precious metal loans	(4)	1	(2)	10
Leases	(1)	(1)	4	(10)
Renewable energy tax credit investments	4	2	13	9
Other long-lived assets	10	(277)	49	(277)
Goodwill impairment	—	—	—	91
Other	(2)	—	(1)	6
Profit (loss) before tax – Group Reporting Basis	<u>\$ 136</u>	<u>\$ (121)</u>	<u>\$ 603</u>	<u>\$ (1,072)</u>

The significant differences between U.S. GAAP and the Group Reporting Basis as they impact our results are summarized in Note 24, "Business Segments," in our 2020 Form 10-K. There have been no significant changes since December 31, 2020 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 nine months ended September 30, 2021, expected credit losses were lower 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 ("lifetime ECL") estimate. Primarily as a result of the different requirements, releases in credit reserves driven by improved economic conditions, which resulted in improved economic forecasts used to calculate expected credit losses as well as client paydowns, were more pronounced under U.S. GAAP.

During the three months ended September 30, 2020, expected credit losses were lower under U.S. GAAP than under the Group Reporting Basis while, in the year-to-date period, expected credit losses were higher under U.S. GAAP than under the Group Reporting Basis. Primarily as a result of the different requirements related to stage 1 loans discussed above, during the three months ended September 30, 2020, releases in credit reserves driven by a partial rebound in economic conditions in the third quarter of 2020, which resulted in improved economic forecasts used to calculate expected credit losses, as well as releases in credit reserves due to paydowns, including the paydown of a single oil and gas industry client, were more pronounced under U.S. GAAP. In the year-to-date period, loss provisions driven by an overall deterioration of economic conditions caused by the COVID-19 pandemic, which resulted in a worsening of the economic forecasts used to calculate expected credit losses and downgrades reflecting weakness in the financial condition of certain clients, were more pronounced under U.S. GAAP.

During the nine months ended September 30, 2021, we transferred certain loans to held for sale which under U.S. GAAP require the loans to be carried at the lower of amortized cost or fair value which resulted in a release of credit loss reserves 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. In addition, a portion of the loans transferred under U.S. GAAP did not meet the more stringent criteria for held for sale classification under the Group Reporting Basis.

During the nine months ended September 30, 2021, amortization expense for long-lived assets was higher under U.S. GAAP due to the impairment charge recorded under the Group Reporting Basis during the third quarter of 2020 as discussed below. Consequently, the carrying amounts for capitalized software and leasehold improvements are higher under U.S. GAAP than under the Group Reporting Basis and, as a result, corresponding amortization expense is higher under U.S. GAAP. In addition, during the second quarter of 2021, we determined we would exit certain branches as part of our Restructuring Plan and, as a result, we recorded an impairment charge of \$18 million under U.S. GAAP to write-off the leasehold improvements associated with these branches. These leasehold improvements were previously written-off under the Group Reporting Basis as discussed below.

During the three and nine months ended September 30, 2020, we determined that long-lived assets comprising capitalized software, property, plant and equipment and operating lease right-of-use assets may not be recoverable and tested the long-lived asset group for impairment. Under the Group Reporting Basis, we recorded an impairment charge of \$277 million to write-down the long-lived asset group to its estimated fair value, consisting of 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. Under U.S. GAAP, the estimated undiscounted cash flows of the long-lived asset group exceeded its carrying amount and no impairment charge was required.

During the nine months ended September 30, 2020, goodwill impairment charges were lower under the Group Reporting Basis than under U.S. GAAP. Under the Group Reporting Basis, goodwill was amortized until 2005, however goodwill was amortized under U.S. GAAP until 2002, which resulted in a lower carrying amount of goodwill and, therefore, a lower impairment charge under the Group Reporting Basis.

Balance Sheet Review

The following table provides balance sheet totals at September 30, 2021 and increases (decreases) since December 31, 2020:

	September 30, 2021	Increase (Decrease) From December 31, 2020	
		Amount	%
(dollars are in millions)			
Period end assets:			
Short-term investments	\$ 70,638	\$ 19,237	37.4 %
Loans, net	55,051	(6,022)	(9.9)
Loans held for sale	4,927	4,590	*
Trading assets	21,985	(5,299)	(19.4)
Securities	42,373	(7,280)	(14.7)
All other assets	6,176	(510)	(7.6)
	<u>\$ 201,150</u>	<u>\$ 4,716</u>	<u>2.4 %</u>
Period end liabilities and equity:			
Total deposits	\$ 152,368	\$ 7,218	5.0 %
Trading liabilities	2,670	(2,727)	(50.5)
Short-term borrowings	6,377	1,425	28.8
Long-term debt	18,105	(1,874)	(9.4)
Interest, taxes and other liabilities	3,393	728	27.3
Total equity	18,237	(54)	(.3)
	<u>\$ 201,150</u>	<u>\$ 4,716</u>	<u>2.4 %</u>

* 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, 2020 due to an increase in overall liquidity as we raised funds in advance of their usage. The increase in funds was driven by net sales, paydowns and maturities of securities, higher deposits primarily from our commercial clients, net sales of trading security positions and lower loans as discussed in detail below. These increases were partially offset by repayments of precious metal trading liabilities and long-term debt.

Loans, Net The following table summarizes our loan balances at September 30, 2021 and increases (decreases) since December 31, 2020:

	September 30, 2021	Increase (Decrease) From December 31, 2020	
		Amount	%
(dollars are in millions)			
Commercial loans:			
Real estate, including construction	\$ 8,250	\$ (2,214)	(21.2)%
Business and corporate banking	12,788	(691)	(5.1)
Global banking ⁽¹⁾	11,440	(2,079)	(15.4)
Other commercial ⁽²⁾	6,436	2,299	55.6
Total commercial	<u>38,914</u>	<u>(2,685)</u>	<u>(6.5)</u>
Consumer loans:			
Residential mortgages	16,093	(2,284)	(12.4)
Home equity mortgages	369	(358)	(49.2)
Credit cards	—	(1,066)	(100.0)
Other consumer	150	(169)	(53.0)
Total consumer	<u>16,612</u>	<u>(3,877)</u>	<u>(18.9)</u>
Total loans	<u>55,526</u>	<u>(6,562)</u>	<u>(10.6)</u>
Allowance for credit losses ⁽³⁾	475	(540)	(53.2)
Loans, net	<u>\$ 55,051</u>	<u>\$ (6,022)</u>	<u>(9.9)%</u>

⁽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 GBM relationship managers.

⁽²⁾ Includes loans to HSBC affiliates which totaled \$2,857 million and \$1,100 million at September 30, 2021 and December 31, 2020, 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, 2020 due primarily to the impact of our efforts to improve returns through disciplined lending, paydowns and lower demand from clients reflecting increased capital markets activity. Also contributing to the decrease were transfers of loans to held for sale, including certain commercial real estate loans with a carrying value of \$1,123 million which were transferred during the third quarter of 2021 and our retail business banking loan portfolio with a carrying value of \$149 million which was transferred during the second quarter of 2021 as discussed below. These decreases were partially offset by higher loans to affiliates. The decline in commercial non-affiliate loans was primarily in the real estate, consumer services, energy, chemicals and banking industries.

Consumer loans decreased compared with December 31, 2020 due primarily to the transfer of certain consumer loans with a carrying value of \$3,616 million to held for sale during the second quarter of 2021 as discussed below.

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⁾			
	September 30, 2021		December 31, 2020	
	First Lien	Second Lien	First Lien	Second Lien
LTV < 80%	98.3 %	99.0 %	97.6 %	96.8 %
80% ≤ LTV < 90%	1.5	.9	2.1	2.7
90% ≤ LTV < 100%	.1	.1	.2	.4
LTV ≥ 100%	.1	—	.1	.1
Average LTV for portfolio	52.7	45.1	52.6	46.2

⁽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 June 30, 2021 and September 30, 2020, respectively.

Loans Held for Sale The following table summarizes loans held for sale at September 30, 2021 and increases (decreases) since December 31, 2020:

	September 30, 2021	Increase (Decrease) From December 31, 2020	
		Amount	%
(dollars are in millions)			
Commercial loans:			
Real estate, including construction	\$ 1,123	\$ 1,113	*
Business and corporate banking	105	105	*
Global banking	63	(56)	(47.1)%
Total commercial	1,291	1,162	*
Consumer loans:			
Residential mortgages	2,449	2,241	*
Home equity mortgages	257	257	*
Credit cards	785	785	*
Other consumer	145	145	*
Total consumer	3,636	3,428	*
Total loans held for sale	\$ 4,927	\$ 4,590	*

* Percentage change is greater than 100 percent.

Commercial loans held for sale increased compared with December 31, 2020. During the third quarter of 2021, we transferred \$1,123 million of certain commercial real estate loans to held for sale as part of an effort to reduce exposure to this sector and improve returns on risk-weighted assets.

During the second quarter of 2021, as part of our Restructuring Plan we made the decision to exit our mass market retail banking business. See Note 3, "Branch Assets and Liabilities Held for Sale," in the accompanying consolidated financial statements for additional information. As a result, during the second quarter of 2021, we transferred our retail business banking loan portfolio to held for sale with a carrying value of \$149 million. At September 30, 2021, the carrying value of these loans was \$105 million.

Also included in commercial loans held for sale are 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. The fair value of these loans totaled \$63 million and \$36 million at September 30, 2021 and December 31, 2020, respectively. Balances will fluctuate from period to period depending on the volume and level of activity.

In addition, at December 31, 2020, commercial loans held for sale included certain other loans that we no longer intended to hold for investment and transferred to held for sale which totaled \$93 million. There were none of these loans remaining at September 30, 2021.

Consumer loans held for sale increased compared with December 31, 2020. As discussed above, during the second quarter of 2021, as part of our Restructuring Plan we made the decision to exit our mass market retail banking business as well as our remaining retail credit card portfolio. As a result, during the second quarter of 2021, we transferred certain consumer loans to held for sale, including loans related to the branch disposal group, with a carrying value which collectively totaled \$3,616 million, including \$2,364 million of residential mortgages, \$265 million of home equity mortgages, \$829 million of credit cards and \$158 million of other consumer loans. At September 30, 2021, the carrying value of these loans collectively totaled \$3,584 million, including \$2,397 million of residential mortgages (reflecting additional residential mortgage originations to mass market retail banking customers), \$257 million of home equity mortgages, \$785 million of credit cards and \$145 million of other consumer loans.

Also 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 (loss).

Excluding the commercial loans designated under 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 consumer loans held for sale was \$1 million and nil at September 30, 2021 and December 31, 2020, respectively. The valuation allowance on commercial loans held for sale was nil and \$1 million at September 30, 2021 and December 31, 2020, respectively.

Trading Assets and Liabilities The following table summarizes trading assets and liabilities at September 30, 2021 and increases (decreases) since December 31, 2020:

	September 30, 2021	Increase (Decrease) From December 31, 2020	
		Amount	%
(dollars are in millions)			
Trading assets:			
Securities ⁽¹⁾	\$ 16,698	\$ (2,796)	(14.3)%
Precious metals	3,316	(1,673)	(33.5)
Derivatives, net	1,971	(830)	(29.6)
	<u>\$ 21,985</u>	<u>\$ (5,299)</u>	<u>(19.4)%</u>
Trading liabilities:			
Securities sold, not yet purchased	\$ 947	\$ 220	30.3 %
Payables for precious metals	90	(2,222)	(96.1)
Derivatives, net	1,633	(725)	(30.7)
	<u>\$ 2,670</u>	<u>\$ (2,727)</u>	<u>(50.5)%</u>

⁽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, 2020 due to decreases in foreign sovereign and U.S. Treasury positions, partially offset by an increase in equity positions. Trading security positions are 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, 2020 driven by an increase in short U.S. Treasury positions related to economic hedges of derivatives in the interest rate trading portfolio.

Precious metals trading assets decreased compared with December 31, 2020 due primarily to decreases in our own inventory positions, primarily silver, as well as lower spot prices. Payables for precious metals were lower compared with December 31, 2020 reflecting a decrease in borrowing of gold inventory to support client activity levels. 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 decreased compared with December 31, 2020 mainly from market movements and reduced positions driven by the exit or transfer of certain derivative contracts as part of our Restructuring Plan which resulted in lower valuations of foreign exchange, interest rate, equity and credit derivatives. Market movements on commodity derivatives were mixed resulting in higher derivative asset valuations, but lower derivative liability valuations.

Securities Securities include securities available-for-sale and securities held-to-maturity, net. Securities balances were lower compared with December 31, 2020 driven by net sales, paydowns and maturities as part of our continuing strategy to maximize returns while balancing the securities portfolio for risk management purposes as well as unfavorable market valuations due to increasing yields. The decline in securities balances was primarily in U.S. Treasury, foreign sovereign and U.S. Government agency mortgage-backed securities which was partially offset by net purchases of U.S. Government sponsored mortgage-backed securities.

All Other Assets All other assets includes, among other items, properties and equipment, net, goodwill and other branch related assets held for sale. All other assets decreased compared with December 31, 2020 due primarily to lower cash collateral posted, lower lease assets and lower investments in Federal Home Loan Bank ("FHLB") stock.

During the third quarter of 2020, we completed a quantitative impairment test of goodwill and determined that the fair value of our Commercial Banking reporting unit exceeded its carrying value, with its fair value being approximately 110 percent of book value, including allocated goodwill. During the fourth quarter of 2020, we changed our annual impairment assessment to

be as of October 1. Our fair value calculations are highly sensitive to certain assumptions and estimates used. We will continue to monitor changes to our business forecasts as we continue to perform periodic analyses of the risks and strategies of our business and product offerings. If deterioration in economic and credit conditions, a change in the strategy or performance of our business or product offerings, or an increase in the capital requirements of our business occurs, interim goodwill impairment tests could be required, which may result in an impairment charge.

Deposits The following table summarizes deposit balances by major depositor categories at September 30, 2021 and increases (decreases) since December 31, 2020:

	September 30, 2021	Increase (Decrease) From December 31, 2020	
		Amount	%
(dollars are in millions)			
Individuals, partnerships and corporations	\$ 121,838	\$ (10,627)	(8.0)%
Domestic and foreign banks	18,568	8,348	81.7
U.S. government and states and political subdivisions	320	(1)	(.3)
Foreign governments and official institutions	2,321	177	8.3
Deposits held for sale ⁽¹⁾	9,321	9,321	*
Total deposits	<u>\$ 152,368</u>	<u>\$ 7,218</u>	<u>5.0 %</u>
Total core deposits ⁽²⁾	<u>\$ 128,961</u>	<u>\$ 3,375</u>	<u>2.7 %</u>

* Percentage change is greater than 100 percent.

⁽¹⁾ Represents deposits associated with the exit of our mass market retail banking business as part of our Restructuring Plan which were transferred to held for sale during the second quarter of 2021.

⁽²⁾ Core deposits, as calculated in accordance with Federal Financial Institutions Examination Council ("FFIEC") guidelines, generally include all domestic demand, money market and other savings accounts, as well as time deposits with balances not exceeding \$250,000. Balance at September 30, 2021 excludes deposits held for sale.

Total deposits increased compared with December 31, 2020 due primarily to higher commercial demand deposits as our clients increased their deposits in response to the economic uncertainty caused by the COVID-19 pandemic, improved economic conditions and the actions taken by the U.S. Government to provide financial support to businesses. Also contributing to the increase in deposits were higher savings deposits from a few large private banking clients as well as higher deposits from affiliates. These increases were partially offset by declines in time deposits and retail savings deposits. A shift in mix of deposits from affiliates resulted in a decline in deposits from non-bank affiliates, partially offset by an increase in deposits from bank affiliates.

Short-Term Borrowings Short-term borrowings were higher compared with December 31, 2020 reflecting increases in commercial paper outstanding and securities sold under repurchase agreements.

Long-Term Debt Long-term debt decreased compared with December 31, 2020 as the impact of debt issuances, including \$3,500 million of senior debt issued to HSBC North America during the first half of 2021, was more than offset by debt retirements. Debt issuances during the three and nine months ended September 30, 2021 totaled \$1,544 million and \$6,861 million, respectively, of which \$312 million and \$507 million, respectively, was issued by HSBC Bank USA.

Incremental issuances from our shelf registration statement with the SEC totaled \$2,854 million of senior structured notes during the nine months ended September 30, 2021. Total long-term debt outstanding under this shelf was \$8,209 million and \$9,138 million at September 30, 2021 and December 31, 2020, respectively.

Incremental issuances from the HSBC Bank USA Global Bank Note Program totaled \$507 million during the nine months ended September 30, 2021. Total debt outstanding under this program was \$1,894 million and \$1,888 million at September 30, 2021 and December 31, 2020, respectively.

Borrowings from the FHLB totaled \$1,000 million and \$4,250 million at September 30, 2021 and December 31, 2020, respectively.

Interest, Taxes and Other Liabilities Interest, taxes and other liabilities includes, among other items, other branch related liabilities held for sale. Interest, taxes and other liabilities increased compared with December 31, 2020 due primarily to higher outstanding settlement balances related to security purchases, partially offset by lower lease liabilities and a lower liability for off-balance sheet credit exposures.

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 September 30,	2021	2021 Compared to 2020 Increase (Decrease)		2020
		Volume	Rate	
(dollars are in millions)				
Interest income:				
Short-term investments	\$ 24	\$ 8	\$ —	\$ 16
Trading securities	60	(16)	12	64
Securities	154	(41)	(7)	202
Commercial loans	250	(62)	(23)	335
Consumer loans	166	(3)	(7)	176
Other	4	(5)	(2)	11
Total interest income	<u>658</u>	<u>(119)</u>	<u>(27)</u>	<u>804</u>
Interest expense:				
Deposits	60	(13)	(62)	135
Short-term borrowings	4	(1)	(2)	7
Long-term debt	70	(15)	(26)	111
Tax liabilities and other	4	2	(1)	3
Total interest expense	<u>138</u>	<u>(27)</u>	<u>(91)</u>	<u>256</u>
Net interest income	<u>\$ 520</u>	<u>\$ (92)</u>	<u>\$ 64</u>	<u>\$ 548</u>
Yield on total interest earning assets	1.43 %			1.69 %
Cost of total interest bearing liabilities .....	.41			.68
Interest rate spread	1.02			1.01
Benefit from net non-interest paying funds ⁽¹⁾11			.14
Net interest margin on average earning assets	<u>1.13 %</u>			<u>1.15 %</u>

Nine Months Ended September 30,	2021	2021 Compared with 2020 Increase (Decrease)		2020
		Volume	Rate	
(dollars are in millions)				
Interest income:				
Short-term investments	\$ 57	\$ 55	\$ (124)	\$ 126
Trading securities	162	(24)	(6)	192
Securities	491	(116)	(100)	707
Commercial loans	807	(250)	(126)	1,183
Consumer loans	501	(4)	(41)	546
Other	17	(20)	2	35
Total interest income	<u>2,035</u>	<u>(359)</u>	<u>(395)</u>	<u>2,789</u>
Interest expense:				
Deposits	210	(16)	(430)	656
Short-term borrowings	13	(21)	(28)	62
Long-term debt	230	(85)	(156)	471
Tax liabilities and other	8	3	(5)	10
Total interest expense	<u>461</u>	<u>(119)</u>	<u>(619)</u>	<u>1,199</u>
Net interest income	<u>\$1,574</u>	<u>\$ (240)</u>	<u>\$ 224</u>	<u>\$ 1,590</u>
Yield on total interest earning assets	1.49 %			1.99 %
Cost of total interest bearing liabilities .....	.46			1.09
Interest rate spread	1.03			.90
Benefit from net non-interest paying funds ⁽¹⁾12			.23
Net interest margin on average earning assets	<u>1.15 %</u>			<u>1.13 %</u>

⁽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 months ended September 30, 2021 due primarily to lower interest income from interest earning assets driven by the unfavorable impact of lower average interest earning asset balances, primarily commercial loans, securities and trading securities, as well as lower yields, primarily on loans. The decrease in the three-month period was partially offset by lower interest expense from interest bearing liabilities driven by lower rates paid and the favorable impact of lower average interest bearing liability balances, primarily deposits and long-term debt. In the year-to-date period, net interest income decreased due primarily to lower interest income from interest earning assets driven by lower yields, primarily on loans, short-term investments and securities, as well as the unfavorable impact of lower average interest earning asset balances, primarily commercial loans, securities and trading securities. The decrease in the year-to-date period was partially offset by lower interest expense from interest bearing liabilities driven by lower rates paid and the favorable impact of lower average interest bearing liability balances.

Short-term investments Interest income increased during the three months ended September 30, 2021 due to higher average balances. In the year-to-date period, interest income was lower as the impact of higher average balances was more than offset by lower yields reflecting the impact of lower market rates. Higher average balances in both periods were driven by higher deposits with the Federal Reserve Bank, partially offset by lower securities purchased under resale agreements.

Trading securities Interest income decreased during the three and nine months ended September 30, 2021 due primarily to lower average balances driven by declines in foreign sovereign and U.S. Treasury positions, partially offset by an increase in equity positions. While lower yields reflecting the impact of lower market rates contributed to the decrease in the year-to-date period, a shift in mix to higher yielding equity positions resulted in higher yields overall in the three-month period. Interest income associated with trading securities was partially offset within trading revenue by the performance of the associated derivatives as discussed further below.

Securities Lower interest income during the three and nine months ended September 30, 2021 was due to lower average balances and lower yields reflecting the impact of lower market rates. Lower average balances were driven by declines in U.S.

Government agency mortgage-backed, U.S. Treasury and foreign sovereign securities, partially offset by an increase in U.S. Government sponsored mortgage-backed securities.

Commercial loans Interest income was lower during the three and nine months ended September 30, 2021 due to lower average balances and lower yields reflecting the impact of lower market rates on variable rate loans. Lower average balances were driven primarily by the impact of our efforts to improve returns through disciplined lending, paydowns and lower demand from clients reflecting increased capital markets activity.

Consumer loans Lower interest income during the three and nine months ended September 30, 2021 was due primarily to lower yields reflecting the impact of lower market rates on residential mortgage loans and, in the year-to-date period, home equity mortgage loans.

Other Interest income decreased during the three and nine months ended September 30, 2021 due primarily to lower average cash collateral balances.

Deposits Interest expense decreased during the three and nine months ended September 30, 2021 due primarily to lower rates paid reflecting the impact of lower market rates and a shift in mix to lower cost deposits. Also contributing to the decrease in interest expense, to a lesser extent, were lower average balances driven by declines in time deposits and deposits from affiliates which were partially offset by growth in savings and demand deposits as our customers increased their deposits in response to the economic uncertainty caused by the COVID-19 pandemic and the actions taken by the U.S. Government to provide financial support to households and businesses.

Short-term borrowings Interest expense decreased during the three and nine months ended September 30, 2021 due to lower rates paid reflecting the impact of lower market rates and lower average borrowings driven by a decline in securities sold under repurchase agreements.

Long-term debt Lower interest expense during the three and nine months ended September 30, 2021 was due to lower rates paid reflecting the impact of lower market rates on variable rate borrowings and lower average borrowings.

Tax liabilities and other Interest expense was relatively flat during the three and nine months ended September 30, 2021.

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

Three Months Ended September 30,	2021	2020	Increase (Decrease)	
			Amount	%
(dollars are in millions)				
Loans:				
Commercial loans:				
Real estate, including construction	\$ (2)	\$ 43	\$ (45)	*
Business and corporate banking	(38)	(36)	(2)	(5.6)
Global banking	(9)	(103)	94	91.3
Other commercial	(2)	3	(5)	*
Total commercial loans	<u>(51)</u>	<u>(93)</u>	<u>42</u>	<u>45.2</u>
Consumer loans:				
Residential mortgages	(9)	12	(21)	*
Home equity mortgages	(2)	(1)	(1)	(100.0)
Credit cards	(1)	(2)	1	50.0
Other consumer	(1)	9	(10)	*
Total consumer loans	<u>(13)</u>	<u>18</u>	<u>(31)</u>	<u>*</u>
Total loans	<u>(64)</u>	<u>(75)</u>	<u>11</u>	<u>14.7</u>
Other financial assets measured at amortized cost	1	(1)	2	*
Securities available-for-sale	—	(1)	1	100.0
Off-balance sheet credit exposures	(18)	(28)	10	35.7
Total provision for credit losses	<u>\$ (81)</u>	<u>\$ (105)</u>	<u>\$ 24</u>	<u>22.9 %</u>

Nine Months Ended September 30,	2021	2020	Increase (Decrease)	
			Amount	%
	(dollars are in millions)			
Loans:				
Commercial loans:				
Real estate, including construction	\$ (30)	\$ 122	\$ (152)	*
Business and corporate banking	(115)	283	(398)	*
Global banking	(153)	183	(336)	*
Other commercial	(3)	3	(6)	*
Total commercial loans	<u>(301)</u>	<u>591</u>	<u>(892)</u>	<u>*</u>
Consumer loans:				
Residential mortgages	(3)	62	(65)	*
Home equity mortgages	(10)	1	(11)	*
Credit cards	(78)	96	(174)	*
Other consumer	(18)	24	(42)	*
Total consumer loans	<u>(109)</u>	<u>183</u>	<u>(292)</u>	<u>*</u>
Total loans	<u>(410)</u>	<u>774</u>	<u>(1,184)</u>	<u>*</u>
Other financial assets measured at amortized cost	—	—	—	— %
Securities available-for-sale	—	(1)	1	100.0
Off-balance sheet credit exposures	(127)	67	(194)	*
Total provision for credit losses	<u>\$ (537)</u>	<u>\$ 840</u>	<u>\$ (1,377)</u>	<u>*</u>

* Percentage change is greater than 100 percent.

Our provision for credit losses increased \$24 million during the three months ended September 30, 2021 due to a higher provision for credit losses on our commercial loan portfolio, partially offset by a lower provision for credit losses on our consumer loan portfolio and a lower provision for credit losses on off-balance sheet credit exposures. In the year-to-date period, our provision for credit losses decreased \$1,377 million due to a lower provision for credit losses on both our commercial and consumer loan portfolios as well as a lower provision for credit losses on off-balance sheet credit exposures.

The provision for credit losses on our commercial loan portfolio increased \$42 million during the three months ended September 30, 2021 reflecting a lower release in credit loss reserves. The release in credit reserves in the current year period was driven by improved economic conditions which resulted in improved economic forecasts used for calculating lifetime ECL and a decline in credit reserves for risk factors associated with higher risk client exposures. Also contributing to the release in credit reserves in the current year period was the transfer of certain commercial real estate loans to held for sale which resulted in a release of credit loss reserves and a reduction to the provision for credit losses of approximately \$24 million during the third quarter of 2021, including a release of credit reserves for risk factors associated with higher risk industry exposures. The release in credit reserves in the prior year period was driven by a partial rebound in economic conditions in the third quarter of 2020 which resulted in improved economic forecasts used for calculating lifetime ECL which was more pronounced in the prior year period and a decline in credit reserves for risk factors associated with large loan exposures, as well as releases in credit reserves due to paydowns, including the paydown of a single oil and gas industry client. These releases in the prior year period were partially offset by provisions for risk factors associated with higher risk client and industry exposures.

In the year to-date period, the provision for credit losses on our commercial loan portfolio decreased \$892 million reflecting a release in credit loss reserves compared with a loss provision in the prior year-to-date period. The release in credit reserves in the current year-to-date period was driven by improved economic conditions which resulted in improved economic forecasts used for calculating lifetime ECL, improvements in credit conditions associated with certain clients and declines in credit reserves for risk factors associated with higher risk client exposures and economic uncertainty. Client paydowns, loan sales and the release of reserves associated with the transfer of certain commercial real estate loans to held for sale during the third quarter of 2021 as discussed above also contributed to the release in credit reserves in the current year-to-date period. The loss provision in the prior year-to-date period was driven by the overall deterioration of economic conditions caused by the COVID-19 pandemic which resulted in a worsening of the economic forecasts used for calculating lifetime ECL, downgrades reflecting weakness in the financial condition of certain clients and provisions for risk factors associated with higher risk client and industry exposures, and large loan exposures.

The provision for credit losses on our consumer loan portfolio decreased \$31 million during the three months ended September 30, 2021 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 driven by improved economic conditions which resulted in improved economic forecasts used for calculating lifetime ECL and a decline in credit reserves for risk factors associated with economic uncertainty. The loss provision in the prior year period was driven largely by a provision for risk factors associated with forbearance accounts which was partially offset by releases in credit reserves driven by a partial rebound in economic conditions in the third quarter of 2020 which resulted in improved economic forecasts used for calculating lifetime ECL as well as a decline in credit card balances due to lower customer spending.

In the year-to-date period, the provision for credit losses on our consumer loan portfolio decreased \$292 million reflecting a release in credit loss reserves compared with a loss provision in the prior year-to-date period. The release in credit reserves in the current year-to-date period was driven by the impact of our decision to exit our mass market retail banking business as well as our remaining credit card portfolio which resulted in a release of credit loss reserves and a reduction to the provision for credit losses of approximately \$100 million during the second quarter of 2021. Also contributing to the release in credit reserves in the current year-to-date period were improved economic conditions which resulted in improved economic forecasts used for calculating lifetime ECL and declines in credit reserves for risk factors associated with economic uncertainty and forbearance accounts. The loss provision in the prior year-to-date period was driven by an overall deterioration of economic conditions caused by the COVID-19 pandemic which resulted in a worsening of the economic forecasts used for calculating lifetime ECL and higher dollars of delinquency, as well as provisions for risk factors associated with forbearance accounts and growth in personal loan balances due to new product promotions. These loss provisions in the prior year-to-date period were partially offset by a decline in credit card balances due to lower customer spending.

The provision for credit losses on off-balance sheet credit exposures increased \$10 million during the three months ended September 30, 2021 reflecting a lower release in credit loss reserves as the positive impact of improvements in economic conditions was more pronounced in the prior year period. In the year-to-date period, the provision for credit losses on off-balance sheet credit exposures decreased \$194 million reflecting a release in credit loss reserves compared with a loss provision in the prior year-to-date period. The release in credit reserves in the current year-to-date period resulted from improved economic conditions consistent with commercial loans as discussed above. The loss provision in the prior year-to-date period resulted from an overall deterioration of economic conditions caused by the COVID-19 pandemic consistent with commercial loans as discussed above, partially offset by the impact of lower outstanding exposure.

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 September 30,	2021	2020	Increase (Decrease)	
			Amount	%
(dollars are in millions)				
Credit card fees, net	\$ —	\$ 10	\$ (10)	(100.0)%
Trust and investment management fees	26	34	(8)	(23.5)
Other fees and commissions	160	144	16	11.1
Trading revenue (expense)	(42)	49	(91)	*
Other securities gains, net	4	52	(48)	(92.3)
Servicing and other fees from HSBC affiliates	79	79	—	—
Gain on instruments designated at fair value and related derivatives	8	15	(7)	(46.7)
Other income (loss):				
Valuation of loans held for sale	—	(17)	17	100.0
Residential mortgage banking revenue	3	9	(6)	(66.7)
Insurance	2	2	—	—
Miscellaneous income (loss)	2	(21)	23	*
Total other income (loss)	7	(27)	34	*
Total other revenues	<u>\$ 242</u>	<u>\$ 356</u>	<u>\$ (114)</u>	<u>(32.0)%</u>
(dollars are in millions)				
Nine Months Ended September 30,	2021	2020	Increase (Decrease)	
			Amount	%
Credit card fees, net	\$ 23	\$ 30	\$ (7)	(23.3)%
Trust and investment management fees	81	98	(17)	(17.3)
Other fees and commissions	496	425	71	16.7
Trading revenue (expense)	1	255	(254)	(99.6)
Other securities gains, net	51	111	(60)	(54.1)
Servicing and other fees from HSBC affiliates	232	255	(23)	(9.0)
Gain on instruments designated at fair value and related derivatives	33	15	18	*
Other income (loss):				
Valuation of loans held for sale	(5)	(25)	20	80.0
Residential mortgage banking revenue	20	11	9	81.8
Insurance	5	6	(1)	(16.7)
Miscellaneous income (loss)	(7)	26	(33)	*
Total other income (loss)	13	18	(5)	(27.8)
Total other revenues	<u>\$ 930</u>	<u>\$ 1,207</u>	<u>\$ (277)</u>	<u>(22.9)%</u>

* Percentage change is greater than 100 percent.

Credit card fees, net Credit card fees, net decreased during the three and nine months ended September 30, 2021 due to higher cost estimates associated with our credit rewards program reflecting an increase in estimated customer redemption rates which was partially offset by higher interchange fees driven by higher customer spending reflecting improved economic conditions compared with the prior year periods.

Trust and investment management fees Trust and investment management fees declined during the three and nine months ended September 30, 2021 due primarily to higher liquidity fund fee waivers driven by the impact of low market interest rates. The decline was partially offset by higher average assets under management reflecting new money growth primarily driven by a few large private banking clients as well as positive market performance.

Other fees and commissions Other fees and commissions increased during the three and nine months ended September 30, 2021 due primarily to higher fees from loan syndication and account services reflecting improved economic conditions compared with the prior year periods. Also contributing to the increase in the year-to-date period were higher fees from wire

transfers. See Note 14, "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 (expense) Trading revenue (expense) is generated by participation in the foreign exchange, precious metals, rates, credit and equities markets. The following table presents trading revenue (expense) 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 (loss). Trading revenue related to the mortgage banking business is included as a component of other income (loss). During the first quarter of 2021, we changed our presentation for the components of trading revenue (expense) to provide a more detailed view. As a result, we have reclassified prior year amounts in order to conform to the current year presentation.

Three Months Ended September 30,	2021	2020	Increase (Decrease)	
			Amount	%
(dollars are in millions)				
Business Activities:				
Foreign Exchange	\$ 49	\$ 46	\$ 3	6.5 %
Metals	11	51	(40)	(78.4)
Debt Markets	(1)	14	(15)	*
Securities Financing	(42)	(38)	(4)	(10.5)
Markets Treasury	1	(1)	2	*
Legacy structured credit products	(31)	25	(56)	*
Other trading ⁽¹⁾	(29)	(48)	19	39.6
Total trading revenue (expense)	<u>\$ (42)</u>	<u>\$ 49</u>	<u>\$ (91)</u>	<u>*</u>

Nine Months Ended September 30,	2021	2020	Increase (Decrease)	
			Amount	%
(dollars are in millions)				
Business Activities:				
Foreign Exchange	\$ 145	\$ 283	\$ (138)	(48.8)%
Metals	39	107	(68)	(63.6)
Debt Markets	—	19	(19)	(100.0)
Securities Financing	(119)	(76)	(43)	(56.6)
Markets Treasury	7	(15)	22	*
Legacy structured credit products	(28)	11	(39)	*
Other trading ⁽¹⁾	(43)	(74)	31	41.9
Total trading revenue (expense)	<u>\$ 1</u>	<u>\$ 255</u>	<u>\$ (254)</u>	<u>(99.6)%</u>

* Percentage change is greater than 100 percent.

⁽¹⁾ Includes trading revenue related to Global Banking and Equities as well as trading revenue associated with the exit of certain derivative contracts as part of our Restructuring Plan, including trading losses of \$22 million and \$32 million recorded during the three and nine months ended September 30, 2021, respectively, compared with trading losses of \$47 million and \$57 million during the three and nine months ended September 30, 2020, respectively.

Trading revenue (expense) decreased during the three and nine months ended September 30, 2021 due to lower revenue in Legacy structured credit products, Metals, Debt Markets and, in the year-to-date period, Foreign Exchange and Securities Financing. Legacy structured credit products revenue was lower reflecting the unwind of our remaining business activities, including a loss of approximately \$31 million recorded during the third quarter of 2021, as well as the impact of a structured note vehicle that was unwound during the third quarter of 2020 which was a key contributor to the valuation gains recorded in the prior year periods. Revenue was lower in Metals and, in the year-to-date period, Foreign Exchange as market volatility driven by the COVID-19 pandemic resulted in increased trading opportunities in the prior year periods. Lower revenue in Debt Markets and, in the year-to-date period, Foreign Exchange reflects the impact of our decision to exit or transfer certain derivatives as part of our Restructuring Plan which resulted in lower revenue from interest rate swaps and emerging markets rate products. Securities Financing revenue was lower in the year-to-date period due to higher losses related to swaps in prime brokerage. These decreases were partially offset by lower Other trading losses associated with the exit of certain derivative

contracts as part of our Restructuring Plan and, in the year-to-date period, higher revenue in Markets Treasury due to the improved performance of economic hedge positions used to manage interest rate risk.

Other securities gains, net We maintain securities portfolios as part of our balance sheet diversification and risk management strategies. During the three and nine months ended September 30, 2021, we sold \$1,252 million and \$7,422 million, respectively, of primarily U.S. Treasury, U.S. Government agency mortgage-backed and U.S. Government sponsored mortgage-backed securities compared with \$2,359 million and \$10,598 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 nine months ended September 30, 2021 reflecting lower net gains from the sales of U.S. Treasury and U.S. Government agency mortgage-backed securities as well as the impact of lower sales activity. 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 was flat during the three months ended September 30, 2021 and decreased in the year-to-date period. The decrease in the year-to-date period was due primarily to lower cost reimbursements associated with shared services performed on behalf of other HSBC affiliates, including internal audit, as well as lower sales commissions from HSBC Bank plc. These decreases were partially offset by higher reimbursements associated with trading activities performed on behalf of HSBC Bank plc.

Gain 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 held for investment, certain of our own fixed-rate debt issuances and all of our hybrid instruments issued, including structured notes and deposits. 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 on instruments designated at fair value and related derivatives was lower during the three months ended September 30, 2021 attributable primarily to unfavorable movements related to the economic hedging of interest rate and other risks within our structured notes. In the year-to-date period, gain on instruments designated at fair value and related derivatives was higher attributable to favorable movements related to the economic hedging of interest rate and other risks within our structured notes and the non-recurrence of unfavorable fair value adjustments recorded in the prior year period on certain commercial loans held for sale which were impacted by the COVID-19 pandemic. These increases in the year-to-date period were partially offset by unfavorable movements related to the economic hedging of interest rate risk within our own debt. See Note 11, "Fair Value Option," in the accompanying consolidated financial statements for additional information including a breakout of these amounts by individual component.

Other income (loss) Other income (loss) was higher during the three months ended September 30, 2021 due primarily to lower valuation losses on commercial loans held for sale, lower losses associated with credit default swap protection which largely reflects the hedging of a few client relationships and favorable fair value adjustments on equity investments. These increases in the three-month period were partially offset by lower residential mortgage banking revenue driven by lower gains on sales of residential mortgage loans. In the year-to-date period, other income (loss) was lower due primarily to lower income associated with bank owned life insurance, higher losses associated with credit default swap protection which largely reflects the hedging of a few client relationships and the non-recurrence of miscellaneous gains recorded in the first quarter of 2020, including a \$12 million gain on extinguishment of time deposits reflecting early client withdrawals and a \$9 million gain on the sale of one of our owned retail branch properties. These decreases in the year-to-date period were partially offset by lower valuation losses on commercial loans held for sale, higher gains on sales of commercial loans, favorable fair value adjustments on equity investments and higher residential mortgage banking revenue driven by higher gains on sales of residential mortgage loans.

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

Three Months Ended September 30,	2021	2020	Increase (Decrease)	
			Amount	%
			(dollars are in millions)	
Salaries and employee benefits	\$ 151	\$ 193	\$ (42)	(21.8)%
Support services from HSBC affiliates:				
Fees paid to HSBC Technology & Services (USA) ("HTSU")	242	285	(43)	(15.1)
Fees paid to HSBC Markets (USA) Inc. ("HMUS")	26	17	9	52.9
Fees paid to other HSBC affiliates	121	89	32	36.0
Total support services from HSBC affiliates	<u>389</u>	<u>391</u>	<u>(2)</u>	<u>(.5)</u>
Occupancy expense, net	27	44	(17)	(38.6)
Other expenses:				
Equipment and software	25	24	1	4.2
Marketing	11	12	(1)	(8.3)
Outside services	17	16	1	6.3
Professional fees	16	19	(3)	(15.8)
Federal Deposit Insurance Corporation ("FDIC") assessment fees	15	22	(7)	(31.8)
Expense related to legal matters (excluding attorney's fees)	1	56	(55)	(98.2)
Miscellaneous	14	8	6	75.0
Total other expenses	<u>99</u>	<u>157</u>	<u>(58)</u>	<u>(36.9)</u>
Total operating expenses	<u>\$ 666</u>	<u>\$ 785</u>	<u>\$ (119)</u>	<u>(15.2)%</u>
Personnel - average number	3,641	4,296		
Efficiency ratio	87.4 %	86.8 %		

Nine Months Ended September 30,	2021	2020	Increase (Decrease)	
			Amount	%
			(dollars are in millions)	
Salaries and employee benefits	\$ 509	\$ 590	\$ (81)	(13.7)%
Support services from HSBC affiliates:				
Fees paid to HTSU	754	820	(66)	(8.0)
Fees paid to HMUS	72	63	9	14.3
Fees paid to other HSBC affiliates	322	279	43	15.4
Total support services from HSBC affiliates	<u>1,148</u>	<u>1,162</u>	<u>(14)</u>	<u>(1.2)</u>
Occupancy expense, net	175	222	(47)	(21.2)
Goodwill impairment	—	784	(784)	(100.0)
Other expenses:				
Equipment and software	81	72	9	12.5
Marketing	29	45	(16)	(35.6)
Outside services	52	44	8	18.2
Professional fees	58	57	1	1.8
FDIC assessment fees	48	55	(7)	(12.7)
Expense related to legal matters (excluding attorney's fees)	(2)	56	(58)	*
Miscellaneous	52	30	22	73.3
Total other expenses	<u>318</u>	<u>359</u>	<u>(41)</u>	<u>(11.4)</u>
Total operating expenses	<u>\$2,150</u>	<u>\$ 3,117</u>	<u>\$ (967)</u>	<u>(31.0)%</u>
Personnel - average number	3,791	4,463		
Efficiency ratio	85.9 %	111.4 %		

* Percentage change is greater than 100 percent.

Salaries and employee benefits Salaries and employee benefits expense decreased during the three and nine months ended September 30, 2021 due primarily to lower salaries expense driven by staff reductions related to our Restructuring Plan as well as lower severance costs. While incentive compensation expense was lower and contributed to the decrease in the three-month period, it was higher and partially offset the decrease in the year-to-date period.

Support services from HSBC affiliates Servicing and other fees from HSBC affiliates was relatively flat during the three months ended September 30, 2021 as lower cost allocations from our technology and support service functions driven by the execution of our Restructuring Plan were largely offset by higher allocated restructuring related costs from HTSU and other HSBC affiliates. In the year-to-date period, servicing and other fees from HSBC affiliates decreased due primarily to lower cost allocations from our technology and support service functions driven by the execution of our Restructuring Plan, partially offset by higher allocated restructuring related costs from HTSU and other HSBC affiliates. During the three and nine months ended September 30, 2021, we recorded \$27 million and \$75 million, respectively, of allocated restructuring related costs from HTSU and other HSBC affiliates, primarily support service project costs and severance costs, compared with \$13 million and \$55 million of allocated restructuring related costs during the prior year periods. A summary of the services received from various HSBC affiliates is included in Note 15, "Related Party Transactions," in the accompanying consolidated financial statements.

Occupancy expense, net Occupancy expense, net was lower during the three and nine months ended September 30, 2021 due primarily to lower operating lease costs and depreciation expense driven by the execution of our Restructuring Plan as well as lower lease impairment and other related costs. During the three and nine months ended September 30, 2021, we recorded \$6 million and \$88 million, respectively, of lease impairment and other related costs related to the exit of certain office space and, in the year-to-date period, the exit of certain branches as part of our Restructuring Plan. In the prior year periods, we recorded \$11 million and \$97 million, respectively, of lease impairment and other related costs related to the exit of certain office space and, in the year-to-date period, the initial consolidation of our retail branch network as part of our Restructuring Plan. See Note 2, "Strategic Initiatives," in the accompanying consolidated financial statements for additional information.

Goodwill impairment Reflects a goodwill impairment charge of \$784 million recorded during the first quarter of 2020 representing the entire amount of goodwill allocated to our previously separate Retail Banking and Wealth Management and

Private Banking reporting units. For additional discussion of the results of our goodwill impairment testing, see Note 9, "Goodwill," in the accompanying consolidated financial statements.

Other expenses Other expenses were lower during the three and nine months ended September 30, 2021 due primarily to lower expense related to legal matters, lower deposit insurance assessment fees and, in the year-to-date period, lower marketing expense. These decreases were partially offset by higher levels of expense capitalization related to internally developed software and, in the year-to-date period, higher capitalized software amortization expense and higher outside services expense.

Efficiency ratio Our efficiency ratio increased during the three months ended September 30, 2021 due to lower other revenues driven by lower trading revenue and lower net interest income, partially offset by lower operating expenses. In the year-to-date period, our efficiency ratio improved due primarily to lower operating expenses driven by the non-recurrence of a goodwill impairment charge recorded in the first quarter of 2020, partially offset by lower other revenues driven by lower trading revenue and lower net interest income.

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

Three Months Ended September 30,	2021	2020
	(dollars are in millions)	
Income before income tax	\$ 177	\$ 224
Income tax expense	40	36
Effective tax rate	22.6 %	16.1 %
Nine Months Ended September 30,	2021	2020
	(dollars are in millions)	
Income (loss) before income tax	\$ 891	\$ (1,160)
Income tax expense (benefit)	222	(72)
Effective tax rate	24.9 %	(6.2)%

Income tax expense and the effective tax rate increased during the three months ended September 30, 2021 due primarily to the non-recurrence of a reversal of the tax benefit limitation on interim period ordinary losses under ASC 740 recorded in the second quarter of 2020. In the year-to-date period, income tax expense (benefit) and the effective tax rate increased due to higher pre-tax income and the non-recurrence of non-deductible goodwill impairment recorded in the first quarter of 2020 related to our previously separate Retail Banking and Wealth Management and Private Banking businesses.

Segment Results – Group Reporting Basis

We have four distinct business segments that we utilize for management reporting and analysis purposes, which are aligned with HSBC's global business strategy: Wealth and Personal Banking ("WPB"), Commercial Banking ("CMB"), Global Banking and Markets ("GBM") and a Corporate Center ("CC"). See Item 1, "Business," in our 2020 Form 10-K for a description of our segments which are based upon our global businesses, including a discussion of the main business activities of the segments and a summary of their products and services.

As of January 1, 2021, we implemented a change to our internal management reporting to prospectively report assets related to our active branches within our WPB segment, which were historically reported within our CC segment. As a result, lease impairment and other related costs associated with these branches is recorded within our WPB segment beginning in 2021. Prior periods were not impacted by this change.

There have been no additional changes in the basis of our segmentation as compared with the presentation in our 2020 Form 10-K. We are currently reviewing the financial information used to manage our GBM business, including the scope and content of the financial data being reported to our management and our Board of Directors. We will evaluate any impact such changes may have on our segment reporting once completed.

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.

There have been no changes in the measurement of segment profit as compared with the presentation in our 2020 Form 10-K.

The significant differences between U.S. GAAP and the Group Reporting Basis as they impact our results are summarized in Note 24, "Business Segments," in our 2020 Form 10-K. There have been no significant changes since December 31, 2020 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 September 30,	2021	2020	Increase (Decrease)	
			Amount	%
(dollars are in millions)				
Net interest income	\$ 202	\$ 200	\$ 2	1.0 %
Other operating income	57	110	(53)	(48.2)
Total operating income ⁽¹⁾	259	310	(51)	(16.5)
Expected credit losses	(35)	12	(47)	*
Net operating income	294	298	(4)	(1.3)
Operating expenses	279	527	(248)	(47.1)
Profit (loss) before tax	\$ 15	\$ (229)	\$ 244	*
(dollars are in millions)				
Nine Months Ended September 30,	2021	2020	Amount	%
(dollars are in millions)				
Net interest income	\$ 616	\$ 629	\$ (13)	(2.1)%
Other operating income	215	283	(68)	(24.0)
Total operating income ⁽¹⁾	831	912	(81)	(8.9)
Expected credit losses	(36)	188	(224)	*
Net operating income	867	724	143	19.8
Operating expenses	921	1,888	(967)	(51.2)
Profit (loss) before tax	\$ (54)	\$ (1,164)	\$ 1,110	95.4 %

* 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 September 30,	2021	2020	Increase (Decrease)	
			Amount	%
(dollars are in millions)				
Retail banking current accounts, savings and deposits	\$ 102	\$ 118	\$ (16)	(13.6)%
Retail banking mortgages, credit cards and other personal lending	70	85	(15)	(17.6)
Wealth and asset management products	20	25	(5)	(20.0)
Private banking	46	45	1	2.2
Retail business banking and other ⁽²⁾	21	37	(16)	(43.2)
Total operating income	<u>\$ 259</u>	<u>\$ 310</u>	<u>\$ (51)</u>	<u>(16.5)%</u>

Nine Months Ended September 30,	2021	2020	Increase (Decrease)	
			Amount	%
(dollars are in millions)				
Retail banking current accounts, savings and deposits	\$ 318	\$ 385	\$ (67)	(17.4)%
Retail banking mortgages, credit cards and other personal lending	235	226	9	4.0
Wealth and asset management products	59	73	(14)	(19.2)
Private banking	137	133	4	3.0
Retail business banking and other ⁽²⁾	82	95	(13)	(13.7)
Total operating income	<u>\$ 831</u>	<u>\$ 912</u>	<u>\$ (81)</u>	<u>(8.9)%</u>

⁽²⁾ Includes cost reimbursements associated with activities performed on behalf of other HSBC affiliates and allocated Markets Treasury revenue.

During the second quarter of 2021, as part of our Restructuring Plan we made the decision to exit our mass market retail banking business, including our Personal and Advance propositions as well as retail business banking, and focus on the banking and wealth management needs of globally-connected affluent and high net worth clients through our Premier, Jade or Private Banking propositions. In conjunction with the execution of this strategy, we have entered into definitive sale agreements with third parties to sell approximately 90 of our retail branches along with substantially all residential mortgage, unsecured and retail business banking loans and all deposits in our branch network not associated with our Premier, Jade and Private Banking customers. Certain assets under management associated with our mass market retail banking business which are managed by an affiliate will also be transferred. Although this disposal group will be sold in multiple transactions that are expected to be completed by the first quarter of 2022, the actual time to complete these sales depends on many factors, including regulatory approval. We will continue to offer deposits and retail loan products to our Premier, Jade and Private Banking customers.

Our WPB segment reported a profit before tax during the three months ended September 30, 2021 compared with a loss before tax in the prior year period due primarily to lower operating expenses and lower expected credit losses, partially offset by lower other operating income. In the year-to-date period, our WPB segment reported a lower loss before tax due to lower operating expenses and lower expected credit losses, partially offset by lower other operating income and lower net interest income. Lower operating expenses in the three-month period were driven by the non-recurrence of an impairment charge of \$207 million recorded during the third quarter of 2020 related to the write-off of all the capitalized software associated with our WPB business segment. In the year-to-date period, lower operating expenses were driven by lower impairment charges as \$67 million of lease impairment and other related costs recorded in the current year-to-date period primarily related to the exit of certain branches as part of our Restructuring Plan were more than offset by a goodwill impairment charge of \$693 million recorded during the first quarter of 2020, representing the entire amount of remaining goodwill previously recorded, and the impairment charge recorded during the third quarter of 2020 related to capitalized software as discussed above.

Net interest income was relatively flat during the three months ended September 30, 2021 and decreased in the year-to-date period. The decrease in the year-to-date period was due to lower deposit spreads reflecting the impact of lower market rates, partially offset by improved spreads on residential mortgage loans.

Other operating income decreased during the three and nine months ended September 30, 2021 due primarily to lower investment management fees driven by higher liquidity fund fee waivers reflecting the impact of low market interest rates, lower credit card fees driven by higher cost estimates associated with our credit rewards program reflecting an increase in estimated customer redemption rates and lower residential mortgage banking revenue driven by unfavorable fair value adjustments on residential mortgage loans held for sale. The decrease in the year-to-date period was partially offset by the non-recurrence of a loss of \$7 million recorded during the first quarter of 2020 related to extending the maturity of the total return swap position used to economically hedge the periodic payments made under the swap agreements entered into in conjunction with the sales of Visa Inc. Class B common shares.

Expected credit losses improved during the three and nine months ended September 30, 2021 reflecting releases in credit loss reserves compared with loss provisions in the prior year periods. The releases in credit reserves in the current year periods were

due to improved economic conditions which resulted in improved economic forecasts used for calculating ECL as well as lower loss estimates for risk factors associated with economic uncertainty and declines in credit card balances. The loss provision in the prior year three-month period reflects higher loss estimates for risk factors associated with forbearance accounts which was partially offset by a partial rebound in economic conditions in the third quarter of 2020 which resulted in improved economic forecasts used for calculating ECL as well as a decline in credit card balances due to lower customer spending. In the prior year-to-date period, the loss provision was driven by an overall deterioration of economic conditions caused by the COVID-19 pandemic which resulted in a worsening of the economic forecasts used for calculating ECL and higher dollars of delinquency, as well as higher loss estimates for risk factors associated with forbearance accounts and growth in personal loan balances due to new product promotions. The loss provision in the prior year-to-date period was partially offset by a decline in credit card balances due to lower customer spending.

Excluding the impairment charges discussed above, operating expenses remained lower during the three and nine months ended September 30, 2021 driven by the execution of our Restructuring Plan which resulted in lower staff costs, lower operating lease costs, lower marketing expense, lower severance costs and lower 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 nine months ended September 30, 2021 and 2020:

Nine Months Ended September 30,	2021	2020
	(in millions)	
Client assets at beginning of period	\$ 44,104	\$ 39,295
Net new money (outflows)	10,403	(1,750)
Value change	2,767	2,439
Client assets at end of period	<u>\$ 57,274</u>	<u>\$ 39,984</u>

The increase in client assets during the nine months ended September 30, 2021 reflects new money growth primarily driven by a few large clients as well as positive market performance.

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

Three Months Ended September 30,	2021	2020	Increase (Decrease)	
			Amount	%
	(dollars are in millions)			
Net interest income	\$ 200	\$ 202	\$ (2)	(1.0)%
Other operating income	70	66	4	6.1
Total operating income ⁽¹⁾	270	268	2	.7
Expected credit losses	24	(21)	45	*
Net operating income	246	289	(43)	(14.9)
Operating expenses	134	150	(16)	(10.7)
Profit before tax	<u>\$ 112</u>	<u>\$ 139</u>	<u>\$ (27)</u>	<u>(19.4)%</u>

Nine Months Ended September 30,	2021	2020	Increase (Decrease)	
			Amount	%
	(dollars are in millions)			
Net interest income	\$ 580	\$ 616	\$ (36)	(5.8)%
Other operating income	208	176	32	18.2
Total operating income ⁽¹⁾	788	792	(4)	(.5)
Expected credit losses	(26)	283	(309)	*
Net operating income	814	509	305	59.9
Operating expenses	437	439	(2)	(.5)
Profit before tax	<u>\$ 377</u>	<u>\$ 70</u>	<u>\$ 307</u>	<u>*</u>

* 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 September 30,	2021	2020	Increase (Decrease)	
			Amount	%
(dollars are in millions)				
Lending and Transaction Management	\$ 121	\$ 123	\$ (2)	(1.6)%
Global Liquidity and Cash Management, current accounts and savings deposits	102	105	(3)	(2.9)
Global Trade and Receivables Finance	15	15	—	—
Investment banking products and other ⁽²⁾	32	25	7	28.0
Total operating income	<u>\$ 270</u>	<u>\$ 268</u>	<u>\$ 2</u>	<u>.7%</u>
(dollars are in millions)				
Nine Months Ended September 30,	2021	2020	Increase (Decrease)	
			Amount	%
Lending and Transaction Management	\$ 338	\$ 342	\$ (4)	(1.2)%
Global Liquidity and Cash Management, current accounts and savings deposits	301	328	(27)	(8.2)
Global Trade and Receivables Finance	45	42	3	7.1
Investment banking products and other ⁽²⁾	104	80	24	30.0
Total operating income	<u>\$ 788</u>	<u>\$ 792</u>	<u>\$ (4)</u>	<u>(.5)%</u>

⁽²⁾ Includes allocated Markets Treasury revenue.

Our CMB segment reported a lower profit before tax during the three months ended September 30, 2021 due primarily to higher expected credit losses, partially offset by lower operating expenses. In the year-to-date period, our CMB segment reported a higher profit before tax due primarily to lower expected credit losses and, to a lesser extent, higher other operating income. The increase in the year-to-date period was partially offset by lower net interest income.

Net interest income was relatively flat during the three months ended September 30, 2021 and decreased in the year-to-date period. The decrease in the year-to-date period was due to lower deposit spreads reflecting the impact of lower market rates and lower average loan balances, partially offset by higher average deposit balances, improved loan spreads and higher earnings on capital.

Other operating income increased during the three and nine months ended September 30, 2021 due primarily to higher fees from loan syndication and account services and, in the year-to-date period, the non-recurrence of a loss recorded on the sale of a loan in the second quarter of 2020. These increases were partially offset by lower allocated Markets Treasury revenue.

Expected credit losses increased during the three months ended September 30, 2021 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 driven by a higher loss estimate for risk factors associated with real estate industry loan exposures, partially offset by improved economic conditions which resulted in improved economic forecasts used for calculating ECL. The release in credit reserves in the prior year period was driven by a partial rebound in economic conditions in the third quarter of 2020 which resulted in improved economic forecasts used for calculating ECL, partially offset by higher loss estimates for risk factors associated with higher risk client and industry exposures. In the year-to-date period, expected credit losses improved reflecting a release in credit loss reserves compared with a loss provision in the prior year-to-date period. The release in credit reserves in the current year-to-date period was driven by improved economic conditions which resulted in improved economic forecasts used for calculating ECL as well as client paydowns, partially offset by a higher loss estimate for risk factors associated with real estate industry loan exposures. The loss provision in the prior year-to-date period was driven by an overall deterioration of economic conditions caused by the COVID-19 pandemic which resulted in a worsening of the economic forecasts used for calculating ECL, downgrades reflecting weakness in the financial condition of certain clients and higher loss estimates for risk factors associated with higher risk client and industry exposures.

Operating expenses decreased during the three months ended September 30, 2021 and were relatively flat in the year-to-date period. The decrease in the three-month period was due primarily to lower salaries and incentive compensation expense, lower branch network costs and lower cost allocations from our legal and risk support service functions.

Global Banking and Markets The following table summarizes the Group Reporting Basis results for our GBM segment:

Three Months Ended September 30,	2021	2020	Increase (Decrease)	
			Amount	%
(dollars are in millions)				
Net interest income	\$ 74	\$ 92	\$ (18)	(19.6)%
Other operating income	184	217	(33)	(15.2)
Total operating income ⁽¹⁾	258	309	(51)	(16.5)
Expected credit losses	(31)	(6)	(25)	*
Net operating income	289	315	(26)	(8.3)
Operating expenses	186	251	(65)	(25.9)
Profit before tax	\$ 103	\$ 64	\$ 39	60.9 %
(dollars are in millions)				
Nine Months Ended September 30,	2021	2020	Increase (Decrease)	
			Amount	%
(dollars are in millions)				
Net interest income	\$ 255	\$ 304	\$ (49)	(16.1)%
Other operating income	613	743	(130)	(17.5)
Total operating income ⁽¹⁾	868	1,047	(179)	(17.1)
Expected credit losses	(154)	129	(283)	*
Net operating income	1,022	918	104	11.3
Operating expenses	573	644	(71)	(11.0)
Profit before tax	\$ 449	\$ 274	\$ 175	63.9 %

* Percentage change is greater than 100 percent.

(1) The following table summarizes the impact of key activities on the total operating income of our GBM segment. For purposes of the discussion below the table, total operating income is referred to as revenue. During the first quarter of 2021, we changed our presentation for the components of total operating income to provide a more detailed view. As a result, we have reclassified prior year amounts in order to conform to the current year presentation.

Three Months Ended September 30,	2021	2020	Increase (Decrease)	
			Amount	%
(dollars are in millions)				
Foreign Exchange and Metals	\$ 47	\$ 111	\$ (64)	(57.7)%
Debt Markets	1	13	(12)	(92.3)
Securities Financing	10	6	4	66.7
Equities	20	5	15	*
Securities Services	6	7	(1)	(14.3)
Markets and Securities Services other ⁽²⁾	1	(46)	47	*
Credit and funding valuation adjustments	(5)	18	(23)	*
Total Markets and Securities Services ("MSS")	80	114	(34)	(29.8)
Global Liquidity and Cash Management ("GLCM")	91	93	(2)	(2.2)
Capital Markets	33	34	(1)	(2.9)
Credit and Lending	24	26	(2)	(7.7)
Global Trade and Receivables Finance ("GTRF")	12	14	(2)	(14.3)
Global Banking other ⁽³⁾	11	(3)	14	*
Total Global Banking	171	164	7	4.3
GBM other ⁽⁴⁾	7	31	(24)	(77.4)
Total operating income	\$ 258	\$ 309	\$ (51)	(16.5)%

Nine Months Ended September 30,	2021	2020	Increase (Decrease)	
			Amount	%
(dollars are in millions)				
Foreign Exchange and Metals	\$ 181	\$ 388	\$ (207)	(53.4)%
Debt Markets	(2)	18	(20)	*
Securities Financing	25	28	(3)	(10.7)
Equities	36	16	20	*
Securities Services	19	21	(2)	(9.5)
Markets and Securities Services other ⁽²⁾	(9)	(44)	35	79.5
Credit and funding valuation adjustments	12	(13)	25	*
Total MSS	262	414	(152)	(36.7)
GLCM	269	304	(35)	(11.5)
Capital Markets	164	121	43	35.5
Credit and Lending	68	58	10	17.2
GTRF	37	41	(4)	(9.8)
Global Banking other ⁽³⁾	13	37	(24)	(64.9)
Total Global Banking	551	561	(10)	(1.8)
GBM other ⁽⁴⁾	55	72	(17)	(23.6)
Total operating income	\$ 868	\$ 1,047	\$ (179)	(17.1)%

(2) Includes revenue associated with the exit of certain derivative contracts as part of our Restructuring Plan, including trading losses of nil and \$10 million recorded during the three and nine months ended September 30, 2021, respectively, compared with trading losses of \$47 million and \$57 million during the three and nine months ended September 30, 2020, respectively.

(3) 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 and loan sales.

(4) Includes cost reimbursements associated with activities performed on behalf of other HSBC affiliates, allocated Markets Treasury revenue and certain corporate funding charges not assigned to products.

Our GBM segment reported a higher profit before tax during the three and nine months ended September 30, 2021 due to lower expected credit losses and lower operating expenses, partially offset by lower other operating income and lower net interest income.

MSS revenue decreased during the three and nine months ended September 30, 2021 due primarily to lower revenue in Foreign Exchange and Metals and, to a lesser extent, Debt Markets. Revenue was lower in Foreign Exchange and Metals as market volatility driven by the COVID-19 pandemic resulted in increased trading opportunities in the prior year periods. Lower revenue in Debt Markets and, in the year-to-date period, Foreign Exchange and Metals reflects the impact of our decision to

exit or transfer certain derivatives as part of our Restructuring Plan which resulted in lower revenue from interest rate swaps and emerging markets rate products. These decreases were partially offset by improved revenue in MSS other due primarily to lower trading losses associated with the exit of certain derivatives as part of our Restructuring Plan as well as higher revenue in Equities driven by improved revenue from cash equities products and higher reimbursements associated with trading activities performed on behalf of HSBC Bank plc. Also contributing to the decrease in the three-month period were unfavorable credit and funding valuation adjustments driven by widening credit spreads. In the year-to-date period, credit and funding valuation adjustments were favorable due primarily to compressed credit and funding spreads in the current year-to-date period compared with widening credit spreads on derivative assets driven by market volatility caused by the COVID-19 pandemic as well as the impact of lower market rates in the prior year-to-date period.

Global Banking revenue increased during the three months ended September 30, 2021 due to higher revenue in Global Banking other driven by lower losses associated with credit default swap protection which largely reflects the hedging of a few client relationships. In the year-to-date period, Global Banking revenue decreased due primarily to lower revenue in GLCM and Global Banking other. Revenue was lower in GLCM in the year-to-date period due to lower net interest income driven by lower deposit spreads reflecting the impact of lower market rates, partially offset by the impact of higher average deposit balances as well as higher account service fees. Lower revenue in Global Banking other in the year-to-date period was due to higher losses associated with credit default swap protection which largely reflects the hedging of a few client relationships as well as lower earnings on capital. These decreases in the year-to-date period were partially offset by higher revenue in Capital Markets, and Credit and Lending due to higher revenue associated with collections of nonaccrual loans, improved loans spreads and, in Capital Markets, higher loan syndication fees. The higher revenue in Capital Markets, and Credit and Lending in the year-to-date period was partially offset by lower net interest income from lower average loan balances driven by the impact of our efforts to improve returns through disciplined lending as well as lower demand from clients reflecting increased capital markets activity.

GBM other revenue decreased during the three and nine months ended September 30, 2021 due to lower allocated Markets Treasury revenue, partially offset by lower liquidity charges and, in the year-to-date period, lower corporate funding charges.

Expected credit losses improved during the three months ended September 30, 2021 reflecting higher releases in credit loss reserves. The release in credit reserves in the current year period was driven by a lower loss estimate for risk factors associated with oil and gas industry loan exposures as well as improved economic conditions which resulted in improved economic forecasts used for calculating ECL. The release in credit reserves in the prior year period was driven by a partial rebound in economic conditions in the third quarter of 2020 which resulted in improved economic forecasts used for calculating ECL, partially offset by higher loss estimates for risk factors associated with higher risk client exposures and downgrades reflecting weakness in the financial condition of certain clients. In the year-to-date period, expected credit losses improved reflecting a release in credit loss reserves compared with a loss provision in the prior year-to-date period. The release in credit reserves in the current year-to-date period was driven by improved economic conditions which resulted in improved economic forecasts used for calculating ECL and improvements in credit conditions associated with certain clients as well as a lower loss estimate for risk factors associated with oil and gas industry loan exposures. Client paydowns and loan sales also contributed to the release in credit reserves in the current year-to-date period. The loss provision in the prior year-to-date period was driven by an overall deterioration of economic conditions caused by the COVID-19 pandemic which resulted in a worsening of the economic forecasts used for calculating ECL, higher loss estimates for risk factors associated with oil and gas industry loan exposures, higher risk client exposures and downgrades reflecting weakness in the financial condition of certain clients.

Operating expenses decreased during the three and nine months ended September 30, 2021 due primarily to lower expense related to legal matters, lower salaries expense and lower market data costs. These decreases were partially offset by higher cost allocations from our support service functions and, in the year-to-date period, higher incentive compensation expense.

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

Three Months Ended September 30,	2021	2020	Increase (Decrease)	
			Amount	%
(dollars are in millions)				
Net interest expense	\$ (1)	\$ (9)	\$ 8	88.9 %
Other operating income (expense)	(38)	40	(78)	*
Total operating income ⁽¹⁾	(39)	31	(70)	*
Expected credit losses	—	—	—	—
Net operating income (expense)	(39)	31	(70)	*
Operating expenses	55	126	(71)	(56.3)
Loss before tax	\$ (94)	\$ (95)	\$ 1	1.1 %

Nine Months Ended September 30,	2021	2020	Increase (Decrease)	
			Amount	%
(dollars are in millions)				
Net interest expense	\$ (3)	\$ (29)	\$ 26	89.7 %
Other operating income (expense)	(9)	101	(110)	*
Total operating income ⁽¹⁾	(12)	72	(84)	*
Expected credit losses	—	—	—	—
Net operating income (expense)	(12)	72	(84)	*
Operating expenses	157	324	(167)	(51.5)
Loss before tax	\$ (169)	\$ (252)	\$ 83	32.9 %

* Percentage change is greater than 100 percent.

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

Three Months Ended September 30,	2021	2020	Increase (Decrease)	
			Amount	%
(dollars are in millions)				
Legacy structured credit products	\$ (31)	\$ 24	\$ (55)	*
Other ⁽²⁾	(8)	7	(15)	*
Total operating income (expense)	\$ (39)	\$ 31	\$ (70)	*

Nine Months Ended September 30,	2021	2020	Increase (Decrease)	
			Amount	%
(dollars are in millions)				
Legacy structured credit products	\$ (28)	\$ 11	\$ (39)	*
Other ⁽²⁾	16	61	(45)	(73.8)
Total operating income (expense)	\$ (12)	\$ 72	\$ (84)	*

⁽²⁾ Includes a trading loss of \$22 million recorded in the third quarter of 2021 associated with the exit of certain derivative contracts as part of our Restructuring Plan.

Our CC segment loss before tax was flat during the three months ended September 30, 2021 as lower operating expenses and lower net interest expense was offset by lower other operating income (expense). In the year-to-date period, our CC segment reported a lower loss before tax due to lower operating expenses and lower net interest expense, partially offset by lower other operating income (expense).

Net interest expense was lower during the three and nine months ended September 30, 2021 driven by lower retained liquidity charges and lower net interest expense from legacy structured credit products.

Other operating income decreased during the three and nine months ended September 30, 2021 due to lower revenue in legacy structured credit products reflecting the unwind of our remaining business activities, including a loss of approximately \$31 million recorded during the third quarter of 2021, as well as the impact of a structured note vehicle that was unwound during the third quarter of 2020 which was a key contributor to the valuation gains recorded in the prior year periods. Also contributing to the decrease were a trading loss of \$22 million recorded in the third quarter of 2021 associated with the exit of certain derivative contracts as part of our Restructuring Plan and, in the year-to-date period, unfavorable movements related to

the economic hedging of interest rate risk within our own debt, lower cost reimbursements associated with shared services performed on behalf of other HSBC affiliates, including internal audit, and the non-recurrence of a \$9 million gain recorded during the first quarter of 2020 on the sale of one of our owned retail branch properties.

Operating expenses decreased during the three and nine months ended September 30, 2021 due primarily to lower lease impairment and other related costs. During the three and nine months ended September 30, 2021, we recorded lease impairment and other related costs of \$5 million and \$14 million, respectively, primarily associated with the exit of certain office space. In the prior year periods, we recorded lease impairment and other related costs of \$63 million and \$155 million, respectively, including an impairment charge of \$55 million recorded during the third quarter of 2020 related to the write-off of a portion of the leasehold improvements associated with our WPB business as well as the exit of certain space and, in the year-to-date period, the initial consolidation of our retail branch network as part of our Restructuring Plan. Also contributing to the decreases in both periods were lower cost allocations from our technology and support service functions. These decreases were partially offset by higher allocated restructuring related costs from HTSU and other HSBC affiliates, primarily support service project costs and severance costs.

Reconciliation of Segment Results As previously discussed, segment results are reported on a Group Reporting Basis. See Note 16, "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.

COVID-19 Loan Forbearance Initiatives We have implemented various loan modification payment deferral programs to provide borrowers relief from the economic impacts of the COVID-19 pandemic. Substantially all of the loans under these programs are not classified as TDR Loans due to our election to suspend TDR Loan classification under the CARES Act or their short-term nature as discussed under the Interagency Statement. In addition, under the Interagency Statement, for COVID-19 related loan modifications in the form of a payment deferral, the borrower's past due status will not be affected during the deferral period and, if the loan was accruing at the time the relief was granted, the loan will generally not be placed on nonaccrual status as long as the borrower utilizes a payment deferral of six months or less. For consumer mortgage loans, when a borrower utilizes a payment deferral of more than six months, the loan will generally be placed on nonaccrual status and, if the loan does not meet the criteria in the CARES Act, assessed for TDR Loan classification. We have not modified our commercial loan nonaccrual policies as a result of this guidance. These COVID-19 related payment deferral programs could delay the recognition of delinquencies, nonaccrual status, and net charge-offs for those customers who may have otherwise moved into past due or nonaccrual status had such relief not been offered. See "Executive Overview," in this MD&A for additional information.

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 in prior periods are presented under the caption "Critical Accounting Policies and Estimates" in MD&A and in Note 2, "Summary of Significant Accounting Policies and New Accounting Pronouncements," in our 2020 Form 10-K. Our approach toward credit risk management is summarized under the caption "Risk Management" in MD&A in our 2020 Form 10-K. There have been no significant revisions to our policies or methodologies during the first nine months of 2021.

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

	September 30, 2021	June 30, 2021	December 31, 2020
	(in millions)		
Allowance for credit losses:			
Loans:			
Commercial loans	\$ 475	\$ 538	\$ 814
Consumer loans	—	9	201
Total loans	<u>475</u>	<u>547</u>	<u>1,015</u>
Securities held-to-maturity	1	2	2
Other financial assets measured at amortized cost ⁽¹⁾	2	1	2
Securities available-for-sale	1	1	1
Total allowance for credit losses	<u>\$ 479</u>	<u>\$ 551</u>	<u>\$ 1,020</u>
Liability for off-balance sheet credit exposures	\$ 110	\$ 128	\$ 237

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

The total allowance for credit losses at September 30, 2021 decreased \$72 million or 13 percent as compared with June 30, 2021 and decreased \$541 million or 53 percent as compared with December 31, 2020 due to lower loss estimates on both our commercial and consumer loan portfolios.

Our commercial allowance for credit losses at September 30, 2021 decreased \$63 million or 12 percent as compared with June 30, 2021 and decreased \$339 million or 42 percent as compared with December 31, 2020 driven by improved economic conditions which resulted in improved economic forecasts used for calculating lifetime ECL and a decline in credit reserves for risk factors associated with higher risk client exposures, as well as the transfer of certain commercial real estate loans to held for sale which resulted in a release of credit loss reserves of approximately \$24 million during the third quarter of 2021. Also contributing to the decrease as compared with December 31, 2020 were improvements in credit conditions associated with certain clients, a decline in credit reserves for risk factors associated with economic uncertainty and releases in credit reserves due to client paydowns and loan sales.

Our consumer allowance for credit losses at September 30, 2021 decreased \$9 million or 100 percent as compared with June 30, 2021 and decreased \$201 million or 100 percent as compared with December 31, 2020 driven by improved economic conditions which resulted in improved economic forecasts used for calculating lifetime ECL and a decline in credit reserves for risk factors primarily associated with economic uncertainty. Also contributing to the decrease as compared with December 31, 2020 was the impact of our decision to exit our mass market retail banking business as well as our remaining credit card portfolio which resulted in a reduction in credit loss reserves on consumer loans of approximately \$156 million during the second quarter of 2021 as well as a decline in credit reserves for risk factors primarily associated with forbearance accounts.

The liability for off-balance sheet credit exposures at September 30, 2021 decreased \$18 million or 14 percent as compared with June 30, 2021 and decreased \$127 million or 54 percent as compared with December 31, 2020 resulting from improved economic conditions consistent with commercial loans as discussed above.

Summary of Credit Loss Experience for Loans

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

	% of Loans to Total Loans		% of Loans to Total Loans		% of Loans to Total Loans	
	Amount	September 30, 2021	Amount	June 30, 2021	Amount	December 31, 2020
(dollars are in millions)						
Commercial ⁽¹⁾	\$ 475	70.1 %	\$ 538	69.5 %	\$ 814	67.0 %
Consumer:						
Residential mortgages	(11)	29.0	(6)	29.5	(9)	29.6
Home equity mortgages	11	.7	15	.7	22	1.2
Credit cards	—	—	—	—	161	1.7
Other consumer	—	.2	—	.3	27	.5
Total consumer	—	29.9	9	30.5	201	33.0
Total	\$ 475	100.0 %	\$ 547	100.0 %	\$ 1,015	100.0 %

⁽¹⁾ See Note 7, "Allowance for Credit Losses," in the accompanying consolidated financial statements for components of the commercial allowance for credit losses.

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

	September 30, 2021	June 30, 2021	December 31, 2020
Ratio of Allowance for credit losses to:			
Loans: ⁽¹⁾			
Commercial:			
Non-affiliates	1.32 %	1.48 %	2.01 %
Affiliates	—	—	—
Total commercial	1.22	1.42	1.96
Consumer:			
Residential mortgages	(.07)	(.04)	(.05)
Home equity mortgages	2.98	3.87	3.03
Credit cards	N/A	N/A	15.10
Other consumer	—	—	8.46
Total consumer	—	.05	.98
Total loans	.86	1.01	1.63
Net charge-offs: ⁽²⁾			
Commercial ⁽³⁾	931 %	1,035 %	754 %
Consumer	—	5	251
Total net charge-offs	273	222	540
Nonperforming loans: ⁽¹⁾⁽⁴⁾			
Commercial	119 %	134 %	150 %
Consumer	—	1	17
Total nonperforming loans	39	42	59

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

⁽²⁾ Ratios at September 30, 2021 and June 30, 2021 reflect year-to-date net charge-offs, annualized. Ratios at December 31, 2020 reflect full year net charge-offs.

⁽³⁾ Our commercial net charge-off coverage ratio for the year-to-date periods ended September 30, 2021 and June 30, 2021 and year ended December 31, 2020 was 112 months, 124 months and 90 months, respectively. The net charge-off coverage ratio represents the commercial allowance for credit losses at period end divided by average monthly commercial net charge-offs during the period.

⁽⁴⁾ 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.

N/A Not Applicable

See Note 7, "Allowance for Credit Losses," in the accompanying consolidated financial statements for a rollforward of credit losses by general loan categories for the three and nine months ended September 30, 2021 and 2020.

The allowance for credit losses on loans as a percentage of total loans held for investment at September 30, 2021 decreased as compared with both June 30, 2021 and December 31, 2020 due primarily to the decrease in our allowance for credit losses for the reasons discussed above. The decrease in the ratio as compared with December 31, 2020 was partially offset by a decrease in total loans held for investment.

The allowance for credit losses on loans as a percentage of net charge-offs at September 30, 2021 increased as compared with June 30, 2021 due to lower dollars of net charge-offs driven by lower charge-offs in our consumer loan portfolio primarily reflecting the impact of the transfer of our credit card loan portfolio to held for sale during the second quarter of 2021, which outpaced the decrease in our allowance for credit losses for the reasons discussed above. As compared with December 31, 2020, the allowance for credit losses on loans as a percentage of net charge-offs decreased as the decrease in our allowance for credit losses for the reasons discussed above outpaced a decrease in dollars of net charge-offs driven by lower charge-offs in our commercial loan portfolio due primarily to the deterioration of two corporate banking loans and loan sales in the prior year period. The decrease in dollars of net charge-offs as compared with December 31, 2020 was partially offset by higher charge-offs in our consumer loan portfolio due primarily to the transfer of our credit card loan portfolio to held for sale during the second quarter of 2021.

The allowance for credit losses on loans as a percentage of nonperforming loans held for investment at September 30, 2021 decreased as compared with both June 30, 2021 and December 31, 2020 as the decrease in our allowance for credit losses for the reasons discussed above outpaced a decrease in nonperforming loans driven by lower nonperforming loans in our consumer loan portfolio and, as compared with December 31, 2020, our commercial loan portfolio.

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"). For COVID-19 related loan modifications in the form of a payment deferral, the borrower's past due status will not be affected during the deferral period.

	September 30, 2021		June 30, 2021		December 31, 2020	
	Delinquent Loans	Delinquency Ratio	Delinquent Loans	Delinquency Ratio	Delinquent Loans	Delinquency Ratio
(dollars are in millions)						
Commercial	\$ 108	.28 %	\$ 33	.09 %	\$ 109	.26 %
Consumer:						
Residential mortgages ⁽¹⁾⁽²⁾	310	1.93	372	2.32	404	2.20
Home equity mortgages ⁽¹⁾⁽²⁾	20	5.42	22	5.67	25	3.44
Credit cards	—	N/A	—	N/A	28	2.63
Other consumer	4	2.67	4	2.80	8	2.51
Total consumer	<u>334</u>	<u>2.01</u>	<u>398</u>	<u>2.40</u>	<u>465</u>	<u>2.27</u>
Total	<u>\$ 442</u>	<u>.80</u>	<u>\$ 431</u>	<u>.79</u>	<u>\$ 574</u>	<u>.92</u>

⁽¹⁾ At September 30, 2021, June 30, 2021 and December 31, 2020, consumer mortgage loan delinquency includes \$252 million, \$289 million and \$281 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:

	September 30, 2021		June 30, 2021		December 31, 2020	
	Delinquent Loans	Delinquency Ratio	Delinquent Loan	Delinquency Ratio	Delinquent Loans	Delinquency Ratio
(dollars are in millions)						
Interest-only loans	\$ 20	.55 %	\$ 34	.94 %	\$ 34	.94 %
ARM loans	137	1.14	177	1.49	191	1.46

N/A Not Applicable

Our two-months-and-over contractual delinquency ratio was relatively flat compared with June 30, 2021 as higher dollars of delinquency in our commercial loan portfolio were largely offset by lower dollars of delinquency in our consumer loan portfolio. As compared with December 31, 2020, our two-months-and-over contractual delinquency ratio decreased 12 basis points due to lower dollars of delinquency in our consumer loan portfolio, partially offset by lower outstanding loan balances in both our consumer and commercial loan portfolios.

Our commercial loan two-months-and-over contractual delinquency ratio increased 19 basis points compared with June 30, 2021 and was relatively flat compared with December 31, 2020. The increase in the ratio as compared with June 30, 2021 was due to higher dollars of delinquency driven by a commercial real estate loan and a global banking loan which became 60 days past due in the third quarter.

Our consumer loan two-months-and-over contractual delinquency ratio decreased 39 basis points compared with June 30, 2021 due primarily to lower dollars of delinquency in residential mortgages driven by improved economic conditions. As compared with December 31, 2020, our consumer loan two-months-and-over contractual delinquency ratio decreased 26 basis points due to lower dollars of delinquency reflecting improved economic conditions and the impact of our decision to exit our mass market retail banking business as well as our remaining retail credit card portfolio which resulted in the transfer of certain loans to held for sale during the second quarter of 2021, including \$61 million of delinquent consumer loans. The decrease in the ratio as compared with December 31, 2020 was partially offset by lower 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 September 30,				Nine Months Ended September 30,			
	2021		2020		2021		2020	
	Net Charge-off Dollars	Net Charge-off Ratio	Net Charge-off Dollars	Net Charge-off Ratio	Net Charge-off Dollars	Net Charge-off Ratio	Net Charge-off Dollars	Net Charge-off Ratio
(dollars are in millions)								
Commercial:								
Real estate, including construction	\$ —	— %	\$ 12	.42 %	\$ —	— %	\$ 12	.14 %
Business and corporate banking	12	.38	(3)	(.07)	26	.27	61	.48
Global banking	—	—	1	.02	12	.13	20	.14
Other commercial	—	—	—	—	—	—	(1)	(.02)
Total commercial	<u>12</u>	<u>.12</u>	<u>10</u>	<u>.08</u>	<u>38</u>	<u>.13</u>	<u>92</u>	<u>.23</u>
Consumer:								
Residential mortgages	(4)	(.10)	(2)	(.04)	(1)	(.01)	(7)	(.05)
Home equity mortgages	2	2.13	—	—	1	.18	(1)	(.12)
Credit cards	(1)	15.88	21	7.41	83	18.71	66	7.12
Other consumer	(1)	(3.54)	4	5.62	9	5.56	7	3.25
Total consumer	<u>(4)</u>	<u>(.10)</u>	<u>23</u>	<u>.45</u>	<u>92</u>	<u>.66</u>	<u>65</u>	<u>.43</u>
Total	<u>\$ 8</u>	<u>.06</u>	<u>\$ 33</u>	<u>.19</u>	<u>\$ 130</u>	<u>.29</u>	<u>\$ 157</u>	<u>.29</u>

Our net charge-off ratio as a percentage of average loans decreased 13 basis points during the three months ended September 30, 2021 due to a lower level of net charge-offs in our consumer loan portfolio primarily reflecting the impact of transferring our credit card loan portfolio to held for sale during the second quarter of 2021. The decrease in the ratio was partially offset by lower average loan balances in both our commercial and consumer loan portfolios.

In the year-to-date period, our net charge-off ratio as a percentage of average loans was flat as a lower level of net charge-offs were offset by lower average loan balances in both our commercial and consumer loan portfolios. Lower net charge-offs in the year-to-date period were driven by a lower level of net charge-offs in our commercial loan portfolio due primarily to the deterioration of two corporate banking loans and loan sales in the prior year period which was partially offset by a higher level of net charge-offs in our consumer loan portfolio due primarily to the transfer of our credit card loan portfolio to held for sale during the second quarter of 2021 which increased net charge-offs by \$56 million.

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"):

	September 30, 2021		June 30, 2021		December 31, 2020	
	Nonperforming Loans ⁽¹⁾	Nonperforming Ratio	Nonperforming Loans ⁽¹⁾	Nonperforming Ratio	Nonperforming Loans ⁽¹⁾	Nonperforming Ratio
(dollars are in millions)						
Commercial	\$ 400	1.03 %	\$ 402	1.06 %	\$ 544	1.31 %
Consumer:						
Residential mortgages ⁽²⁾⁽³⁾⁽⁴⁾ ..	785	4.88	844	5.25	1,079	5.87
Home equity mortgages ⁽²⁾⁽³⁾ ..	47	12.74	50	12.89	63	8.67
Credit cards	—	N/A	—	N/A	19	1.78
Other consumer	—	—	—	—	2	.63
Total consumer	<u>832</u>	<u>5.01</u>	<u>894</u>	<u>5.39</u>	<u>1,163</u>	<u>5.68</u>
Total	<u>\$ 1,232</u>	<u>2.22</u>	<u>\$ 1,296</u>	<u>2.38</u>	<u>\$ 1,707</u>	<u>2.75</u>
Other real estate owned ⁽⁵⁾	\$ 2		\$ 2		\$ 3	

⁽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 September 30, 2021, June 30, 2021 and December 31, 2020, total nonperforming loans include \$1 million, \$1 million and \$21 million, respectively, of accruing loans contractually 90 days or more past due.

⁽²⁾ At September 30, 2021, June 30, 2021 and December 31, 2020, nonperforming consumer mortgage loans include \$323 million, \$343 million and \$375 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. At September 30, 2021, June 30, 2021 and December 31, 2020, nonaccrual consumer mortgage loans also included \$367 million, \$384 million and \$590 million, respectively, of loans under COVID-19 related payment deferral programs where the borrowers utilized a payment deferral of more than six months and, as a result, have been placed on nonaccrual status.

⁽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 September 30, 2021, June 30, 2021 and December 31, 2020.

N/A Not Applicable

Our nonperforming loans ratio decreased 16 basis points compared with June 30, 2021 due primarily to lower nonperforming loans in our consumer loan portfolio. As compared with December 31, 2020, our nonperforming loans ratio decreased 53 basis points due to lower nonperforming loans in both our consumer and commercial loan portfolios, partially offset by lower outstanding loan balances in both our consumer and commercial loan portfolios.

Our commercial nonperforming loans ratio was relatively flat compared with June 30, 2021 and decreased 28 basis points compared with December 31, 2020. The decrease in the ratio as compared with December 31, 2020 was due to lower nonperforming loans driven primarily by paydowns of global banking loans and the sale of a global banking loan, partially offset by the downgrade of a commercial real estate loan. The decrease in the ratio as compared with December 31, 2020 was partially offset by lower outstanding loan balances.

Our consumer nonperforming loans ratio decreased 38 basis points compared with June 30, 2021 due primarily to lower nonperforming loans in residential mortgages driven by improved economic conditions as well as the impact of customers exiting forbearance relief and returning to accruing status. As compared with December 31, 2020, our consumer nonperforming loans ratio decreased 67 basis points due to lower nonperforming loans reflecting the impact of our decision to exit our mass market retail banking business as well as our remaining retail credit card portfolio which resulted in the transfer of certain loans to held for sale during the second quarter of 2021, including \$206 million of nonperforming consumer loans, of which \$21 million were accruing loans contractually 90 days or more past due. Lower nonperforming consumer loans as compared with December 31, 2020 also reflects improved economic conditions as well as the impact of customers exiting forbearance relief and returning to accruing status. The decrease in the ratio as compared with December 31, 2020 was partially offset by lower 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 2020 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 throughout the United States and internationally. 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:

	September 30, 2021		December 31, 2020	
	Commercial Utilized	Unused Commercial Commitments	Commercial Utilized	Unused Commercial Commitments
	(in millions)			
Diversified financials	\$ 8,089	\$ 11,999	\$ 7,644	\$ 13,058
Real estate	6,996	1,737	8,323	2,163
Consumer services	3,496	3,442	4,619	3,692
Retailing	2,312	5,130	2,286	4,989
Commercial and professional services	2,087	5,454	1,877	5,245
Capital goods	1,495	6,416	1,696	5,884
Chemicals	1,472	3,860	2,012	4,025
Consumer durables and apparel	1,337	3,324	1,457	2,914
Technology hardware and equipment	1,151	7,261	1,329	7,054
Energy	1,089	5,877	1,849	6,123
Utilities	875	1,238	839	1,371
Software and services	838	3,821	823	2,322
Telecommunication services	717	556	367	606
Health care equipment and services	623	3,014	761	1,957
Food, beverage and tobacco	599	2,943	612	3,030
Transportation	571	464	676	398
Pharmaceuticals, biotechnology and life science	497	3,518	605	3,912
Food and staples retailing	494	2,199	522	2,055
Semiconductors & semiconductor equipment	379	1,586	705	1,951
Metals and mining	360	796	455	1,158
Total commercial credit exposure in top 20 industries ⁽¹⁾	35,477	74,635	39,457	73,907
All other industries	580	10,831	1,042	11,493
Total commercial credit exposure ⁽²⁾	<u>\$ 36,057</u>	<u>\$ 85,466</u>	<u>\$ 40,499</u>	<u>\$ 85,400</u>

⁽¹⁾ Based on utilization at September 30, 2021.

⁽²⁾ Excludes commercial credit exposures with affiliates.

Geographic Concentrations The following table reflects regional exposure at September 30, 2021 and December 31, 2020 for our real estate secured loan portfolios, excluding loans held for sale:

	Commercial Real Estate, including Construction Loans	Residential Mortgages and Home Equity Mortgages
September 30, 2021		
New York State	28.9 %	28.3 %
California	19.8	48.6
North Central United States	4.9	1.3
North Eastern United States, excluding New York State	5.2	7.6
Southern United States	33.6	8.7
Western United States, excluding California	7.6	5.5
Total	<u>100.0 %</u>	<u>100.0 %</u>
December 31, 2020		
New York State	27.1 %	30.6 %
California	25.6	45.9
North Central United States	3.9	1.4
North Eastern United States, excluding New York State	6.2	7.7
Southern United States	29.8	9.4
Western United States, excluding California	7.4	5.0
Total	<u>100.0 %</u>	<u>100.0 %</u>

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.
- Adjustable rate mortgage ("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 September 30, 2021 and December 31, 2020. Each category is not mutually exclusive and loans may appear in more than one category below.

	September 30, 2021	December 31, 2020
	(in millions)	
Interest-only residential mortgage and home equity mortgage loans	\$ 3,736	\$ 3,597
ARM loans ⁽¹⁾	12,003	13,038

⁽¹⁾ During the remainder of 2021 and during 2022, approximately \$91 million and \$374 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 September 30, 2021 and December 31, 2020:

	September 30, 2021	December 31, 2020
	(in millions)	
Closed end:		
First lien	\$ 16,093	\$ 18,377
Second lien	21	31
Revolving ⁽¹⁾	348	696
Total	<u>\$ 16,462</u>	<u>\$ 19,104</u>

⁽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.

	September 30, 2021	December 31, 2020
	(in millions)	
Risk associated with derivative contracts:		
Total credit risk exposure	\$ 14,704	\$ 21,624
Less: collateral held against exposure	4,848	5,907
Net credit risk exposure	<u>\$ 9,856</u>	<u>\$ 15,717</u>

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 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.

During the first nine months of 2021, the COVID-19 pandemic continued to impact business and economic activity. We continue to actively monitor and control our liquidity and funding risk in accordance with HSBC policy. To date, we have not experienced any significant impact to our liquidity or funding capabilities as a result of the pandemic. 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. We continuously monitor

the impact of market events on our liquidity positions and will continue to adapt our framework as necessary to reflect market events.

Interest Bearing Deposits with Banks totaled \$62,140 million and \$14,353 million at September 30, 2021 and December 31, 2020, respectively, of which \$61,909 million and \$13,895 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 \$7,480 million and \$35,746 million at September 30, 2021 and December 31, 2020, 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 \$16,698 million and \$19,494 million at September 30, 2021 and December 31, 2020, 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 \$42,373 million and \$49,653 million at September 30, 2021 and December 31, 2020, respectively. See "Balance Sheet Review" in this MD&A for further analysis and discussion on trends.

Short-Term Borrowings totaled \$6,377 million and \$4,952 million at September 30, 2021 and December 31, 2020, respectively. See "Balance Sheet Review" in this MD&A for further analysis and discussion on short-term borrowing trends.

Deposits totaled \$152,368 million and \$145,150 million at September 30, 2021 and December 31, 2020, respectively, which included \$128,961 million and \$125,586 million, respectively, of core deposits as calculated in accordance with FFIEC guidelines. See "Balance Sheet Review" in this MD&A for further analysis and discussion on deposit trends.

Long-Term Debt decreased to \$18,105 million at September 30, 2021 from \$19,979 million at December 31, 2020. The following table presents the maturities of long-term debt at September 30, 2021:

	(in millions)
2021	\$ 1,148
2022	2,983
2023	1,543
2024	1,899
2025	4,650
Thereafter	5,882
Total	<u>\$ 18,105</u>

The following table summarizes issuances and retirements of long-term debt during the nine months ended September 30, 2021 and 2020:

Nine Months Ended September 30,	2021	2020
	(in millions)	
Long-term debt issued	\$ 6,861	\$ 7,250
Long-term debt repaid	<u>(8,402)</u>	<u>(8,387)</u>
Net long-term debt issued (repaid)	<u>\$ (1,541)</u>	<u>\$ (1,137)</u>

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 nine months ended September 30, 2021.

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. During the first quarter of 2021, due to an anticipated decrease in utilization of the shelf registration statement, the Board of Directors approved a reduction in the amount we are authorized to issue from \$25,000 million at December 31, 2020 to \$20,000 million, of which \$11,791 million was available at September 30, 2021. HSBC Bank USA has a \$40,000 million Global Bank Note Program that provides for the issuance of subordinated and senior notes, of which \$12,442 million was available at September 30, 2021. We anticipate using the Global Bank Note Program more in the future as part of our efforts designed to minimize overall funding costs while accessing diverse funding channels.

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 September 30, 2021, 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 \$15,963 million.

Preferred Equity See Note 18, "Preferred Stock," in our 2020 Form 10-K for information regarding all outstanding preferred share issues.

Common Equity During the nine months ended September 30, 2021, HSBC USA did not receive any cash capital contributions from its parent, HSBC North America, and did not make any capital contributions to its subsidiary, HSBC Bank USA.

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, Tier 1 capital to adjusted quarterly average assets (i.e., the "Tier 1 leverage ratio") and Tier 1 capital to total leverage exposure (i.e., the "supplementary leverage ratio" or "SLR"). 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 September 30, 2021 and December 31, 2020:

	September 30, 2021	December 31, 2020
Common equity Tier 1 capital to risk-weighted assets ⁽¹⁾	15.9 %	14.5 %
Tier 1 capital to risk-weighted assets ⁽¹⁾	17.1	15.6
Total capital to risk-weighted assets ⁽¹⁾	19.3	18.8
Tier 1 leverage ratio ⁽²⁾	9.1	8.6
Supplementary leverage ratio ⁽³⁾⁽⁴⁾	7.0	7.8

⁽¹⁾ Prior period amounts have been revised to conform to the current period presentation. See Note 17, "Retained Earnings and Regulatory Capital Requirements," in the accompanying consolidated financial statements for further discussion.

⁽²⁾ 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.

⁽³⁾ Total leverage exposure, the SLR denominator, includes adjusted quarterly average assets plus certain off-balance sheet exposures.

⁽⁴⁾ As discussed further below, the rules that permitted banking institutions to temporarily exclude U.S. Treasury securities and deposits at Federal Reserve Banks from the denominator of their SLR expired on April 1, 2021.

In response to the COVID-19 pandemic, the federal banking agencies issued a final rule that provides the option to transition in the regulatory capital impacts of the new current expected credit loss accounting standard over a five-year period. HSBC North America and HSBC Bank USA have elected the five-year transition option and, as a result, beginning in 2020, our capital ratios are reported in accordance with the transition rules in the final rule. Accordingly, during 2020 and 2021, we will exclude from regulatory capital the change in retained earnings resulting from adoption of the new accounting standard on January 1, 2020 as well as 25 percent of the change in the allowance for credit losses recognized between January 1, 2020 and December 31, 2021. Beginning January 1, 2022, the excluded impacts will be phased in to regulatory capital over a three-year transition period and will be fully reflected at January 1, 2025.

Also in response to the COVID-19 pandemic, the federal banking agencies issued final rules that permitted intermediate holding companies, such as HSBC North America, and depository institutions, such as HSBC Bank USA, to temporarily exclude U.S. Treasury securities and deposits at Federal Reserve Banks from the denominator of their SLR. The rules were designed to allow banking institutions to expand their balance sheets to accommodate increased customer deposits while continuing to provide credit to companies and households. These changes took effect in 2020 and expired on April 1, 2021.

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"). 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 III

standards and calculate their risk-based capital requirements for credit risk solely using the generally-applicable Standardized Approach. For additional discussion of the Basel III rule requirements, including required minimum capital ratios, as well as further discussion of the Tailoring Rules and other related regulatory developments and their expected impact see Part I, "Regulation and Competition - Regulatory Capital and Liquidity Requirements," in our 2020 Form 10-K. We continue to review the composition of our capital structure and capital buffers in light of these developments.

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 annual supervisory stress tests conducted by the FRB, and annual company-run stress tests as required under Dodd-Frank (collectively, "DFAST"). Disclosure of the company-run stress tests is required only every other year. The company-run stress tests are forward looking exercises to assess the impact of hypothetical macroeconomic baseline and severely adverse scenarios provided by the FRB (and internally developed scenarios for the company-run exercises) on the financial condition and capital adequacy of a CCAR firm over a nine quarter planning horizon. 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 2020 Form 10-K.

HSBC North America submitted its 2021 CCAR capital plan and its 2021 annual company-run DFAST results in April 2021. In July 2021, HSBC North America publicly disclosed its 2021 annual DFAST results. In June 2021, the FRB publicly disclosed its own DFAST and CCAR results and informed HSBC North America that it did not object to HSBC North America's capital plan or the planned capital distributions included in its 2021 CCAR submission. The FRB previously announced that it intended to terminate restrictions on capital distributions put in place in connection with additional stress tests that the FRB conducted to assess the impact of the COVID-19 pandemic. Firms with capital levels above the minimum requirements in the 2021 CCAR exercise, including HSBC North America, are no longer subject to the additional restrictions after June 30, 2021. Under these additional restrictions, CCAR firms were allowed to make certain capital distributions in the first two quarters of 2021, provided that the distributions generally did not exceed net income. Stress testing results are based solely on hypothetical adverse stress scenarios and should not be viewed or interpreted as forecasts of expected outcomes or capital adequacy or of the actual financial condition of HSBC North America. 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 17, "Retained Earnings and Regulatory Capital Requirements," in the accompanying consolidated financial statements.

2021 Funding Strategy Our current estimate for funding needs and sources for 2021 are summarized in the following table:

	Actual January 1 through September 30, 2021	Estimated October 1 through December 31, 2021	Estimated Full Year 2021
	(in billions)		
Increase (decrease) in funding needs:			
Net change in loans	\$ (1)	\$ (2)	\$ (3)
Net change in short-term investments and securities	12	(2)	10
Net change in trading and other assets	(6)	—	(6)
Total funding needs	<u>\$ 5</u>	<u>\$ (4)</u>	<u>\$ 1</u>
Increase (decrease) in funding sources:			
Net change in deposits	\$ 7	\$ (2)	\$ 5
Net change in trading and other short-term liabilities	—	(1)	(1)
Net change in long-term debt	(2)	(1)	(3)
Total funding sources	<u>\$ 5</u>	<u>\$ (4)</u>	<u>\$ 1</u>

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. The above funding plan assumes that the announced sale of our mass market retail banking business will not be completed in 2021.

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 2020 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, Credit Derivatives and Other Contractual Obligations

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 extensions of credit and, in certain cases, guarantees.

As a financial services provider, we routinely extend credit through loan commitments and lines and letters of credit and provide financial guarantees, including derivative transactions having characteristics of a guarantee. 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.

The following table provides maturity information related to our credit derivatives and off-balance sheet arrangements. Many of these commitments and guarantees expire unused or without default. In addition, implementation of our business strategy (as described under the heading "Executive Overview" in our 2020 Form 10-K and in this MD&A) will affect our contractual obligations over time, including with respect to credit derivatives and consumer commitments. As a result, we believe that the contractual amount is not representative of the actual future credit exposure or funding requirements.

	Balance at September 30, 2021				Balance at December 31, 2020
	One Year or less	Over One through Five Years	Over Five Years	Total	
Standby letters of credit, net of participations ⁽¹⁾	\$ 5,951	\$ 1,947	\$ 166	\$ 8,064	\$ 8,545
Commercial letters of credit	297	71	—	368	197
Credit derivatives ⁽²⁾	190	1,610	263	2,063	19,500
Other commitments to extend credit:					
Commercial ⁽³⁾	18,026	64,093	4,702	86,821	87,875
Consumer	8,016	—	—	8,016	8,173
Total	<u>\$ 32,480</u>	<u>\$ 67,721</u>	<u>\$ 5,131</u>	<u>\$105,332</u>	<u>\$ 124,290</u>

⁽¹⁾ Includes \$1,957 million and \$1,836 million issued for the benefit of HSBC affiliates at September 30, 2021 and December 31, 2020, respectively.

⁽²⁾ Includes \$1,691 million and \$13,550 million issued for the benefit of HSBC affiliates at September 30, 2021 and December 31, 2020, respectively.

⁽³⁾ Includes \$1,355 million and \$2,475 million issued for the benefit of HSBC affiliates at September 30, 2021 and December 31, 2020, respectively.

Other Commitments to Extend Credit Other commitments to extend credit include arrangements whereby we are contractually obligated to extend credit in the form of loans, participations in loans, lease financing receivables, or similar transactions. Commercial commitments comprise primarily those related to secured and unsecured loans and lines of credit. Consumer commitments comprise certain 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.

In addition to the above, we have established and manage a number of constant net asset value ("CNAV") money market funds that invest in shorter-dated highly-rated money market securities to provide investors with a highly liquid and secure investment. These funds price the assets in their portfolio on an amortized cost basis, which enables them to create and liquidate shares at a constant price. The funds, however, are not permitted to price their portfolios at amortized cost if that amount varies by more than 50 basis points from the portfolio's market value. In that case, the fund would be required to price its portfolio at market value and consequently would no longer be able to create or liquidate shares at a constant price. We do not consolidate the CNAV 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.

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 held for investment, residential mortgage loans whose carrying amount was reduced based on the fair value of the underlying collateral and real estate owned 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 September 30, 2021 and December 31, 2020, our Level 3 measurements included the following: certain structured deposits and structured notes for which the embedded foreign exchange or equity derivatives have significant

unobservable inputs (e.g., volatility or default correlations), certain asset-backed securities, individually assessed commercial loans, mortgage servicing rights, interest rate derivatives with certain inputs which are unobservable, certain credit default swaps, 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 and, at September 30, 2021, certain loans held for sale. At December 31, 2020, our level 3 measurements also included asset-backed credit default swaps with certain inputs which were unobservable. See Note 20, "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 September 30, 2021 and December 31, 2020:

	September 30, 2021	December 31, 2020
	(dollars are in millions)	
Level 3 assets ⁽¹⁾⁽²⁾	\$ 1,483	\$ 1,118
Total assets measured at fair value ⁽¹⁾⁽³⁾	76,901	98,640
Level 3 liabilities ⁽¹⁾	2,246	1,620
Total liabilities measured at fair value ⁽¹⁾	30,182	49,380
Level 3 assets as a percent of total assets measured at fair value	1.9 %	1.1 %
Level 3 liabilities as a percent of total liabilities measured at fair value	7.4 %	3.3 %

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

⁽²⁾ Includes \$454 million of recurring Level 3 assets and \$1,029 million of non-recurring Level 3 assets at September 30, 2021. Includes \$845 million of recurring Level 3 assets and \$273 million of non-recurring Level 3 assets at December 31, 2020.

⁽³⁾ Includes \$75,665 million of assets measured on a recurring basis and \$1,236 million of assets measured on a non-recurring basis at September 30, 2021. Includes \$97,982 million of assets measured on a recurring basis and \$658 million of assets measured on a non-recurring basis at December 31, 2020.

Significant Changes in Fair Value for Level 3 Assets and Liabilities During the second quarter of 2021, we transferred certain loans to held for sale which were determined to be Level 3 assets measured at fair value on a non-recurring basis. See Note 8, "Loans Held for Sale" in the accompanying consolidated financial statements for additional information.

See Note 20, "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 nine months ended September 30, 2021 and 2020 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 \$2 million or a decrease of the overall fair value measurement of approximately \$2 million at September 30, 2021. The effect of changes in significant unobservable input parameters are primarily driven by the uncertainty in determining the fair value of mortgage servicing rights and certain asset-backed securities.

Risk Management

Overview Managing risk effectively is fundamental to the delivery of our strategic priorities.

We use a comprehensive risk management framework across the organization and across all risk types underpinned by our risk culture. This framework fosters continuous monitoring, promotes risk awareness and encourages sound operational and strategic decision-making. It also ensures a consistent approach to identifying, assessing, managing and reporting the risks we accept and incur in our activities.

Our Board of Directors has the ultimate responsibility for effective oversight of risk management. 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. Robust risk governance and accountability are embedded throughout our business through an established framework that helps to ensure appropriate oversight of and accountability for the effective management of risk. During the third quarter of 2021, the Compliance and Conduct Committee ("CCC") of the Board of Directors was dissolved as part of a global effort to streamline corporate governance forums to enhance efficiency. As a result, the oversight responsibilities of the CCC were allocated amongst the Board of Directors' standing committees. In particular, the Risk Committee of the Board of Directors has assumed responsibilities related to compliance, conduct and values, fiduciary matters, and responsible business practices.

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 pension risk. Treasury risk also includes the risk to our earnings due to changes in market interest rates;
- *Market risk* is the risk that movements in market factors, such as foreign exchange rates, interest rates, credit spreads, equity prices and commodity prices, will reduce our income or the value of our portfolios;
- *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 that we fail to observe the letter and spirit of relevant laws, codes, rules, regulations and standards of good market practice, which as a consequence incur fines and penalties and suffer damage to our business;
- *Financial crime risk* is the risk that we knowingly or unknowingly help 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 potential for adverse consequences from business decisions informed by models, which can be exacerbated by errors in methodology, design or the way they are used.

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. Consequently, actual results may differ significantly from model projections. The severe projections of macroeconomic variables during the current COVID-19 pandemic represent events 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 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 2020 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. Other than the change to financial crime risk management discussed below, there have been no material changes to our approach to risk management since December 31, 2020.

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. The impact of the COVID-19 pandemic continued to create economic uncertainty during the first nine months of 2021. 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 2020 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 2020 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.

The Basel Committee based Liquidity Coverage Ratio ("LCR") 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. At both September 30, 2021 and December 31, 2020, HSBC USA's LCR exceeded 100 percent. A LCR of 100 percent or higher reflects an unencumbered HQLA balance that is equal to or exceeds 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. LCR rule and are required to report their LCR to U.S. regulators on a daily basis. Under the Tailoring Rules, an 85 percent LCR requirement applies to Category III firms with weighted short-term wholesale funding under \$75 billion, including HSBC North America, and their depository institution subsidiaries, such as HSBC Bank USA, from 100 to 85 percent beginning January 1, 2020. As a result, under the U.S. LCR rule, a LCR of 100 percent or higher reflects an unencumbered HQLA balance that is equal to or exceeds 85 percent of a Category III firm's liquidity needs for a 30 calendar day liquidity stress scenario. During the nine months ended September 30, 2021, HSBC Bank USA's LCR under the U.S. LCR rule remained above the 100 percent minimum requirement.

The U.K. calibration of the Basel Committee based Net Stable Funding Ratio ("NSFR"), which is a longer term liquidity measure with a 12-month time horizon to ensure a sustainable maturity structure of assets and liabilities, is still pending. Therefore, our calculation of NSFR is based on our current interpretation and understanding of the Basel Committee NSFR guidance, which may differ in future periods depending on completion of the U.K. calibration. The U.K. NSFR rules are expected to become effective in January 2022. At both September 30, 2021 and December 31, 2020, HSBC USA's estimated NSFR exceeded 100 percent. 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. In October 2020, U.S. regulators issued a final rule to implement the NSFR in the United States, applicable to certain large banking organizations, including HSBC North America and HSBC Bank USA, which took effect July 1, 2021. Consistent with the Tailoring Rules, an 85 percent NSFR requirement applies to Category III firms with weighted short-term wholesale funding under \$75 billion, including HSBC North America, and their depository institution subsidiaries, such as HSBC Bank USA. As a result, under the U.S. 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 85 percent of a Category III firm's required amount of funding for assets and off-balance sheet exposures. At both September 30, 2021 and December 31, 2020, HSBC Bank USA's NSFR under the U.S. NSFR rule exceeded 100 percent. The ratio at December 31, 2020 was estimated based on our interpretation and understanding of the U.S. NSFR rule at that time.

As a Category III firm, HSBC North America remains subject to liquidity stress testing on a monthly basis 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 ratings agencies. The following table reflects the short and long-term credit ratings of HSBC USA and HSBC Bank USA at September 30, 2021:

	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.

In June 2021, Moody's downgraded both the long-term deposit rating and the adjusted baseline credit assessment of HSBC Bank USA by one notch following similar downgrades to the senior unsecured rating and the notional baseline credit assessment of HSBC. These rating downgrades reflect Moody's view that the HSBC Group will face challenges in restoring

profitability to levels in line with its main peers in the next 12-18 months, which could reduce the capacity of HSBC to provide support to HSBC Bank USA in case of need. Concurrently, Moody's affirmed the standalone baseline credit assessment and the short-term deposit rating of HSBC Bank USA.

In August 2021, Moody's concluded a review of certain of our credit ratings for potential upgrade and upgraded the senior debt rating of HSBC USA by one notch to A1. Moody's review also resulted in one notch upgrades to the provisional subordinated and preferred stock ratings of HSBC USA and the subordinated debt rating of HSBC Bank USA. These rating upgrades reflect Moody's expectation that HSBC USA and HSBC Bank USA would be resolved in a unified manner alongside their immediate parent, HSBC North America, and their ultimate parent, HSBC. Concurrently, Moody's affirmed the baseline credit assessment and the adjusted baseline credit assessment for HSBC Bank USA.

While these rating actions did not have a material financial impact on our borrowing costs or liquidity, any future actions could have such an impact. 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 September 30, 2021, 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.

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 2020 Form 10-K for a more complete discussion of our approach to interest rate risk. Interest rate metrics have been adjusted to reflect the impact of our decision to exit our mass market retail banking business as part of our Restructuring Plan. The risk metrics at September 30, 2021 reflect current assumed transaction dates, with balances reduced at projected sale dates and the associated impacts of those reductions is included in both base and shock scenarios.

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 September 30, 2021 and December 31, 2020, 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:

	September 30, 2021		December 31, 2020	
	Amount	%	Amount	%
(dollars are in millions)				
Estimated increase (decrease) in projected net interest income (reflects projected rate movements on October 1, 2021 and January 1, 2021, respectively):				
Resulting from a gradual 100 basis point increase in the yield curve	\$ 349	16 %	\$ 186	7 %
Resulting from a gradual 100 basis point decrease in the yield curve	(216)	(10)	(213)	(8)
Other significant scenarios monitored (reflects projected rate movements on October 1, 2021 and January 1, 2021, respectively):				
Resulting from an immediate 100 basis point increase in the yield curve	499	22	274	11
Resulting from an immediate 100 basis point decrease in the yield curve	(416)	(19)	(379)	(15)

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.

Market Risk Management Exposure to market risk is separated into two portfolios:

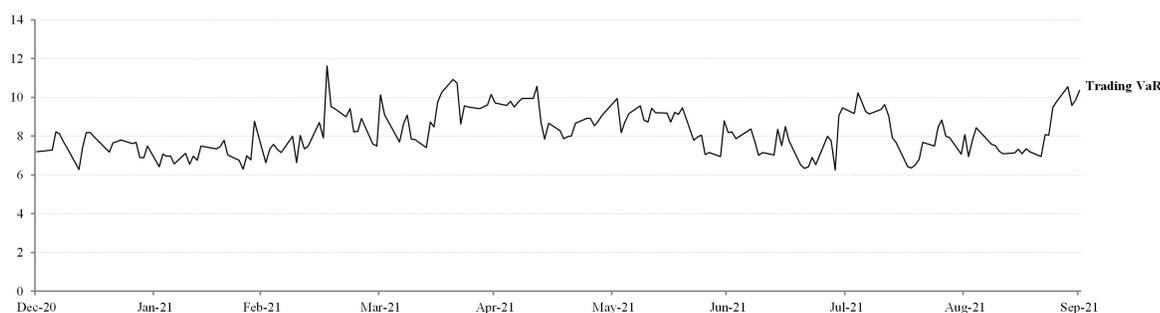
- *Trading portfolios* comprise positions arising from market-making and warehousing of client-derived positions.
- *Non-trading portfolios* comprise positions that primarily arise from the interest rate management of our retail and commercial banking assets and liabilities and financial investments 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 2020 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 portfolios Trading VaR generates primarily from the Markets and Securities Services unit of our GBM business segment. Portfolios comprise mainly foreign exchange products, 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 nine months ended September 30, 2021 and at December 31, 2020:

	Foreign exchange and commodity	Interest rate	Credit Spread	Portfolio Diversification ⁽¹⁾	Total ⁽²⁾
(in millions)					
At September 30, 2021	\$ 2	\$ 9	\$ 1	\$ (2)	\$ 10
Nine Months Ended September 30, 2021					
Average	3	8	2	(5)	8
Maximum	5	10	9	—	12
Minimum	1	6	—	—	6
At December 31, 2020	\$ 3	\$ 7	\$ 2	\$ (5)	\$ 7

⁽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.

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 see 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 nine months ended September 30, 2021, we experienced no loss back-testing exceptions.

Non-trading portfolios 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.

The following table summarizes our non-trading VaR for the nine months ended September 30, 2021 and at December 31, 2020:

	Interest rate	Credit Spread	Portfolio Diversification ⁽¹⁾	Total ⁽¹⁾
	(in millions)			
At September 30, 2021	\$ 113	\$ 67	\$ (46)	\$ 134
Nine Months Ended September 30, 2021				
Average	96	63	(57)	102
Maximum	126	83		143
Minimum	61	51		72
At December 31, 2020	\$ 69	\$ 66	\$ (66)	\$ 69

⁽¹⁾ Refer to the Trading VaR table above for additional information.

Non trading VaR was higher at September 30, 2021 as compared with December 31, 2020 due primarily to an increase in yields on U.S. Treasury and U.S. Government agency mortgage-backed securities.

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. See "Treasury Risk Management" above for a broader discussion on how interest rate risk is managed.

Financial Crime Risk Management The Financial Crime Risk Management Committee ("FCRMC"), chaired by the U.S. Head of Financial Crime and Bank Secrecy Act/Anti-Money Laundering Compliance Officer, served as the principal financial crime governance forum, responsible for the management of financial crime risk. As a reflection of the growing maturity and effectiveness of financial crime risk management, the functions of the FCRMC were integrated into the Risk Management Meeting ("RMM") during the first quarter of 2021. With this change, the RMM now oversees the risk management of both regulatory compliance and financial crime. There have been no other material changes to our approach to financial crime risk management since December 31, 2020.

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 nine months ended September 30, 2021 included fees of \$20 million and \$68 million, respectively, compared with fees of \$20 million and \$56 million during the three and nine months ended September 30, 2020, respectively.

Three Months Ended September 30,	2021			2020		
	Average Balance	Interest	Rate	Average Balance	Interest	Rate
(dollars are in millions)						
Assets:						
Interest bearing deposits with banks	\$ 60,700	\$ 23	.15 %	\$ 21,794	\$ 7	.13 %
Federal funds sold and securities purchased under resale agreements	865	1	.46	18,514	9	.19
Trading securities	16,752	60	1.42	21,538	64	1.18
Securities	41,097	154	1.49	51,902	202	1.55
Loans:						
Commercial	39,864	250	2.49	49,575	335	2.69
Consumer:						
Residential mortgages	18,580	135	2.88	18,444	146	3.15
Home equity mortgages	638	5	3.11	778	6	3.07
Credit cards	793	22	11.01	1,134	18	6.31
Other consumer	269	4	5.90	285	6	8.38
Total consumer	20,280	166	3.25	20,641	176	3.39
Total loans	60,144	416	2.74	70,216	511	2.90
Other	2,376	4	.67	5,379	11	.81
Total interest earning assets	\$ 181,934	\$ 658	1.43 %	\$ 189,343	\$ 804	1.69 %
Allowance for credit losses	(535)			(1,153)		
Cash and due from banks	1,117			1,194		
Other assets	12,684			15,462		
Total assets	\$ 195,200			\$ 204,846		
Liabilities and Equity:						
Domestic deposits:						
Savings deposits	\$ 63,116	\$ 23	.14 %	\$ 67,282	\$ 49	.29 %
Time deposits	10,810	18	.66	25,473	68	1.06
Other interest bearing deposits	19,197	15	.31	22,489	18	.32
Foreign deposits:						
Foreign banks deposits	5,904	—	.03	4,785	—	.04
Other interest bearing deposits	229	—	—	342	—	.06
Deposits held for sale	8,046	4	.22	—	—	—
Total interest bearing deposits	107,302	60	.22	120,371	135	.45
Short-term borrowings	4,692	4	.34	5,848	7	.48
Long-term debt	19,282	70	1.44	22,606	111	1.95
Total interest bearing deposits and debt	131,276	134	.40	148,825	253	.68
Tax liabilities and other	1,013	4	1.57	594	3	2.01
Total interest bearing liabilities	\$ 132,289	\$ 138	.41 %	\$ 149,419	\$ 256	.68 %
Net interest income/Interest rate spread		\$ 520	1.02 %		\$ 548	1.01 %
Noninterest bearing deposits	38,288			29,030		
Other liabilities	6,295			8,138		
Total equity	18,328			18,259		
Total liabilities and equity	\$ 195,200			\$ 204,846		
Net interest margin on average earning assets			1.13 %			1.15 %
Net interest income to average total assets			1.06 %			1.06 %

Nine Months Ended September 30,	2021			2020		
	Average Balance	Interest	Rate	Average Balance	Interest	Rate
	(dollars are in millions)					
Assets:						
Interest bearing deposits with banks	\$ 48,003	\$ 45	.13 %	\$ 22,779	\$ 69	.40 %
Federal funds sold and securities purchased under resale agreements	9,820	12	.16	11,690	57	.65
Trading securities	18,759	162	1.15	21,494	192	1.19
Securities	42,942	491	1.53	52,310	707	1.81
Loans:						
Commercial	40,626	807	2.66	52,670	1,183	3.00
Consumer:						
Residential mortgages	18,565	408	2.94	18,244	451	3.30
Home equity mortgages	675	14	2.77	801	20	3.34
Credit cards	892	64	9.59	1,236	56	6.05
Other consumer	282	15	7.11	277	19	9.16
Total consumer	20,414	501	3.28	20,558	546	3.55
Total loans	61,040	1,308	2.86	73,228	1,729	3.15
Other	2,640	17	.86	5,778	35	.81
Total interest earning assets	\$ 183,204	\$ 2,035	1.49 %	\$ 187,279	\$ 2,789	1.99 %
Allowance for credit losses	(773)			(891)		
Cash and due from banks	1,217			1,186		
Other assets	13,266			13,917		
Total assets	\$ 196,914			\$ 201,491		
Liabilities and Equity:						
Domestic deposits:						
Savings deposits	\$ 66,090	\$ 82	.17 %	\$ 60,308	\$ 228	.50 %
Time deposits	13,735	76	.74	28,474	334	1.57
Other interest bearing deposits	20,939	45	.29	19,077	86	.60
Foreign deposits:						
Foreign banks deposits	5,753	1	.03	4,849	5	.14
Other interest bearing deposits	243	—	—	597	3	.67
Deposits held for sale	3,636	6	.22	—	—	—
Total interest bearing deposits	110,396	210	.25	113,305	656	.77
Short-term borrowings	4,874	13	.36	9,055	62	.91
Long-term debt	19,322	230	1.59	24,383	471	2.58
Total interest bearing deposits and debt	134,592	453	.45	146,743	1,189	1.08
Tax liabilities and other	852	8	1.26	636	10	2.10
Total interest bearing liabilities	\$ 135,444	\$ 461	.46 %	\$ 147,379	\$ 1,199	1.09 %
Net interest income/Interest rate spread		\$ 1,574	1.03 %		\$ 1,590	.90 %
Noninterest bearing deposits	37,213			27,614		
Other liabilities	6,054			8,147		
Total equity	18,203			18,351		
Total liabilities and equity	\$ 196,914			\$ 201,491		
Net interest margin on average earning assets			1.15 %			1.13 %
Net interest income to average total assets			1.07 %			1.05 %

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 and Chief Financial Officer, 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 Chief Executive Officer and Chief Financial Officer 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 September 30, 2021 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 21, "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 third quarter of 2021 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 third quarter of 2021, and approximately 15 remain outstanding.

Other relationships with Iranian banks Activity related to U.S.-sanctioned Iranian banks not covered elsewhere in this disclosure includes the matter described below.

The HSBC Group acts as the trustee and administrator for a pension scheme involving eight employees of a U.S.-sanctioned Iranian bank in Hong Kong. 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 Hong Kong laws and regulations. Estimated gross revenue, which includes fees and/or commissions, generated by this pension scheme during the third quarter of 2021, was approximately \$809.

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.

Activity related to U.S. Executive Order 13224 The HSBC Group maintained an account for an individual customer in the Middle East who was designated under Executive Order 13224 in the third quarter of 2021. The account was closed and exited during the third quarter of 2021. The HSBC Group made one nominal local currency domestic payment to return funds to the customer as part of the exit process.

There was no measurable gross revenue or net profit to the HSBC Group during the third quarter of 2021 relating to these transactions.

Other activity The HSBC Group has an insurance company customer in the United Arab Emirates that, during the third quarter of 2021, made local currency payments for the reimbursement of medical treatment to a hospital located in the United Arab Emirates and owned by the Government of Iran. The HSBC Group processed these payments to the hospital made by its customer.

The HSBC Group has one customer in the United Arab Emirates that, during the third quarter of 2021, made one local currency payment to a hospital located in the United Arab Emirates and owned by the Government of Iran. The HSBC Group processed this payment.

The HSBC Group has one customer in the United Arab Emirates that, during the third quarter of 2021, received a small local currency check from an insurance company owned by the Government of Iran. The HSBC Group processed this check from the insurance company to its customer.

The HSBC Group has one customer in France that, during the third quarter of 2021, received two local currency payments from an Iranian-owned bank in relation to management charges for property owned by the Iranian-owned bank. The HSBC Group processed these payments to its customer.

The HSBC Group has an international organization as a customer in France, and during the third quarter of 2021, that customer received a local currency payment from the Iranian Embassy in Austria for membership fees. The HSBC Group processed this payment.

The HSBC Group has a customer in the Middle East that, during the third quarter of 2021, made two local currency credit card payments to an Iranian Consulate for passport and dual citizenship application fees. The HSBC Group processed these payments.

For these activities, there was no measurable gross revenue or net profit to the HSBC Group during the third quarter of 2021.

Frozen accounts and transactions The HSBC Group and HSBC Bank USA 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 third quarter of 2021. There was no measurable gross revenue or net profit to the HSBC Group during the third quarter of 2021 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 April 13, 2021 (incorporated by reference to [Exhibit 3.2 to HSBC USA Inc.'s Current Report on Form 8-K filed April 14, 2021](#)).
- 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 September 30, 2021, formatted in Inline eXtensible Business Reporting Language ("Inline XBRL"): (i) the Consolidated Statement of Income (Loss) for the three and nine months ended September 30, 2021 and 2020, (ii) the Consolidated Statement of Comprehensive Income (Loss) for the three and nine months ended September 30, 2021 and 2020, (iii) the Consolidated Balance Sheet at September 30, 2021 and December 31, 2020, (iv) the Consolidated Statement of Changes in Equity for the three and nine months ended September 30, 2021 and 2020, (v) the Consolidated Statement of Cash Flows for the nine months ended September 30, 2021 and 2020, 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: October 25, 2021

HSBC USA INC.

By: /s/ KAVITA MAHTANI

Kavita Mahtani

Senior Executive Vice President and
Chief Financial Officer

**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: October 25, 2021

/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: October 25, 2021

/s/ KAVITA MAHTANI

Kavita Mahtani
Senior Executive Vice President and
Chief Financial Officer

**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 September 30, 2021 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: October 25, 2021

/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 September 30, 2021 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: October 25, 2021

/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.